

PLYMOUTH COUNTY
CONTRIBUTORY RETIREMENT SYSTEM
AUDIT REPORT
JAN. 1, 2017 - DEC. 31, 2021



PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION
COMMONWEALTH OF MASSACHUSETTS

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PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chair*

JOHN W. PARSONS, ESQ., *Executive Director*

Auditor DIANA DIZOGLIO | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES J. GUIDO | RICHARD MACKINNON, JR. | JENNIFER F. SULLIVAN, ESQ.

April 4, 2024

The Public Employee Retirement Administration Commission (PERAC) has completed a review of the audits of the Plymouth County Retirement System conducted by the firm of Powers & Sullivan, LLC, Certified Public Accountants (P&S). P&S conducted these audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits in *Government Auditing Standards*, issued by the Comptroller General of the United States. The audits covered the period from January 1, 2017, to December 31, 2021.

We conducted an inspection of the work papers prepared by P&S. We determined that the audits were conducted in a competent professional manner and the work papers demonstrated that audit tests and procedures were performed in sufficient detail to allow us to accept the final audit reports as issued.

We identified specific differences between these financial audits designed to provide an opinion on financial statements and our compliance audits performed in accordance with the accounting and management standards established by PERAC in regulation 840 CMR 25.00 and in compliance with the provisions specified in PERAC Memo #18/2019.

Accordingly, we supplemented the field work conducted in the audits by P&S with certain limited procedures designed to provide additional assurance that the accounting and management standards established by PERAC were adhered to and complied with. The specific objectives of our review were to determine: 1) that the Board is exercising appropriate fiduciary oversight, 2) that cash balances are accurately stated, 3) that contracts were procured in compliance with the provision of Section 23B of Chapter 32 and that fees paid were in accordance with contracts, 4) that travel expenses were properly documented and accounted for, 5) that retirement contributions are accurately deducted, 6) that retirement allowances were correctly calculated, 7) that required member documentation is maintained, and 8) that refunds issued by the system were correctly calculated.

To achieve these objectives, we inspected certain records of the Plymouth County Retirement Board in the above areas. Specifically, we reviewed the minutes of the Board meetings for compliance with fiduciary oversight, verified cash balances, examined a sample of investment procurements and recalculated management fees charged. We tested a sample of travel expenses for Board approvals,



supporting documentation and proper accounting. We tested the payroll records of a sample of active members to confirm that the correct percentage of regular compensation is being deducted, including the additional two percent over \$30,000. We tested a sample of members who retired during our audit period to verify that their retirement allowance was calculated in accordance with the statute. We also reviewed a sample of member files for accuracy and completeness and tested refunds issued for accuracy.

In our opinion, the financial records are being maintained and the management functions are being performed in conformity with the standards established by PERAC with the exception of those related to our supplemental work which are detailed in the findings presented in this report.

It should be noted that the financial statements included in this audit report were based on the work performed by P&S and the tests conducted for the periods referenced in their opinion. These audits were not performed by employees or representatives of PERAC. It should also be noted that the opinions expressed in these audit reports were based on the laws and regulations in effect at the time.

The financial statements and footnotes presented in this report were limited to the express results as of and for the years ended December 31, 2021, December 31, 2020, December 31, 2019, December 31, 2018, and December 31, 2017.

In closing, I wish to acknowledge the work of Powers & Sullivan, LLC who conducted these examinations, and the PERAC examiners who conducted limited procedures to supplement the field work and express my appreciation to the Plymouth County Retirement Board and staff for their courtesy and cooperation.

Sincerely,



William T. Keefe
Executive Director

EXPLANATION OF FINDING AND RECOMMENDATION

I. Unit Payroll Review:

To test regular compensation, we requested payroll registers directly from 34 units and received 33 of them.

Our testing found two pay codes were erroneously included in regular compensation: long-term disability (LTD) and overtime. The unit corrected the LTD pay code in 2023.

There were also pay codes that were erroneously excluded from regular compensation: On call pay when this service was required by Housing Authorities, firefighter pay for being a certified EMS and a certified member of the HazMat team, and a member receiving a stipend for filling in as a unit's Executive Director.

There were several pay codes in the units' payrolls that were too vague to determine proper inclusion/exclusion from regular compensation. "Other", "Additional", "COVID" and "Stipend with Retirement" did not have descriptions detailed enough to determine if they were properly included or excluded, and requests for more specific information were not responded to.

We found two employees working over full-time hours and a number of other employees from selected payrolls working over 20 hours per week that were not contributing to the system. The employing units did not confirm whether these were permanent or temporary employees.

Recommendation: Pay codes should be reviewed with all units' payroll departments to ensure that the definition of regular compensation is properly applied. Non-contributing employees consistently working over 20 hours per week should be reviewed to determine if they are eligible for membership.

Board Response:

The Plymouth County Retirement Association is actively working with our member units to improve lines of communication. It is hoped that this effort will result in increased cooperation, compliance during audits, aid in internal initiatives, and better adherence to instructions given by staff members regarding deductions. However, the Board lacks statutory authority to compel the employer units to provide information necessary for review.

Presently, the Plymouth County Retirement Association samples complete payrolls from units. This along with reconciling each contribution has yielded proactive reoccurring corrections and issue mitigation. The Plymouth County Retirement Association continues to dedicate itself to these existing efforts, in order to improve the calculations process.

EXPLANATION OF FINDING AND RECOMMENDATION (CONTINUED)

The Plymouth County Retirement Association will increase sampling across all units. Specific payrolls will be reviewed based on end-of-year, staff turnover, or unique circumstances.

The Executive Director, with the aid of staff, will continue to regularly provide educational opportunities to all units. This process will proactively encourage a review of contributions and eligibility.

Note: Units within the Plymouth County Retirement Association have seen significant turnover. This staff turnover is expected to persist or possibly increase for the foreseeable future.

2. Monthly Board Meetings and Financial Reporting:

A review of the Board minutes from January 2017 to July 2023 found the following issues:

- Complete packages of monthly financial reports were not presented to Board members on a consistent basis during the audit period. We did not see financial reports documented in minutes of meetings during 2017 and the number of months missing reports for the rest of the audit period were as follows: one in 2018, seven in 2019 and eleven in both 2020 and 2021.
- Cash reconciliations prepared by the Treasurer's office were not completed on a timely basis. For example, we noted the July 2020 cash reconciliations were completed in January 2021.
- A review of budget to actual expenses was not consistently documented in the minutes.
- The issuing of a new Request For Proposal (RFP) was not sufficiently documented in the minutes.

Recommendation: The Board should be presented with a complete monthly financial reports package which includes the trial balance, cash receipts report, cash disbursements report, adjusting journal entries, cash reconciliations and cash flow forecasts. Names and dates of reports should be listed in the minutes for best documentation. Cash reconciliations should be prepared and presented to the Board on a timely basis. A review of budget to actual expenses should be done at least quarterly and documented in the minutes.

Board meeting minutes need to show the RFP process starting with the posting of RFP, review of respondents, ranking of respondents, interviews, final selection and approval for contract.

Board Response:

The Plymouth County Retirement Association strives to maintain the highest levels of transparency possible and consistently seeks to disclose all possible information available to our board members and the public, in adherence to M.G.L. c.32, as well as the Massachusetts Public Record and Open Meeting Laws. In fact, a quick review reveals that the Plymouth County Retirement Association is one of the most transparent systems in the country.

EXPLANATION OF FINDING AND RECOMMENDATION (CONTINUED)

Prior to 2019 a senior staff member at Plymouth County Retirement Association was responsible for monthly financial reports and reconciliations. Toward the end of 2019 reconciliations were belatedly submitted to the Treasurer's office. A new accountant was then hired to prepare the monthly reports (amongst other duties). That transition and delay resulted in the issues noted during the audit. As documented in this finding, reporting has improved and evolved over time with the new accountant on board.

Moving forward, the complete cashbooks submitted to The Public Employee Retirement Administration Commission will be provided to the board for evaluation. For increased clarity, existing financial reports will be better documented in meeting minutes. Explicit reference has been added to the January meeting minutes to better articulate those materials presented to the board.

The Plymouth County Retirement Association prides itself on its extensive meeting minutes, specifically the narratives and detail. Presently, all consultant reports are published on our website. These document the RFP process, received responses, evaluation process, and rankings. Meeting minutes have documented every aspect of the board's determinations regarding the RFP processes: from the issuance, invitations to finalists, presentations, and awards of every mandate.

After discussing the inclusion of the RFP posting dates with our consultant, the date that the RFP is published will be documented within the meeting minutes. The consultant noted that no other client presently has this requirement, calling into question whether the entire process was pedantic and redundant.

3. Active Members' Folders:

About half of the active members' folders tested had a documentation issue of some kind related to materials not submitted by the employing units. The most common missing document was the SSA-1945 acknowledgement form that the member's pay does not contribute to Social Security. Our testing found that 22 out of 36 (61%) actives hired after January 1, 2005 were missing this form from their folders. A signed copy of the SSA-1945 form should be filed pursuant to PERAC Memo #5, 2006. One member's folder could not be found, and they had over 19 years of creditable service recorded in the board's database.

The members report run in September 2023 had 192 members with the dummy date of birth of January 1, 1901, 21 of which were still listed as active. Three of those 21 were tested and confirmed to not have member folders or enrollment forms. One of the three tested had 4.5 years of creditable service recorded in the board's database.

Recommendation: All active members should have enrollment forms and member folders with all other required forms. Forms received should be reviewed for signatures and completeness. The Board needs to review those members with birthdates in the year 1901, who have retirement deductions withheld, to determine if they are eligible members and then gather enrollment forms and create member folders.

EXPLANATION OF FINDING AND RECOMMENDATION (CONTINUED)

Board Response:

The Plymouth County Retirement Association identifies active member issues on a recurring basis: when deductions are submitted, prior to the receipt of enrollment forms or the creation of a folder. Upon identification, a staff member emails a list of incomplete enrollees to a unit. Typically, this prompts the unit to send enrollment materials, but compliance is not guaranteed in every circumstance, nor for every individual identified. The Board lacks statutory authority to compel the Employer Units to provide information necessary for review.

The Plymouth County Retirement Association will continue to mail the incomplete enrollees themselves, twice per year. The mailing includes a letter explaining why they are being contacted and an enrollment or withdrawal form. This action is performed after attempting to locate an address via LexisNexis or some other third-party tool. After two mailing attempts, the Executive Director sends a letter to the Clerk or the Administrator of each non-compliant unit.

FINAL DETERMINATION:

PERAC Audit staff will follow up in six (6) months to ensure appropriate actions have been taken regarding all findings.

SUPPLEMENTARY INFORMATION

SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

AS OF DECEMBER 31, 2021		
	MARKET VALUE	PERCENTAGE OF TOTAL ASSETS
Cash	\$37,833,062	2.6%
Fixed Income Securities	26	0.0%
Equities	230,129,121	16.0%
Pooled Domestic Equity Funds	142,179,306	9.9%
Pooled International Equity Funds	175,160,571	12.2%
Pooled Global Equity Funds	108,715,659	7.6%
Pooled Domestic Fixed Income Funds	223,620,410	15.6%
Pooled International Fixed Income Funds	19,777,343	1.4%
Pooled Alternative Investment Funds	268,442,531	18.7%
Pooled Real Estate Funds	140,841,414	9.8%
Hedge Funds	<u>90,691,705</u>	<u>6.3%</u>
Grand Total	<u>\$1,437,391,149</u>	<u>100.0%</u>

For the year ending December 31, 2021, the rate of return for the investments of the Plymouth County Retirement System was 16.88%. For the ten-year period ending December 31, 2021, the rate of return for the investments of the Plymouth County Retirement System averaged 10.07%. For the 37-year period ending December 31, 2021, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Plymouth County Retirement System was 9.36%.

The composite rate of return for all retirement systems for the year ending December 31, 2021 was 19.51%. For the ten-year period ending December 31, 2021, the composite rate of return for the investments of all retirement systems averaged 10.86%. For the 37-year period ending December 31, 2021, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.58%.

SUPPLEMENTARY INFORMATION (Continued)

ADMINISTRATION OF THE SYSTEM

The System is administered by a five-person Board of Retirement consisting of the County Treasurer who shall be a member ex-officio, a second member appointed by the County Commissioners, a third and fourth member who shall be elected by the members in or retired from the service of such system, and a fifth member appointed by the Advisory Council.

Ex-officio Member:	Thomas J. O'Brien, Chairperson		
Appointed Member:	James Harrington	Serves until a successor is appointed	
Elected Member:	Joseph F. McDonough	Term Expires:	12/31/2025
Elected Member:	John F. Sciara	Term Expires:	12/31/2024
Appointed Member:	Pamela J. Avitabile	Term Expires:	12/31/2026

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

The investment of the system'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 system has obtained a waiver for superannuation calculations allowing them to bypass this requirement. All expenses incurred by the System must be approved by a majority vote of the Board. Payments shall be made only upon vouchers signed by two persons designated by the Board.

Retirement board members and employees are bonded by an authorized agent representing a company licensed to do business in Massachusetts. Fidelity insurance is the only required policy coverage under Ch. 32 §21 and §23 as well as 840 CMR 17.01. The policy is designed to cover specific intentional acts such as theft, fraud or embezzlement and also specify who commits such acts, most commonly employees of the system. This coverage reimburses the system for the losses it suffers as a result of its employees' actions. It does not insure the employees for their illegal acts. Statutorily required coverage is provided by the current fidelity insurance policy to a limit of \$1,000,000 with a \$10,000 deductible issued through Travelers Casualty and Surety Company. The system also has Fiduciary coverage to a limit of \$50,000,000 under a blanket policy issued through the Massachusetts Association of Contributory Retirement Systems.

BOARD REGULATIONS

The Plymouth County Retirement Board has adopted Supplemental Regulations which are available on the PERAC website at <https://mass.gov/Plymouth-County-retirement-board-regulations>.

SUPPLEMENTARY INFORMATION (Continued)

ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Sherman Actuarial Services as of January 1, 2022.

The actuarial liability for active members was	\$741,411,462
The actuarial liability for inactive members was	18,267,473
The actuarial liability for retired members and beneficiaries was	<u>1,148,435,038</u>
The total actuarial liability was	<u>\$1,908,113,973</u>
System assets as of that date were (actuarial value)	<u>1,313,706,961</u>
The unfunded actuarial liability was	<u>\$594,407,012</u>
The ratio of system's assets to total actuarial liability was	68.8%
As of that date the total covered employee payroll was	\$316,714,508

The normal cost for employees on that date was 9.0% of payroll
 The normal cost for the employer including administrative expenses was 2.0% of payroll

The principal actuarial assumptions used in the valuation are as follows:

Investment Return: 7.88% per annum
 Rate of Salary Increase: 3.75% per annum

SCHEDULE OF FUNDING PROGRESS AS OF JANUARY 1, 2022

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Cov. Payroll ((b-a)/c)
1/1/2022	\$1,313,706,961	\$1,908,113,973	\$594,407,012	68.8%	\$316,714,508	187.7%
1/1/2020	\$1,083,858,357	\$1,777,175,521	\$693,317,164	61.0%	\$294,614,062	235.3%
1/1/2019	\$1,033,377,380	\$1,669,196,814	\$635,819,434	61.9%	\$281,665,696	225.7%
1/1/2017	\$937,406,228	\$1,520,090,445	\$582,684,217	61.7%	\$265,029,194	219.9%
1/1/2015	\$826,923,777	\$1,417,490,110	\$590,566,333	58.3%	\$246,703,686	239.4%

SUPPLEMENTARY INFORMATION (Continued)

MEMBERSHIP EXHIBIT

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Retirement in Past Years										
Superannuation	170	160	217	186	199	190	232	266	335	323
Ordinary Disability	1	2	0	3	0	0	2	0	0	1
Accidental Disability	8	13	6	9	4	8	14	11	14	10
Total Retirements	179	175	223	198	203	198	248	277	349	334
Total Retirees, Beneficiaries and Survivors	3,549	3,662	3,755	3,850	3,917	4,012	4,104	4,300	4,436	4,582
Total Active Members	5,768	5,847	6,145	5,790	5,865	5,794	5,747	5,542	5,695	5,836
Pension Payments										
Superannuation	\$48,665,696	\$51,723,044	\$54,944,291	\$57,819,859	\$61,083,560	\$64,429,715	\$67,749,022	\$71,525,954	\$75,860,110	\$80,516,937
Survivor/Beneficiary Payments	2,552,450	2,798,439	3,092,804	3,323,603	3,449,210	3,654,394	3,902,679	4,133,738	4,353,213	4,711,218
Ordinary Disability	666,321	628,912	648,899	707,340	655,503	645,793	651,062	668,615	647,561	636,118
Accidental Disability	9,044,443	9,333,751	9,377,828	9,878,251	10,098,737	10,470,192	10,861,699	11,793,838	11,966,098	12,016,456
Other	<u>4,743,876</u>	<u>5,257,563</u>	<u>6,618,337</u>	<u>4,892,860</u>	<u>5,941,322</u>	<u>10,647,492</u>	<u>10,198,563</u>	<u>8,081,850</u>	<u>3,346,690</u>	<u>4,009,872</u>
Total Payments for Year	<u>\$65,672,786</u>	<u>\$69,741,709</u>	<u>\$74,682,161</u>	<u>\$76,621,913</u>	<u>\$81,228,332</u>	<u>\$89,847,587</u>	<u>\$93,363,025</u>	<u>\$96,203,996</u>	<u>\$96,173,672</u>	<u>\$101,890,600</u>



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

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2021

PLYMOUTH COUNTY RETIREMENT ASSOCIATION
FINANCIAL STATEMENTS
YEAR ENDED DECEMBER 31, 2021

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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, 2021, 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, 2021, 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 October 13, 2022, 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 Association' 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 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 black ink, appearing to read "Powers & Sullivan LLC". The signature is written in a cursive, flowing style.

October 13, 2022

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, 2021. 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 \$1.4 billion (net position).
- The Association's net position increased by \$200.7 million for the year ended December 31, 2021.
- Total investment income was \$234.4 million; investment expenses were \$30.1 million; and net investment income was \$204.2 million.
- Total contributions were \$127.3 million including \$30.6 million from members, \$89.1 million from employers and \$7.6 million from other sources.
- Retirement benefits, refunds and transfers amounted to \$128.9 million.
- Administrative expenses and depreciation expense were \$1.8 million and \$74,000, respectively.
- The total pension liability was \$1.9 billion as of December 31, 2021, while the net pension liability was \$467.8 million.
- The fiduciary net position as a percentage of the total pension liability was 75.49%.

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 \$1.4 billion at the close of 2021.

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 \$1.4 billion, cash of \$37.8 million, capital assets of \$3 million, as well as accounts receivable of \$8.8 million.

In 2021, total contributions received by the Association were \$127.3 million and net investment income was \$204.2 million while retirement benefit payments, refunds, transfers and administration expenses were \$130.8 million, which resulted in a current increase of \$200.7 million.

During 2021, net position increased by \$200.7 million, which was primarily the result of the \$204.2 million net investment income. In 2021, current contributions were substantially sufficient to support the current expenses with only \$3.5 million of net investment income needed. The annual money weighted rate of return was 14.41% and 12.91% in 2021, and 2020, respectively. Fluctuations in the Association's annual investment returns are expected.

On September 24, 2020, the Association purchased land and a building for approximately \$2.4 million 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.

	2021	2020
Statement of Fiduciary Net Position		
Assets:		
Cash.....	\$ 37,833,063	\$ 21,227,465
Investments.....	1,399,558,086	1,217,496,853
Accounts receivable.....	8,841,653	7,577,111
Other assets.....	-	337,927
Capital assets, net of accumulated depreciation.....	2,994,531	2,394,672
Total assets.....	1,449,227,333	1,249,034,028
Liabilities:		
Accounts payable.....	8,873,014	9,422,197
Net Position Restricted for Pensions.....	\$ 1,440,354,319	\$ 1,239,611,831

	<u>2021</u>	<u>2020</u>
Statement of Changes in Fiduciary Net Position		
Additions:		
Contributions:		
Member contributions.....	\$ 30,579,452	\$ 29,471,227
Employer contributions.....	89,068,346	84,456,699
Other contributions.....	<u>7,622,063</u>	<u>7,722,738</u>
Total contributions.....	<u>127,269,861</u>	<u>121,650,664</u>
Net investment income:		
Total investment income.....	234,370,257	160,310,662
Less, investment expenses.....	<u>(30,127,791)</u>	<u>(15,900,626)</u>
Net investment income.....	<u>204,242,466</u>	<u>144,410,036</u>
Total additions.....	<u>331,512,327</u>	<u>266,060,700</u>
Deductions:		
Administration.....	1,821,575	1,814,276
Retirement benefits, refunds and transfers.....	128,873,828	119,549,784
Depreciation.....	<u>74,436</u>	<u>12,913</u>
Total deductions.....	<u>130,769,839</u>	<u>121,376,973</u>
Net increase (decrease) in fiduciary net position.....	200,742,488	144,683,727
Fiduciary net position at beginning of year.....	<u>1,239,611,831</u>	<u>1,094,928,104</u>
Fiduciary net position at end of year.....	<u>\$ 1,440,354,319</u>	<u>\$ 1,239,611,831</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, 2021

Assets	
CURRENT:	
Cash and cash equivalents.....	\$ 37,833,063
Investments:	
Fixed income.....	232,531,956
Domestic equities.....	372,308,427
International equities.....	175,160,597
Real estate funds.....	140,841,414
Venture capital funds.....	377,158,191
Hedge funds.....	90,691,703
Bank loan.....	10,865,798
Total investments.....	<u>1,399,558,086</u>
Accounts receivable:	
Member contributions.....	1,845,115
Employer pension appropriation.....	231,098
3(8)c Reimbursements from other systems.....	3,916,550
Due from Commonwealth - sheriff retirees (See Note 8).....	440,494
Other accounts receivable.....	2,408,396
Total accounts receivable.....	<u>8,841,653</u>
Total current assets.....	<u>1,446,232,802</u>
NONCURRENT:	
Capital assets, nondepreciable.....	341,500
Capital assets, net of accumulated depreciation.....	2,653,031
Total noncurrent assets.....	<u>2,994,531</u>
Total Assets.....	<u>1,449,227,333</u>
Liabilities	
Accounts payable.....	8,873,014
Net Position Restricted for Pensions.....	\$ <u>1,440,354,319</u>

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2021

Additions:	
Contributions:	
Employer pension assessments.....	\$ 85,994,057
Employer additional contributions.....	3,074,289
Member contributions.....	30,579,452
Transfers from other systems.....	3,061,438
3(8)(c) contributions from other systems.....	3,917,130
Workers' compensation settlements.....	24,000
Federal grant reimbursements.....	35,417
State COLA reimbursements.....	7,072
Members' makeup payments and redeposits.....	448,698
Interest not refunded.....	61,598
Reimbursement of 91A overearnings.....	64,247
Other revenue.....	2,463
	<hr/>
Total contributions.....	127,269,861
	<hr/>
Net investment income:	
Investment income.....	234,370,257
Less: investment expense.....	(30,127,791)
	<hr/>
Net investment income.....	204,242,466
	<hr/>
Total additions.....	331,512,327
	<hr/>
Deductions:	
Administration.....	1,821,575
Retirement benefits and refunds.....	124,310,720
Transfers to other systems.....	2,871,246
3(8)(c) transfer to other systems.....	1,691,862
Depreciation.....	74,436
	<hr/>
Total deductions.....	130,769,839
	<hr/>
Net increase (decrease) in fiduciary net position.....	200,742,488
	<hr/>
Fiduciary net position at beginning of year.....	1,239,611,831
	<hr/>
Fiduciary net position at end of year.....	\$ 1,440,354,319
	<hr/>

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 Sciarra
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, 2021, the carrying amount of the Association's deposits totaled \$37.8 million and the bank balance of \$38.3 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.....	\$ 232,531,956	\$ 2,325,320	\$ 67,434,267	\$ 90,687,463	\$ 72,084,906
<u>Other Investments:</u>					
Money Market Mutual Funds....	233,096				
Domestic Equities.....	372,308,427				
International Equities.....	175,160,597				
Real Estate Funds.....	140,841,414				
Venture Capital Funds.....	377,158,191				
Hedge Funds.....	90,691,703				
Bank Loan.....	10,865,798				
Total Investments.....	\$ 1,399,791,182				

The Association's annual money-weighted rate of return on pension plan investments was a gain of 14.41%. 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, 2021:

Investment Type	December 31, 2021	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.....	\$ 167,887,180	\$ -	\$ 167,887,180	\$ -	\$ -
Domestic Equities.....	372,308,427	372,308,427	-	-	-
International Equities.....	152,724,179	152,724,179	-	-	-
Real Estate Funds.....	97,373,995	-	-	97,373,995	58,769,195
Venture Capital Funds.....	269,687,293	-	-	269,687,293	128,032,110
Hedge Funds.....	10,645,829	-	-	10,645,829	-
Bank Loan.....	10,865,798	-	10,865,798	-	-
Money Market Mutual Funds.....	233,096	233,096	-	-	-
Total Investments by fair value level.....	<u>1,081,725,796</u>	<u>\$ 525,265,702</u>	<u>\$ 178,752,978</u>	<u>\$ 377,707,116</u>	<u>186,801,305</u>
Investments Measured at Net Asset Value:					
Fixed Income.....	64,644,776	-	-	-	-
International Equities.....	22,436,418	-	-	-	-
Real Estate Funds.....	43,467,420	-	-	-	11,462,423
Venture Capital Funds.....	107,470,899	-	-	-	30,649,389
Hedge Funds.....	80,045,874	-	-	-	1,942,822
Total Investments.....	<u>\$ 1,399,791,182</u>	-	-	-	<u>\$ 230,855,939</u>

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, venture capital funds and hedge 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, 2021, 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.....	2,066,085	674,295	-	2,740,380
<u>Less accumulated depreciation for:</u>				
Buildings and improvements.....	(12,913)	(74,436)	-	(87,349)
Total capital assets being depreciated, net.....	2,053,172	599,859	-	2,653,031
Total capital assets, net.....	\$ 2,394,672	\$ 599,859	\$ -	\$ 2,994,531

NOTE 6 – MEMBERSHIP

The following table represents the Association's membership at December 31, 2021:

Retirees and beneficiaries currently receiving benefits....	4,582
Inactive members.....	1,883
Active members.....	5,836
Total.....	12,301

NOTE 7 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2021, were as follows:

Total pension liability.....	\$ 1,908,113,972
Less: Association's fiduciary net position.....	(1,440,354,319)
The net pension liability.....	\$ 467,759,653
The Association's fiduciary net position as a percentage of the total pension liability.....	75.49%

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, 2021:

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.....	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. 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. 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. Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years. 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.

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, 2021, 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%
		100.00%

Discount rate: The discount rate used to measure the total pension liability was 7.875% as of December 31, 2021 and as of December 31, 2020. 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, 2021.....	\$ 662,891,949	\$ 467,759,653	\$ 301,432,010

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 received in 2021. 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, 2021.

NOTE 10 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

There were no GASB pronouncements required to be implemented in 2021, 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 October 13, 2022, which is the date the financial statements were available to be issued.

The Association carries its investments at fair (market) value in accordance with Generally Accepted Accounting Principles (GAAP). Market value adjustments are recorded monthly. The Association's investments had declined in value consistent with recent trends in the overall financial securities market.

In accordance with GAAP, the Association has not recorded the losses in its financial statements as the impairments were not known as of December 31, 2021. The Association has recorded the losses associated with the investment during the year 2022.

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Required Supplementary Information

Plymouth County Retirement Association

23

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.....	58.88%	56.76%	58.32%	65.56%
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362
Net pension liability as a percentage of covered payroll.....	236.28%	247.79%	239.03%	194.39%

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
\$	27,772,477	\$ 28,883,376	\$ 30,398,893	\$ 31,462,854
	122,120,554	129,044,546	137,728,408	141,277,497
	-	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>
	113,701,462	107,978,705	48,577,517	82,360,936
	<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>1,669,196,814</u>	<u>1,777,175,519</u>	<u>1,825,753,036</u>	<u>\$ 1,908,113,972</u>
\$	72,811,482	\$ 74,462,092	\$ 84,456,699	\$ 89,068,346
	27,326,242	29,270,635	29,471,227	30,579,452
	6,940,373	8,614,587	7,722,738	7,622,063
	(72,568,400)	168,963,372	144,410,036	204,242,466
	(1,828,777)	(1,888,516)	(1,814,276)	(1,821,575)
	<u>(115,748,560)</u>	<u>(121,133,872)</u>	<u>(119,549,784)</u>	<u>(128,873,828)</u>
	-	-	(12,913)	(74,436)
	(83,067,640)	158,288,298	144,683,727	200,742,488
	<u>1,019,707,446</u>	<u>936,639,806</u>	<u>1,094,928,104</u>	<u>1,239,611,831</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>732,557,008</u>	<u>682,247,415</u>	<u>586,141,205</u>	<u>\$ 467,759,653</u>
	56.11%	61.61%	67.90%	75.49%
\$	281,665,696	\$ 294,614,062	\$ 293,870,741	\$ 315,856,987
	260.08%	231.57%	199.46%	148.09%

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, 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)	-	246,703,886	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, 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, 2021, 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, 2021, 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, 2021, 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, 2021, and our report thereon, dated October 13, 2022, 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.



October 13, 2022

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2021

Employer	Employer Allocation Percentage	Net Pension Liability
Plymouth County.....	1.5874%	\$ 7,425,217
Town of Abington.....	3.6432%	17,041,417
Town of Bridgewater.....	5.1351%	24,019,926
Bridgewater Housing Authority.....	0.0714%	333,980
Bridgewater/Raynham Regional School.....	2.3504%	10,994,223
Town of Carver.....	2.8284%	13,230,114
Town of Duxbury.....	5.5916%	26,155,249
Duxbury Housing Authority.....	0.0282%	131,908
Town of East Bridgewater.....	3.5740%	16,717,730
East Bridgewater Housing Authority.....	0.0567%	265,220
Town of Halifax.....	1.6947%	7,927,123
Town of Hanover.....	4.8278%	22,582,501
Town of Hanson.....	2.2217%	10,392,216
Town of Kingston.....	3.4892%	16,321,070
Kingston Housing Authority.....	0.0063%	29,469
Town of Lakeville.....	1.4794%	6,920,036
Town of Marion.....	1.6567%	7,749,374
Town of Marshfield.....	8.2145%	38,424,117
Marshfield Housing Authority.....	0.0544%	254,461
Town of Mattapoisett.....	1.7505%	8,188,133
Town of Middleborough.....	9.0923%	42,530,111
Middleborough Housing Authority.....	0.1725%	806,885
Town of Norwell.....	3.7029%	17,320,672
Norwell Housing Authority.....	0.0480%	224,525
Old Rochester Regional School.....	0.9581%	4,481,605
Onset Fire District.....	0.3666%	1,714,807
Town of Pembroke.....	4.7046%	22,006,221
Plymouth County Mosquito Control.....	0.2187%	1,022,990
Town of Plympton.....	0.7069%	3,306,593
Town of Rochester.....	1.1260%	5,266,974
Town of Rockland.....	5.5131%	25,788,057
Town of Scituate.....	6.6998%	31,338,961
Scituate Housing Authority.....	0.1116%	522,020
Silver Lake Regional School.....	1.0012%	4,683,210
South Shore Regional School.....	0.4926%	2,304,184
Town of Wareham.....	5.5012%	25,732,394
Wareham Fire District.....	1.2433%	5,815,656
Wareham Housing Authority.....	0.0609%	284,866
Town of West Bridgewater.....	2.9962%	14,015,015
Town of Whitman.....	2.8819%	13,480,365
Whitman/Hanson Regional School.....	1.5807%	7,393,877
Whitman Housing Authority.....	0.1092%	510,794
Abington Housing Authority.....	0.0459%	214,702
Pembroke Housing Authority.....	0.1177%	550,553
Hanson Housing Authority.....	0.0355%	166,055
Rockland Housing Authority.....	0.0499%	233,412
Mattapoisett Housing Authority.....	0.0336%	157,167
West Bridgewater Housing Authority.....	0.0210%	98,230
South Shore Tri-Town Development.....	0.1465%	685,268
Total.....	100.0000%	\$ 467,759,653

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, 2021

	Plymouth County	Town of Abington	Town of Bridgewater
Net Pension Liability			
Beginning net pension liability.....	\$ 27,450,166	\$ 21,060,053	\$ 28,178,738
Ending net pension liability.....	\$ 7,425,217	\$ 17,041,417	\$ 24,019,926
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 823,521	\$ 1,890,043	\$ 2,664,018
Changes of assumptions.....	25,225	57,895	81,601
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	261,682	226,772	905,935
Total Deferred Outflows of Resources.....	\$ 1,110,428	\$ 2,174,710	\$ 3,651,554
Deferred Inflows of Resources			
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 2,037,365	\$ 4,675,901	\$ 6,590,698
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	9,368,236	711,826	131,772
Total Deferred Inflows of Resources.....	\$ 11,405,601	\$ 5,387,727	\$ 6,722,470
Pension Expense			
Proportionate share of plan pension expense.....	\$ 672,963	\$ 1,544,488	\$ 2,176,986
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(4,965,684)	(187,291)	496,460
Total Employer Pension Expense.....	\$ (4,292,721)	\$ 1,357,197	\$ 2,673,446
Contributions			
Statutory required contribution.....	\$ 3,103,195	\$ 3,144,709	\$ 4,115,684
Contribution in relation to statutory required contribution.....	(6,027,484)	(3,144,709)	(4,115,684)
Contribution deficiency/(excess).....	\$ (2,924,289)	\$ -	\$ -
Contributions as a percentage of covered payroll.....	79.24%	25.94%	26.39%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2023.....	\$ (2,718,389)	\$ 34,127	\$ 518,084
June 30, 2024.....	(3,473,363)	(1,645,356)	(1,755,239)
June 30, 2025.....	(2,978,988)	(942,011)	(972,675)
June 30, 2026.....	(1,124,433)	(659,777)	(861,086)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (10,295,173)	\$ (3,213,017)	\$ (3,070,916)
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 10,522,747	\$ 24,150,476	\$ 34,040,165
Current discount rate (7.875%).....	\$ 7,425,217	\$ 17,041,417	\$ 24,019,926
1% increase (8.875%).....	\$ 4,784,932	\$ 10,981,769	\$ 15,478,835
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, 2021

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 487,669	\$ 13,854,620	\$ 16,128,848	\$ 397,404
Ending net pension liability.....	\$ 333,980	\$ 10,994,223	\$ 13,230,114	\$ -
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 37,041	\$ 1,219,355	\$ 1,467,334	\$ -
Changes of assumptions.....	1,135	37,350	44,946	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	83,151	207,772	52,054
Total Deferred Outflows of Resources.....	\$ 38,176	\$ 1,339,856	\$ 1,720,052	\$ 52,054
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 91,639	\$ 3,016,646	\$ 3,630,140	\$ -
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	65,685	94,394	230,669	268,414
Total Deferred Inflows of Resources.....	\$ 157,324	\$ 3,111,040	\$ 3,860,809	\$ 268,414
Pension Expense				
Proportionate share of plan pension expense.....	\$ 30,270	\$ 986,431	\$ 1,199,081	\$ -
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(61,734)	(186,571)	(52,394)	(216,343)
Total Employer Pension Expense.....	\$ (31,464)	\$ 799,860	\$ 1,146,687	\$ (216,343)
Contributions				
Statutory required contribution.....	\$ 63,836	\$ 1,964,050	\$ 2,406,381	\$ -
Contribution in relation to statutory required contribution.....	(63,836)	(1,964,050)	(2,406,381)	-
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	66.54%	25.05%	28.51%	N/A
Deferred (Inflows)/Outflows Recognized in				
Future Pension Expense				
June 30, 2023.....	\$ (28,490)	\$ 125,698	\$ 71,318	\$ (54,816)
June 30, 2024.....	(46,205)	(895,985)	(1,090,974)	(75,796)
June 30, 2025.....	(28,089)	(562,943)	(618,967)	(67,547)
June 30, 2026.....	(16,364)	(437,954)	(502,134)	(18,201)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (119,148)	\$ (1,771,184)	\$ (2,140,757)	\$ (216,360)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 473,304	\$ 15,580,613	\$ 18,749,236	\$ -
Current discount rate (7.875%).....	\$ 333,980	\$ 10,994,223	\$ 13,230,114	\$ -
1% increase (8.875%).....	\$ 215,222	\$ 7,084,858	\$ 8,525,703	\$ -
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, 2021

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 31,511,181	\$ 182,290	\$ 20,262,901	\$ 308,896
Ending net pension liability.....	\$ 26,155,249	\$ 131,908	\$ 16,717,730	\$ 265,220
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,900,844	\$ 14,830	\$ 1,854,141	\$ 29,415
Changes of assumptions.....	88,855	448	56,794	901
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,144,495	1,480	379,050	17,003
Total Deferred Outflows of Resources.....	\$ 4,134,194	\$ 16,558	\$ 2,289,985	\$ 47,319
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 7,176,598	\$ 36,194	\$ 4,587,088	\$ 72,772
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	12,902	173,196	12,527
Total Deferred Inflows of Resources.....	\$ 7,176,598	\$ 49,096	\$ 4,760,284	\$ 85,299
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,370,514	\$ 11,956	\$ 1,515,171	\$ 24,039
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	619,663	(11,735)	82,526	(865)
Total Employer Pension Expense.....	\$ 2,990,177	\$ 221	\$ 1,597,697	\$ 23,174
Contributions				
Statutory required contribution.....	\$ 4,672,835	\$ 25,467	\$ 2,950,238	\$ 44,203
Contribution in relation to statutory required contribution.....	(4,672,835)	(25,467)	(2,950,238)	(44,203)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	24.64%	48.34%	24.09%	21.93%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 819,764	\$ (2,727)	\$ 276,574	\$ (4)
June 30, 2024.....	(1,771,420)	(14,199)	(1,331,163)	(19,142)
June 30, 2025.....	(1,110,642)	(9,621)	(786,804)	(9,430)
June 30, 2026.....	(980,106)	(5,991)	(629,108)	(9,404)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (3,042,404)	\$ (32,538)	\$ (2,470,301)	\$ (37,980)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 37,006,267	\$ 186,935	\$ 23,691,758	\$ 375,860
Current discount rate (7.875%).....	\$ 26,155,249	\$ 131,908	\$ 16,717,730	\$ 265,220
1% increase (8.875%).....	\$ 16,854,872	\$ 85,004	\$ 10,773,180	\$ 170,912
Covered Payroll as of the January 1, 2022, valuation.....	\$ 18,985,050	\$ 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, 2021

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability.....	\$ 9,313,198	\$ 27,555,870	\$ 12,350,439	\$ 19,329,179
Ending net pension liability.....	\$ 7,927,123	\$ 22,582,501	\$ 10,392,216	\$ 16,321,070
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 879,187	\$ 2,504,595	\$ 1,152,587	\$ 1,810,148
Changes of assumptions.....	26,930	76,718	35,305	55,446
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	315,290	675,972	352,140	1,006,066
Total Deferred Outflows of Resources.....	\$ 1,221,407	\$ 3,257,285	\$ 1,540,032	\$ 2,871,660
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 2,175,051	\$ 6,106,291	\$ 2,851,464	\$ 4,478,250
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	42,491	-	24,074	16,053
Total Deferred Inflows of Resources.....	\$ 2,217,572	\$ 6,106,291	\$ 2,875,538	\$ 4,494,333
Pension Expense				
Proportionate share of plan pension expense.....	\$ 718,457	\$ 2,046,706	\$ 941,871	\$ 1,479,219
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	261,914	312,107	246,487	570,777
Total Employer Pension Expense.....	\$ 980,371	\$ 2,358,813	\$ 1,188,358	\$ 2,049,996
Contributions				
Statutory required contribution.....	\$ 1,482,365	\$ 4,056,304	\$ 1,886,532	\$ 2,882,108
Contribution in relation to statutory required contribution.....	(1,482,365)	(4,056,304)	(1,886,532)	(2,882,108)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	26.91%	22.50%	29.14%	26.47%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 179,997	\$ 576,387	\$ 240,173	\$ 581,119
June 30, 2024.....	(587,559)	(1,636,874)	(750,886)	(893,228)
June 30, 2025.....	(323,803)	(1,029,289)	(443,336)	(617,125)
June 30, 2026.....	(284,800)	(858,250)	(381,857)	(593,439)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (996,165)	\$ (2,939,026)	\$ (1,335,506)	\$ (1,622,673)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 11,234,030	\$ 32,003,098	\$ 14,727,470	\$ 23,129,826
Current discount rate (7.875%).....	\$ 7,927,123	\$ 22,582,501	\$ 10,392,216	\$ 16,321,070
1% increase (8.875%).....	\$ 5,108,368	\$ 14,552,535	\$ 6,656,915	\$ 10,517,596
Covered Payroll as of the January 1, 2022, valuation.....	\$ 5,434,876	\$ 17,710,827	\$ 8,475,013	\$ 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, 2021

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability.....	\$ 14,067	\$ 8,340,203	\$ 8,740,538	\$ 47,445,200
Ending net pension liability.....	\$ 29,469	\$ 6,920,036	\$ 7,749,374	\$ 38,424,117
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 3,268	\$ 767,492	\$ 859,473	\$ 4,201,568
Changes of assumptions.....	100	23,509	26,326	130,535
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	10,711	218,042	622,852	479,560
Total Deferred Outflows of Resources.....	\$ 14,079	\$ 1,009,043	\$ 1,508,651	\$ 4,871,663
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 8,096	\$ 1,808,751	\$ 2,126,309	\$ 10,542,987
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,918	18,169	6,964	38,661
Total Deferred Inflows of Resources.....	\$ 10,004	\$ 1,916,920	\$ 2,133,273	\$ 10,581,648
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,673	\$ 627,178	\$ 702,345	\$ 3,482,473
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	6,706	152,782	406,472	35,157
Total Employer Pension Expense.....	\$ 9,379	\$ 779,960	\$ 1,108,817	\$ 3,517,630
Contributions				
Statutory required contribution.....	\$ 1,926	\$ 1,286,448	\$ 1,289,828	\$ 6,955,238
Contribution in relation to statutory required contribution.....	(1,926)	(1,286,448)	(1,289,828)	(6,955,238)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	25.02%	23.89%	27.07%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 2,002	\$ 155,296	\$ 312,719	\$ 678,351
June 30, 2024.....	600	(501,389)	(434,789)	(3,028,550)
June 30, 2025.....	1,593	(303,512)	(240,804)	(1,873,860)
June 30, 2026.....	(120)	(258,242)	(261,748)	(1,485,926)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 4,075	\$ (907,877)	\$ (624,622)	\$ (5,709,965)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 41,762	\$ 9,806,823	\$ 10,682,131	\$ 54,453,260
Current discount rate (7.875%).....	\$ 29,469	\$ 6,920,036	\$ 7,749,374	\$ 38,424,117
1% increase (8.875%).....	\$ 18,990	\$ 4,459,385	\$ 4,993,824	\$ 24,701,133
Covered Payroll as of the January 1, 2022, valuation.....	\$ N/A	\$ 5,021,021	\$ 5,368,381	\$ 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, 2021

	Marshfield Housing Authority	Town of Mattapoisett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 329,411	\$ 9,570,514	\$ 52,717,540	\$ 982,444
Ending net pension liability.....	\$ 254,461	\$ 8,188,133	\$ 42,530,111	\$ 806,885
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 28,222	\$ 908,135	\$ 4,716,958	\$ 89,491
Changes of assumptions.....	864	27,817	144,484	2,741
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	29,873	502,561	435,752	53,533
Total Deferred Outflows of Resources.....	\$ 58,959	\$ 1,438,513	\$ 5,297,194	\$ 145,765
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 89,820	\$ 2,246,898	\$ 11,689,808	\$ 221,397
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	7,496	24,736	207,168	2,448
Total Deferred Inflows of Resources.....	\$ 77,316	\$ 2,271,434	\$ 11,876,776	\$ 223,845
Pension Expense				
Proportionate share of plan pension expense.....	\$ 23,064	\$ 742,113	\$ 3,854,812	\$ 73,130
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	4,298	356,976	(78,459)	35,203
Total Employer Pension Expense.....	\$ 27,362	\$ 1,099,089	\$ 3,776,353	\$ 108,333
Contributions				
Statutory required contribution.....	\$ 49,296	\$ 1,494,792	\$ 7,750,893	\$ 151,466
Contribution in relation to statutory required contribution.....	(49,296)	(1,494,792)	(7,750,893)	(151,466)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	85.97%	25.21%	28.40%	29.45%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 12,189	\$ 267,271	\$ 661,550	\$ 28,345
June 30, 2024.....	(9,915)	(506,723)	(3,456,095)	(46,809)
June 30, 2025.....	(10,091)	(301,549)	(2,131,061)	(29,063)
June 30, 2026.....	(10,540)	(291,920)	(1,653,976)	(29,653)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (18,357)	\$ (832,921)	\$ (6,579,582)	\$ (76,080)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 360,813	\$ 11,603,924	\$ 60,272,125	\$ 1,143,488
Current discount rate (7.875%).....	\$ 254,461	\$ 8,188,133	\$ 42,530,111	\$ 806,885
1% increase (8.875%).....	\$ 103,979	\$ 5,276,568	\$ 27,407,103	\$ 519,970
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, 2021

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability.....	\$ 20,598,043	\$ 263,764	\$ 5,613,474	\$ 1,981,743
Ending net pension liability.....	\$ 17,320,672	\$ 224,525	\$ 4,481,605	\$ 1,714,807
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,921,013	\$ 24,902	\$ 497,049	\$ 190,187
Changes of assumptions.....	58,842	763	15,225	5,826
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	598,737	11,085	57,773	133,347
Total Deferred Outflows of Resources.....	\$ 2,578,592	\$ 36,750	\$ 570,047	\$ 329,360
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 4,752,526	\$ 61,606	\$ 1,229,683	\$ 470,517
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	45,806	1,064	-	29,826
Total Deferred Inflows of Resources.....	\$ 4,798,332	\$ 62,670	\$ 1,229,683	\$ 500,443
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,589,814	\$ 20,348	\$ 406,179	\$ 165,420
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	411,032	3,523	(15,325)	45,651
Total Employer Pension Expense.....	\$ 1,980,846	\$ 23,871	\$ 390,854	\$ 201,071
Contributions				
Statutory required contribution.....	\$ 3,089,469	\$ 34,198	\$ 800,827	\$ 289,082
Contribution in relation to statutory required contribution.....	(3,089,469)	(34,198)	(800,827)	(289,082)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.78%	18.63%	26.99%	35.69%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 403,378	\$ 7,659	\$ 96,777	\$ 44,233
June 30, 2024.....	(1,261,017)	(16,256)	(353,031)	(58,869)
June 30, 2025.....	(731,262)	(9,259)	(225,823)	(56,346)
June 30, 2026.....	(630,839)	(8,064)	(178,959)	(80,101)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (2,219,740)	\$ (25,920)	\$ (659,036)	\$ (171,063)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 24,546,226	\$ 318,189	\$ 6,351,167	\$ 2,430,162
Current discount rate (7.875%).....	\$ 17,320,672	\$ 224,525	\$ 4,481,605	\$ 1,714,807
1% increase (8.875%).....	\$ 11,101,726	\$ 144,688	\$ 2,888,020	\$ 1,105,050
Covered Payroll as of the January 1, 2022, valuation.....	\$ 11,584,822	\$ 183,526	\$ 2,606,805	\$ 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, 2021

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability.....	\$ 26,980,080	\$ 1,385,052	\$ 3,818,124	\$ 6,189,722
Ending net pension liability.....	\$ 22,006,221	\$ 1,022,990	\$ 3,306,593	\$ 5,266,974
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,440,681	\$ 113,458	\$ 366,730	\$ 584,153
Changes of assumptions.....	74,760	3,475	11,233	17,893
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	490,522	662	174,586	287,552
Total Deferred Outflows of Resources.....	\$ 3,006,063	\$ 117,595	\$ 552,551	\$ 889,628
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 6,038,168	\$ 280,693	\$ 907,278	\$ 1,445,177
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	37,301	167,733	46,593	41,848
Total Deferred Inflows of Resources.....	\$ 6,075,469	\$ 448,426	\$ 953,871	\$ 1,487,025
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,564,479	\$ 62,714	\$ 269,086	\$ 477,359
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions....	176,629	(118,445)	83,746	179,686
Total Employer Pension Expense.....	\$ 2,171,108	\$ (25,731)	\$ 383,432	\$ 657,047
Contributions				
Statutory required contribution.....	\$ 3,660,309	\$ 195,592	\$ 568,080	\$ 938,903
Contribution in relation to statutory required contribution....	(3,660,309)	(195,592)	(568,080)	(938,903)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	28.82%	24.27%	23.35%	30.09%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 464,328	\$ (62,489)	\$ 60,387	\$ 142,497
June 30, 2024.....	(1,669,329)	(143,675)	(224,941)	(352,597)
June 30, 2025.....	(1,632,213)	(79,524)	(121,023)	(188,604)
June 30, 2026.....	(842,192)	(45,143)	(115,743)	(188,393)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (3,069,406)	\$ (330,831)	\$ (401,320)	\$ (567,097)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 31,186,415	\$ 1,449,744	\$ 4,685,983	\$ 7,404,164
Current discount rate (7.875%).....	\$ 22,006,221	\$ 1,022,990	\$ 3,306,593	\$ 5,266,974
1% increase (8.875%).....	\$ 14,181,171	\$ 659,232	\$ 2,130,823	\$ 3,354,125
Covered Payroll as of the January 1, 2022, valuation.....	\$ 13,847,318	\$ 806,057	\$ 2,433,350	\$ 3,119,625
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, 2021

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability.....	\$ 31,091,860	\$ 38,129,072	\$ 706,300	\$ 6,145,104
Ending net pension liability.....	\$ 25,788,057	\$ 31,338,961	\$ 522,020	\$ 4,683,210
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,800,119	\$ 3,475,763	\$ 57,897	\$ 519,409
Changes of assumptions.....	87,508	106,465	1,773	15,910
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	857,406	637,896	5,801	130,268
Total Deferred Outflows of Resources.....	\$ 3,615,133	\$ 4,220,114	\$ 65,471	\$ 665,587
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 7,075,846	\$ 8,508,929	\$ 143,234	\$ 1,285,001
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	310,898	225,548	74,827	137,324
Total Deferred Inflows of Resources.....	\$ 7,386,744	\$ 8,024,577	\$ 218,061	\$ 1,422,325
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,337,234	\$ 2,840,328	\$ 47,314	\$ 424,450
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions....	231,896	320,080	(50,882)	(106,521)
Total Employer Pension Expense.....	\$ 2,569,130	\$ 3,160,408	\$ (3,568)	\$ 317,929
Contributions				
Statutory required contribution.....	\$ 4,601,255	\$ 5,759,996	\$ 101,092	\$ 890,159
Contribution in relation to statutory required contribution....	(4,601,255)	(5,759,996)	(101,092)	(890,159)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	26.56%	27.86%	40.00%	22.72%
Deferred (Inflows)/Outflows Recognized in				
Future Pension Expense				
June 30, 2023.....	\$ 431,705	\$ 532,983	\$ (26,955)	\$ 73,775
June 30, 2024.....	(2,044,330)	(2,472,818)	(66,195)	(373,251)
June 30, 2025.....	(1,196,100)	(1,478,889)	(36,426)	(259,556)
June 30, 2026.....	(982,886)	(1,185,939)	(23,014)	(197,706)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (3,771,611)	\$ (4,604,463)	\$ (152,590)	\$ (756,736)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 36,545,895	\$ 44,412,434	\$ 739,788	\$ 6,636,875
Current discount rate (7.875%).....	\$ 25,788,057	\$ 31,338,961	\$ 522,020	\$ 4,683,210
1% increase (8.875%).....	\$ 16,618,248	\$ 20,195,342	\$ 336,398	\$ 3,017,538
Covered Payroll as of the January 1, 2022, valuation.....	\$ 17,324,738	\$ 20,676,589	\$ 252,732	\$ 3,917,694
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, 2021

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 3,137,814	\$ 30,515,883	\$ 8,603,487	\$ 393,887
Ending net pension liability.....	\$ 2,304,184	\$ 25,732,394	\$ 5,815,056	\$ 284,866
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 255,554	\$ 2,853,946	\$ 645,007	\$ 31,594
Changes of assumptions.....	7,828	87,419	19,757	968
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	60,452	806,184	488,327	59,043
Total Deferred Outflows of Resources.....	\$ 323,834	\$ 3,747,549	\$ 1,153,091	\$ 91,605
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 632,233	\$ 7,050,573	\$ 1,595,727	\$ 78,163
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	115,669	473,574	10,353	17,066
Total Deferred Inflows of Resources.....	\$ 747,902	\$ 7,524,147	\$ 1,606,080	\$ 95,229
Pension Expense				
Proportionate share of plan pension expense.....	\$ 208,835	\$ 2,332,190	\$ 527,088	\$ 25,818
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions....	(113,832)	463,310	395,382	7,190
Total Employer Pension Expense.....	\$ 95,003	\$ 2,795,500	\$ 922,470	\$ 33,008
Contributions				
Statutory required contribution.....	\$ 434,147	\$ 4,566,527	\$ 1,089,908	\$ 54,736
Contribution in relation to statutory required contribution....	(434,147)	(4,716,527)	(1,089,908)	(54,736)
Contribution deficiency/(excess).....	\$ -	\$ (150,000)	\$ -	\$ -
Contributions as a percentage of covered payroll.....	22.65%	25.68%	29.70%	65.97%
Deferred (Inflows)/Outflows Recognized in				
Future Pension Expense				
June 30, 2023.....	\$ 24,817	\$ 316,963	\$ 238,684	\$ 24,790
June 30, 2024.....	(201,125)	(2,046,877)	(315,374)	(4,371)
June 30, 2025.....	(145,261)	(1,119,188)	(177,851)	(11,097)
June 30, 2026.....	(102,499)	(937,496)	(198,448)	(12,946)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (424,068)	\$ (3,786,596)	\$ (452,989)	\$ (3,624)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 3,265,406	\$ 36,467,012	\$ 8,241,736	\$ 403,702
Current discount rate (7.875%).....	\$ 2,304,184	\$ 25,732,394	\$ 5,815,056	\$ 284,866
1% increase (8.875%).....	\$ 1,484,854	\$ 16,582,378	\$ 3,747,704	\$ 183,572
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, 2021

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 17,135,252	\$ 16,122,986	\$ 9,221,790	\$ 601,967
Ending net pension liability.....	\$ 14,015,015	\$ 13,480,365	\$ 7,393,877	\$ 510,794
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,554,387	\$ 1,495,089	\$ 820,045	\$ 56,651
Changes of assumptions.....	47,512	45,796	25,119	1,735
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	527,851	520,871	48,291	131,597
Total Deferred Outflows of Resources.....	\$ 2,129,850	\$ 2,061,756	\$ 893,455	\$ 189,983
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 3,845,504	\$ 3,608,805	\$ 2,028,766	\$ 140,154
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	29,277	141,141	80,548
Total Deferred Inflows of Resources.....	\$ 3,845,504	\$ 3,728,082	\$ 2,169,907	\$ 230,802
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,270,215	\$ 1,221,760	\$ 670,126	\$ 46,297
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions....	235,061	262,255	(55,336)	(3,462)
Total Employer Pension Expense.....	\$ 1,505,276	\$ 1,514,015	\$ 614,790	\$ 42,835
Contributions				
Statutory required contribution.....	\$ 2,515,249	\$ 2,407,960	\$ 1,381,333	\$ 86,461
Contribution in relation to statutory required contribution....	(2,515,249)	(2,407,960)	(1,381,333)	(86,461)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	26.26%	30.55%	25.89%	21.87%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ 411,943	\$ 342,976	\$ 62,390	\$ (3,332)
June 30, 2024.....	(572,439)	(943,432)	(654,107)	(14,706)
June 30, 2025.....	(620,972)	(568,480)	(394,588)	(4,342)
June 30, 2026.....	(534,186)	(497,390)	(290,147)	(18,439)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (1,715,654)	\$ (1,666,326)	\$ (1,276,452)	\$ (40,819)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 19,801,569	\$ 19,103,882	\$ 10,478,333	\$ 723,879
Current discount rate (7.875%).....	\$ 14,015,015	\$ 13,480,365	\$ 7,393,877	\$ 510,794
1% increase (8.875%).....	\$ 9,031,506	\$ 8,686,509	\$ 4,764,736	\$ 329,164
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, 2021

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 334,100	\$ 746,744	\$ 228,009	\$ 321,792
Ending net pension liability.....	\$ 214,702	\$ 550,553	\$ 166,055	\$ 233,412
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 23,812	\$ 61,061	\$ 18,417	\$ 25,887
Changes of assumptions.....	729	1,870	564	793
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	6,253	8,502	147	4,044
Total Deferred Outflows of Resources.....	\$ 30,794	\$ 71,433	\$ 19,128	\$ 30,724
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 58,011	\$ 151,063	\$ 45,563	\$ 64,045
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	30,068	36,697	13,310	75,576
Total Deferred Inflows of Resources.....	\$ 88,079	\$ 187,760	\$ 58,873	\$ 139,621
Pension Expense				
Proportionate share of plan pension expense.....	\$ 19,461	\$ 49,898	\$ 15,048	\$ 21,153
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(29,593)	(17,415)	(12,001)	(31,300)
Total Employer Pension Expense.....	\$ (10,132)	\$ 32,483	\$ 3,047	\$ (10,147)
Contributions				
Statutory required contribution.....	\$ 42,603	\$ 112,197	\$ 32,537	\$ 49,731
Contribution in relation to statutory required contribution.....	(42,603)	(112,197)	(32,537)	(49,731)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	38.04%	23.47%	49.64%	33.02%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ (2,650)	\$ 2,966	\$ (2,590)	\$ (23,251)
June 30, 2024.....	(24,664)	(57,173)	(17,868)	(49,581)
June 30, 2025.....	(19,410)	(37,766)	(11,814)	(25,498)
June 30, 2026.....	(11,461)	(24,354)	(7,473)	(10,567)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (58,185)	\$ (116,327)	\$ (39,745)	\$ (108,897)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 304,268	\$ 780,224	\$ 235,327	\$ 330,783
Current discount rate (7.875%).....	\$ 214,702	\$ 550,553	\$ 166,055	\$ 233,412
1% increase (8.875%).....	\$ 138,357	\$ 354,785	\$ 107,009	\$ 150,415
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, 2021

	Halifax Housing Authority	Mattapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 17,584	\$ 36,927	\$ 132,468	\$ 101,402
Ending net pension liability.....	\$ -	\$ 157,167	\$ -	\$ 98,230
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ 17,431	\$ -	\$ 10,895
Changes of assumptions.....	-	534	-	334
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	11,538	73,953	4,786	11,150
Total Deferred Outflows of Resources.....	\$ 11,538	\$ 91,918	\$ 4,786	\$ 22,379
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ -	\$ 43,124	\$ -	\$ 26,953
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	123,454	43,242	61,221	2,127
Total Deferred Inflows of Resources.....	\$ 123,454	\$ 86,366	\$ 61,221	\$ 29,080
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1	\$ 14,242	\$ 1	\$ 8,505
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(63,801)	66,976	(49,287)	11,802
Total Employer Pension Expense.....	\$ (63,800)	\$ 81,218	\$ (49,286)	\$ 20,807
Contributions				
Statutory required contribution.....	\$ -	\$ 28,832	\$ 19,935	\$ 18,369
Contribution in relation to statutory required contribution.....	-	(28,832)	(19,935)	(18,369)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	49.07%	N/A	29.90%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2023.....	\$ (60,595)	\$ 5,889	\$ (15,876)	\$ 4,462
June 30, 2024.....	(40,677)	(8,869)	(16,656)	(5,914)
June 30, 2025.....	(9,837)	7,813	(17,834)	(2,361)
June 30, 2026.....	(807)	1,119	(6,065)	(2,888)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (111,916)	\$ 5,552	\$ (56,435)	\$ (6,701)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ -	\$ 222,731	\$ -	\$ 139,208
Current discount rate (7.875%).....	\$ -	\$ 157,167	\$ -	\$ 98,230
1% increase (8.875%).....	\$ -	\$ 101,281	\$ -	\$ 63,301
Covered Payroll as of the January 1, 2022, valuation.....	\$ N/A	\$ 58,344	\$ N/A	\$ 81,437

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, 2021

	South Shore Tri-Town Development	Carver Housing Authority	Totals
Net Pension Liability			
Beginning net pension liability.....	\$ 1,038,056	\$ -	\$ 586,141,205
Ending net pension liability.....	\$ 685,268	\$ -	\$ 467,759,653
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 76,002	\$ -	\$ 51,878,605
Changes of assumptions.....	2,328	-	1,589,084
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	43,030	924	13,984,446
Total Deferred Outflows of Resources.....	\$ 121,360	\$ 924	\$ 67,452,135
Deferred Inflows of Resources			
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 188,027	\$ -	\$ 128,346,052
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	82,892	59,332	13,984,446
Total Deferred Inflows of Resources.....	\$ 270,919	\$ 59,332	\$ 142,330,498
Pension Expense			
Proportionate share of plan pension expense.....	\$ 62,108	\$ -	\$ 42,394,211
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(49,775)	(24,118)	-
Total Employer Pension Expense.....	\$ 12,333	\$ (24,118)	\$ 42,394,211
Contributions			
Statutory required contribution.....	\$ 147,186	\$ -	\$ 85,994,057
Contribution in relation to statutory required contribution.....	(147,186)	-	(89,068,346)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ (3,074,289)
Contributions as a percentage of covered payroll.....	132.68%	N/A	27.23%
Deferred (Inflows)/Outflows Recognized in			
Future Pension Expense			
June 30, 2023.....	\$ 11,684	\$ (24,373)	\$ 6,219,483
June 30, 2024.....	(69,719)	(24,985)	(38,586,308)
June 30, 2025.....	(56,237)	(9,050)	(24,030,395)
June 30, 2026.....	(35,287)	-	(18,481,143)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (149,559)	\$ (58,406)	\$ (74,678,363)
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 971,137	\$ -	\$ 662,891,949
Current discount rate (7.875%).....	\$ 685,268	\$ -	\$ 467,759,653
1% increase (8.875%).....	\$ 441,598	\$ -	\$ 301,432,010
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.

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2020

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2020

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Financial Section

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Independent Auditor's Report

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

Report on the Financial Statements

We have audited the accompanying financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2020, and the related notes to the financial statements, which collectively comprise the Plymouth County Retirement Association's financial statements as listed in the table of contents.

Management's Responsibility 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; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Plymouth County Retirement Association as of December 31, 2020, and the results of its operations and changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters*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 Return 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. 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 September 21, 2021, on our consideration of the Plymouth County Retirement 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 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 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 Plymouth County Retirement Association's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of the Plymouth County Retirement 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.



September 21, 2021

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, 2020. 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 \$1.2 billion (net position).
- The Association's net position increased by \$144.7 million for the year ended December 31, 2020.
- Total investment income was \$160.3 million; investment expenses were \$15.9 million; and net investment income was \$144.4 million.
- Total contributions were \$121.7 million including \$29.5 million from members, \$84.5 million from employers and \$7.7 million from other sources.
- Retirement benefits, refunds and transfers amounted to \$119.5 million.
- Administrative expenses and depreciation expense were \$1.8 million and \$13,000, respectively.
- The total pension liability was \$1.8 billion as of December 31, 2020, while the net pension liability was \$586.1 million.
- The fiduciary net position as a percentage of the total pension liability was **67.90%**.

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 and deferred outflows less deferred inflows and 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 \$1.2 billion at the close of 2020.

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 \$1.2 billion, cash of \$21.2 million, capital assets of \$2.4 million, as well as accounts receivable and other assets of \$7.9 million.

In 2020, the Association's total contributions were \$121.7 million and net investment income was \$144.4 million while retirement benefit payments, refunds, transfers and administration expenses were \$121.4 million, which resulted in a current increase of \$144.7 million.

During 2020, net position increased by \$144.7 million. This increase was primarily the result of the \$144.4 million net investment income. In 2020, for the first time, current contributions were sufficient to support the current expenses and therefore net investment income was not needed to support expenses. The annual money weighted rate of return was 12.91% and 16.88% in 2020, and 2019, respectively. Fluctuations in the Association's annual investment returns are expected.

On September 24, 2020, the Association purchased land and a building for approximately \$2.4 million for the purpose of relocating their office operations.

The following tables present summarized financial information for the year.

Statement of Fiduciary Net Position	2020	2019
Assets:		
Cash.....	\$ 21,227,465	\$ 23,775,930
Investments.....	1,217,496,853	1,070,781,893
Accounts receivable.....	7,577,111	11,390,285
Other assets.....	337,927	338,618
Capital assets, nondepreciable.....	341,500	-
Capital assets, net of accumulated depreciation.....	2,053,172	-
Total assets.....	1,249,034,028	1,106,286,726
Liabilities:		
Accounts payable.....	9,422,197	11,358,622
Net Position Restricted for Pensions.....	\$ 1,239,611,831	\$ 1,094,928,104

Statement of Changes in Fiduciary Net Position	2020	2019
Additions:		
Contributions:		
Member contributions.....	\$ 29,471,227	\$ 28,759,454
Employer contributions.....	84,456,699	74,462,092
Other contributions.....	7,722,738	9,125,768
Total contributions.....	121,650,664	112,347,314
Net investment income:		
Total investment income.....	160,310,662	181,696,874
Less, investment expenses.....	(15,900,626)	(12,733,502)
Net investment income.....	144,410,036	168,963,372
Total additions.....	266,060,700	281,310,686
Deductions:		
Administration.....	1,814,276	1,888,516
Retirement benefits, refunds and transfers.....	119,549,784	121,133,872
Depreciation.....	12,913	-
Total deductions.....	121,376,973	123,022,388
Net increase (decrease) in fiduciary net position.....	144,683,727	158,288,298
Fiduciary net position at beginning of year.....	1,094,928,104	936,639,806
Fiduciary net position at end of year.....	\$ 1,239,611,831	\$ 1,094,928,104

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, 10 Cordage Circle, Suite 234, Plymouth, MA 02360.

Financial Statements

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2020

Assets	
CURRENT:	
Cash and cash equivalents.....	\$ 21,227,465
Investments:	
Fixed income.....	136,982,001
Domestic equities.....	358,769,047
International equities.....	227,767,857
Real estate funds.....	116,655,366
Venture capital funds.....	277,087,879
Hedge funds.....	77,646,692
Bank loan.....	22,588,011
	<u>1,217,496,853</u>
Accounts receivable:	
Member contributions.....	1,789,741
Employer pension appropriation.....	583,771
3(8)c Reimbursements from other systems.....	3,546,208
Due from Commonwealth - sheriff retirees (See Note 8).....	660,741
Other accounts receivable.....	996,650
	<u>7,577,111</u>
Interest and dividends.....	306,252
Other assets.....	31,675
	<u>1,246,639,356</u>
NONCURRENT:	
Capital assets, nondepreciable.....	341,500
Capital assets, net of accumulated depreciation.....	2,053,172
	<u>2,394,672</u>
Total Assets.....	<u>1,249,034,028</u>
Liabilities	
Accounts payable.....	9,422,197
Net Position Restricted for Pensions.....	\$ <u>1,239,611,831</u>

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2020

Additions:	
Contributions:	
Employer pension assessments.....	\$ 79,735,479
Employer additional contributions.....	4,721,220
Member contributions.....	29,471,227
Transfers from other systems.....	2,652,812
3(8)(c) contributions from other systems.....	4,145,560
Workers' compensation settlements.....	18,800
Federal grant reimbursements.....	19,871
State COLA reimbursements.....	443,089
Members' makeup payments and redeposits.....	352,096
Interest not refunded.....	56,857
Reimbursement of 91A overearnings.....	<u>33,653</u>
 Total contributions.....	 <u>121,650,664</u>
Net investment income:	
Investment income.....	160,310,662
Less: investment expense.....	<u>(15,900,626)</u>
 Net investment income.....	 <u>144,410,036</u>
 Total additions.....	 <u>266,060,700</u>
Deductions:	
Administration.....	1,814,276
Retirement benefits and refunds.....	117,193,507
Transfers to other systems.....	1,262,642
3(8)(c) transfer to other systems.....	1,093,635
Depreciation.....	<u>12,913</u>
 Total deductions.....	 <u>121,376,973</u>
 Net increase (decrease) in fiduciary net position.....	 144,683,727
 Fiduciary net position at beginning of year.....	 <u>1,094,928,104</u>
 Fiduciary net position at end of year.....	 <u>\$ 1,239,611,831</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 member of the 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 Sciarra
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, 2020, the carrying amount of the Association's deposits totaled \$21.2 million and the bank balance of \$22.0 million was covered by Federal Depository Insurance.

Investments

The Association's investments were as follows:

Investment Type	Fair Value	Maturity			
		Under 1 Year	6-10 Years	6-10 Years	Over 10 Years
<u>Debt Securities:</u>					
Fixed Income.....	\$ 136,982,001	\$ 1,369,820	\$ 39,724,780	\$ 53,422,981	\$ 42,464,420
<u>Other Investments:</u>					
Domestic Equities.....	358,769,047				
International Equities.....	227,767,857				
Real Estate Funds.....	116,655,366				
Venture Capital Funds.....	277,087,879				
Hedge Funds.....	77,646,692				
Bank Loan.....	22,588,011				
Total Investments.....	\$ 1,217,496,853				

The Association's annual money-weighted rate of return on pension plan investments was a gain of 12.91%. 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. Because investing is a key part of the plan'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, 2020:

Investment Type	December 31, 2020	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level:				
Debt Securities:				
Fixed Income.....	\$ 136,982,001	\$ -	\$ 136,982,001	\$ -
Other Investments:				
Domestic Equities.....	358,769,047	358,769,047	-	-
International Equities.....	227,767,857	227,767,857	-	-
Real Estate Funds.....	116,655,366	-	-	116,655,366
Venture Capital Funds.....	277,087,879	-	-	277,087,879
Hedge Funds.....	77,646,692	-	-	77,646,692
Bank Loan.....	22,588,011	-	22,588,011	-
Total Investments by fair value level....	\$ 1,217,496,853	\$ 586,536,904	\$ 159,570,012	\$ 471,389,937

NOTE 5 – CAPITAL ASSETS

On September 24, 2020, the Association purchased land and a building for approximately \$2.4 million for the purpose of relocating their office operations.

Capital asset activity for the year ended December 31, 2020, was as follows:

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets not being depreciated:				
Land.....	\$ -	\$ 341,500	\$ -	\$ 341,500
Capital assets being depreciated:				
Buildings and improvements.....	-	2,066,085	-	2,066,085
Less accumulated depreciation for:				
Buildings and improvements.....	-	(12,913)	-	(12,913)
Total capital assets being depreciated, net....	-	2,053,172	-	2,053,172
Total capital assets, net.....	\$ -	\$ 2,394,672	\$ -	\$ 2,394,672

NOTE 6 – MEMBERSHIP

The following table represents the Association's membership at December 31, 2020:

Retirees and beneficiaries currently receiving benefits....	4,436
Inactive members.....	1,773
Active members.....	<u>5,695</u>
Total.....	<u>11,904</u>

NOTE 7 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2020, were as follows:

Total pension liability.....	\$ 1,825,753,036
The pension plan's fiduciary net position.....	<u>(1,239,611,831)</u>
The net pension liability.....	\$ <u>586,141,205</u>
The pension plan's fiduciary net position as a percentage of the total pension liability.....	67.90%

The total pension liability was determined by an actuarial valuation as of January 1, 2020, using the following actuarial assumptions, applied to all periods included in the measurement date of December 31, 2020:

Valuation date.....	January 1, 2020
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.
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).
Investment rate of return/Discount rate....	7.875% nominal rate, net of investment expense.

Mortality Rates..... 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. 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. 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. Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years. 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.

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, 2020, are summarized in the following table:

Asset Class	Long-Term Expected Nominal Rate of Return	Long-Term Expected Asset Allocation
Domestic equity.....	6.80%	27.00%
International developed equity.....	7.10%	4.00%
Emerging markets equity.....	8.10%	10.00%
Global equity.....	7.10%	11.00%
Core bonds.....	1.80%	9.00%
Value-added fixed income.....	4.00%	9.00%
Hedge funds.....	4.30%	6.00%
Real estate.....	6.90%	9.00%
Private equity.....	9.10%	8.00%
Real assets.....	8.10%	6.00%
Cash and Cash Equivalent.....	0.00%	1.00%
		<u>100.00%</u>

Discount rate: The discount rate used to measure the total pension liability was 7.875% as of December 31, 2020 and as of December 31, 2019. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that 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, 2020.....	\$ 810,781,133	\$ 586,141,205	\$ 427,627,926

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 FY2011 through FY2022 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 received in 2020. The three remaining payments totaling \$660,741, 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, 2020.

NOTE 10 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

There were no GASB pronouncements required to be implemented in 2020, 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 September 21, 2021, which is the date the financial statements were available to be issued and there are no events of note to report.

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Required Supplementary Information

Plymouth County Retirement Association

21

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.....	(90,825,319)	(98,626,669)	(100,786,029)	(110,807,537)
Net change in total pension liability.....	51,781,919	49,373,769	53,226,565	35,404,907
Total pension liability - beginning.....	1,365,708,192	1,417,490,111	1,466,863,880	1,520,090,445
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.....	\$ 56,266,944	\$ 67,162,327	\$ 66,393,381	\$ 69,896,514
Member contributions.....	24,889,464	26,259,167	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.....	811,013,847	834,581,969	832,637,492	886,584,737
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.....	58.88%	56.76%	58.32%	65.56%
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362
Net pension liability as a percentage of covered payroll.....	236.28%	247.79%	239.03%	194.39%

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
\$	27,772,477	\$ 28,883,376	\$ 30,398,893
	122,120,554	129,044,546	137,728,408
	-	15,202,584	-
	59,806,942	55,982,071	-
	19,750,049	-	-
	<u>(115,748,560)</u>	<u>(121,133,872)</u>	<u>(119,549,784)</u>
	113,701,462	107,978,705	48,577,517
	<u>1,555,495,352</u>	<u>1,669,196,814</u>	<u>1,777,175,519</u>
\$	<u>1,669,196,814</u>	\$ <u>1,777,175,519</u>	\$ <u>1,825,753,036</u>
\$	72,811,482	\$ 74,462,092	\$ 84,456,699
	27,326,242	29,270,635	29,471,227
	6,940,373	8,614,587	7,722,738
	(72,568,400)	168,963,372	144,410,036
	(1,828,777)	(1,888,516)	(1,814,276)
	<u>(115,748,560)</u>	<u>(121,133,872)</u>	<u>(119,549,784)</u>
	-	-	(12,913)
	(83,067,640)	158,288,298	144,683,727
	<u>1,019,707,446</u>	<u>936,639,806</u>	<u>1,094,928,104</u>
\$	<u>936,639,806</u>	\$ <u>1,094,928,104</u>	\$ <u>1,239,611,831</u>
\$	<u>732,557,008</u>	\$ <u>682,247,415</u>	\$ <u>586,141,205</u>
	56.11%	61.61%	67.90%
\$	281,665,696	\$ 294,614,062	\$ 293,870,741
	260.08%	231.57%	199.46%

SCHEDULE OF CONTRIBUTIONS

	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017
Actuarially determined contribution.....	\$ 58,130,647	\$ 62,772,260	\$ 66,255,664	\$ 68,534,029
Contributions in relation to the actuarially determined contribution.....	<u>(58,130,647)</u>	<u>(62,772,260)</u>	<u>(66,393,381)</u>	<u>(69,896,514)</u>
Contribution deficiency (excess).....	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (137,717)</u>	<u>\$ (1,362,485)</u>
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362
Contributions as a percentage of covered payroll.....	23.56%	24.52%	25.05%	25.36%

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
\$	72,127,482	73,787,092	79,735,479
	<u>(72,811,482)</u>	<u>(74,462,092)</u>	<u>(84,456,699)</u>
\$	<u>(684,000)</u>	<u>(675,000)</u>	<u>(4,721,220)</u>
\$	281,665,696	294,614,062	293,870,741
	25.85%	25.27%	26.74%

SCHEDULE OF INVESTMENT RETURNS

<u>Year</u>	<u>Annual money-weighted rate of return, net of investment expense</u>
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 Retirement Board
Plymouth County Retirement Association
Plymouth, Massachusetts

We have audited the accompanying schedule of employer allocations of the Plymouth County Retirement Association as of and for the year ended December 31, 2020, 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 income of resources, total contributions and total pension expense included in the accompanying schedule of pension amounts by employer of the Plymouth County Retirement Association as of and for the year ended December 31, 2020, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes 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 Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and row totals titled 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 Plymouth County Retirement Association as of and for the year ended December 31, 2020, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2020, and our report thereon, dated September 21, 2021, expressed an unmodified opinion on those financial statements.

Restriction on Use

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



September 21, 2021

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2020

Employer	Employer Allocation Percentage	Share of Net Pension Liability	Contribution In Excess of Annual Appropriation	Net Pension Liability
Plymouth County.....	4.6832%	\$ 36,617,976	\$ (9,167,810)	\$ 27,450,166
Town of Abington.....	3.5930%	21,060,053	-	21,060,053
Town of Bridgewater.....	4.8075%	28,178,738	-	28,178,738
Bridgewater Housing Authority.....	0.0832%	487,669	-	487,669
Bridgewater/Raynham Regional School.....	2.3637%	13,854,620	-	13,854,620
Town of Carver.....	2.7517%	16,181,174	(52,326)	16,128,848
Carver/Marion/Wareham Regional Refuse.....	0.0678%	397,404	-	397,404
Town of Duxbury.....	5.3931%	31,611,181	-	31,611,181
Duxbury Housing Authority.....	0.0311%	182,290	-	182,290
Town of East Bridgewater.....	3.4570%	20,262,901	-	20,262,901
East Bridgewater Housing Authority.....	0.0527%	308,896	-	308,896
Town of Halifax.....	1.5889%	9,313,198	-	9,313,198
Town of Hanover.....	4.7012%	27,555,670	-	27,555,670
Town of Hanson.....	2.1139%	12,390,439	-	12,390,439
Town of Kingston.....	3.2977%	19,329,179	-	19,329,179
Kingston Housing Authority.....	0.0024%	14,067	-	14,067
Town of Lakeville.....	1.4229%	8,340,203	-	8,340,203
Town of Marion.....	1.4912%	8,740,538	-	8,740,538
Town of Marshfield.....	8.0945%	47,445,200	-	47,445,200
Marshfield Housing Authority.....	0.0562%	329,411	-	329,411
Town of Mattapoisett.....	1.6326%	9,570,514	-	9,570,514
Town of Middleborough.....	8.9940%	52,717,540	-	52,717,540
Middleborough Housing Authority.....	0.1642%	962,444	-	962,444
Town of Norwell.....	3.5036%	20,536,043	-	20,536,043
Norwell Housing Authority.....	0.0450%	263,764	-	263,764
Old Rochester Regional School.....	0.9577%	5,613,474	-	5,613,474
Onset Fire District.....	0.3381%	1,981,743	-	1,981,743
Town of Pembroke.....	4.6030%	26,980,080	-	26,980,080
Plymouth County Mosquito Control.....	0.2363%	1,385,052	-	1,385,052
Town of Plympton.....	0.6514%	3,818,124	-	3,818,124
Town of Rochester.....	1.0526%	6,169,722	-	6,169,722
Town of Rockland.....	5.3045%	31,091,860	-	31,091,860
Town of Scituate.....	6.5051%	38,129,072	-	38,129,072
Scituate Housing Authority.....	0.1205%	706,300	-	706,300
Silver Lake Regional School.....	1.0484%	6,145,104	-	6,145,104
South Shore Regional School.....	0.5353%	3,137,614	-	3,137,614
Town of Wareham.....	5.2062%	30,515,683	-	30,515,683
Wareham Fire District.....	1.1266%	6,603,467	-	6,603,467
Wareham Housing Authority.....	0.0672%	393,887	-	393,887
Town of West Bridgewater.....	2.9234%	17,135,252	-	17,135,252
Town of Whitman.....	2.7507%	16,122,986	-	16,122,986
Whitman/Hanson Regional School.....	1.5733%	9,221,760	-	9,221,760
Whitman Housing Authority.....	0.1027%	601,967	-	601,967
Abington Housing Authority.....	0.0570%	334,100	-	334,100
Pembroke Housing Authority.....	0.1274%	746,744	-	746,744
Hanson Housing Authority.....	0.0389%	228,009	-	228,009
Rockland Housing Authority.....	0.0549%	321,792	-	321,792
Halifax Housing Authority.....	0.0030%	17,584	-	17,584
Mattapoisett Housing Authority.....	0.0063%	36,927	-	36,927
Acushnet/Rochester/Marion Health District.....	0.0226%	132,468	-	132,468
West Bridgewater Housing Authority.....	0.0173%	101,402	-	101,402
South Shore Tri-Town Development.....	0.1771%	1,038,056	-	1,038,056
Total.....	100.00%	\$ 595,361,341	\$ (9,220,136)	\$ 586,141,205

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, 2020

	Plymouth County	Town of Abington	Town of Bridgewater
Net Pension Liability			
Beginning net pension liability.....	\$ 33,705,568	\$ 24,998,762	\$ 32,997,164
Ending net pension liability.....	\$ 27,450,166	\$ 21,060,053	\$ 28,178,738
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 2,288,352	\$ 1,755,647	\$ 2,349,089
Changes of assumptions.....	287,049	220,225	294,667
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,100,543	206,157	71,364
Total Deferred Outflows of Resources.....	\$ 3,675,944	\$ 2,182,029	\$ 2,715,120
Deferred Inflows of Resources			
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 2,723,904	\$ 2,089,804	\$ 2,796,201
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,542,469	1,074,118	273,261
Total Deferred Inflows of Resources.....	\$ 4,266,373	\$ 3,163,922	\$ 3,069,462
Pension Expense			
Proportionate share of plan pension expense.....	\$ 2,024,211	\$ 4,070,045	\$ 2,986,629
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	3,704,953	(1,199,193)	(425,780)
Total Employer Pension Expense.....	\$ 5,729,164	\$ 2,870,852	\$ 2,560,839
Contributions			
Statutory required contribution.....	\$ 3,119,908	\$ 2,888,071	\$ 3,864,267
Contribution in relation to statutory required contribution.....	(7,419,908)	(2,888,071)	(3,864,267)
Contribution deficiency/(excess).....	\$ (4,300,000)	\$ -	\$ -
Contributions as a percentage of covered payroll.....	79.65%	28.38%	27.89%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2022.....	\$ 1,011,447	\$ 315,500	\$ 663,837
June 30, 2023.....	579,089	440,183	833,340
June 30, 2024.....	(1,562,981)	(1,216,807)	(1,293,199)
June 30, 2025.....	(617,984)	(520,769)	(558,320)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (590,429)	\$ (981,893)	\$ (354,342)
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 37,970,504	\$ 28,131,365	\$ 38,978,302
Current discount rate (7.875%).....	\$ 27,450,166	\$ 21,060,053	\$ 28,178,738
1% increase (8.875%).....	\$ 20,026,872	\$ 15,304,671	\$ 20,558,212
Covered Payroll as of the January 1, 2020, valuation.....	\$ 3,916,900	\$ 10,957,546	\$ 13,856,777
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, 2020

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 597,212	\$ 15,902,396	\$ 18,859,725	\$ 725,137
Ending net pension liability.....	\$ 487,669	\$ 13,854,620	\$ 16,128,848	\$ 397,404
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 40,654	\$ 1,154,975	\$ 1,344,563	\$ 33,129
Changes of assumptions.....	5,100	144,879	165,661	4,156
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	7,738	118,384	-	96,067
Total Deferred Outflows of Resources.....	\$ 53,492	\$ 1,418,238	\$ 1,513,224	\$ 133,352
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 48,393	\$ 1,374,808	\$ 1,600,478	\$ 39,436
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	65,858	118,407	414,463	129,215
Total Deferred Inflows of Resources.....	\$ 114,251	\$ 1,493,215	\$ 2,014,941	\$ 168,651
Pension Expense				
Proportionate share of plan pension expense.....	\$ 51,618	\$ 1,469,304	\$ 1,709,546	\$ 41,420
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(20,067)	(11,853)	(194,601)	269,680
Total Employer Pension Expense.....	\$ 31,551	\$ 1,457,351	\$ 1,514,947	\$ 331,100
Contributions				
Statutory required contribution.....	\$ 66,894	\$ 1,889,914	\$ 2,211,815	\$ 54,521
Contribution in relation to statutory required contribution.....	(66,894)	(1,889,914)	(2,261,815)	(425,741)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ (50,000)	\$ (371,220)
Contributions as a percentage of covered payroll.....	27.35%	27.33%	29.29%	159.08%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ (11,378)	\$ 345,154	\$ 246,899	\$ 10,161
June 30, 2023.....	(7,738)	433,362	345,797	13,046
June 30, 2024.....	(30,738)	(594,250)	(779,128)	(38,312)
June 30, 2025.....	(10,905)	(259,273)	(315,285)	(20,194)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (60,759)	\$ (74,977)	\$ (501,717)	\$ (35,299)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 674,569	\$ 19,164,434	\$ 22,310,265	\$ 549,710
Current discount rate (7.875%).....	\$ 487,669	\$ 13,854,620	\$ 16,128,848	\$ 397,404
1% increase (8.875%).....	\$ 355,786	\$ 10,107,842	\$ 11,787,038	\$ 289,932
Covered Payroll as of the January 1, 2020, valuation.....	\$ 244,568	\$ 6,962,105	\$ 7,550,248	\$ 34,273
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, 2020

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 35,384,545	\$ 223,014	\$ 24,132,704	\$ 340,577
Ending net pension liability.....	\$ 31,611,181	\$ 182,290	\$ 20,262,001	\$ 308,896
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,635,231	15,196	\$ 1,689,194	\$ 25,751
Changes of assumptions.....	330,561	1,906	211,891	3,230
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	991,132	5,285	124,126	9,551
Total Deferred Outflows of Resources.....	\$ 3,956,924	\$ 22,387	\$ 2,025,211	\$ 38,532
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 3,136,806	\$ 16,096	\$ 2,010,704	\$ 30,650
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	89,228	11,703	302,178	23,215
Total Deferred Inflows of Resources.....	\$ 3,226,034	\$ 27,799	\$ 2,312,882	\$ 53,865
Pension Expense				
Proportionate share of plan pension expense.....	\$ 3,354,826	\$ 19,294	\$ 2,146,544	\$ 32,796
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	475,761	(6,017)	(354,717)	5,000
Total Employer Pension Expense.....	\$ 3,830,589	\$ 13,277	\$ 1,791,827	\$ 37,796
Contributions				
Statutory required contribution.....	\$ 4,334,944	\$ 24,975	\$ 2,778,694	\$ 42,331
Contribution in relation to statutory required contribution.....	(4,334,944)	(24,975)	(2,778,694)	(42,331)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	23.99%	51.15%	24.18%	18.95%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 1,139,245	\$ 2,016	\$ 474,123	\$ 944
June 30, 2023.....	1,321,417	3,706	607,102	3,095
June 30, 2024.....	(1,180,826)	(9,063)	(948,213)	(14,251)
June 30, 2025.....	(548,944)	(4,063)	(420,683)	(5,121)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 730,890	\$ (7,402)	\$ (287,671)	\$ (15,333)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 43,726,237	\$ 252,153	\$ 28,028,703	\$ 427,281
Current discount rate (7.875%).....	\$ 31,611,181	\$ 182,290	\$ 20,262,001	\$ 308,896
1% increase (8.875%).....	\$ 23,082,401	\$ 132,992	\$ 14,783,097	\$ 225,360
Covered Payroll as of the January 1, 2020, valuation.....	\$ 18,073,102	\$ 48,826	\$ 11,493,973	\$ 223,356
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, 2020

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability.....	\$ 10,924,945	\$ 31,382,708	\$ 14,400,815	\$ 21,176,743
Ending net pension liability.....	\$ 9,313,198	\$ 27,555,870	\$ 12,390,439	\$ 19,329,179
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 776,384	\$ 2,297,147	\$ 1,032,915	\$ 1,611,355
Changes of assumptions.....	97,389	288,152	129,568	202,127
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	80,277	531,408	124,428	719,923
Total Deferred Outflows of Resources.....	\$ 954,050	\$ 3,116,707	\$ 1,286,911	\$ 2,533,405
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 924,156	\$ 2,734,372	\$ 1,229,517	\$ 1,918,052
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	121,978	45,863	92,851	62,029
Total Deferred Inflows of Resources.....	\$ 1,046,134	\$ 2,780,035	\$ 1,322,368	\$ 1,980,081
Pension Expense				
Proportionate share of plan pension expense.....	\$ 987,040	\$ 2,922,974	\$ 1,313,538	\$ 2,052,605
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(101,943)	135,204	(80,874)	480,026
Total Employer Pension Expense.....	\$ 885,097	\$ 3,058,178	\$ 1,232,664	\$ 2,532,631
Contributions				
Statutory required contribution.....	\$ 1,277,154	\$ 3,778,828	\$ 1,899,136	\$ 2,850,687
Contribution in relation to statutory required contribution.....	(1,277,154)	(3,778,828)	(1,899,136)	(2,850,687)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	22.86%	22.80%	28.58%	25.69%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 220,794	\$ 888,545	\$ 326,394	\$ 702,816
June 30, 2023.....	286,356	1,054,342	410,535	826,455
June 30, 2024.....	(413,795)	(1,102,196)	(532,023)	(862,088)
June 30, 2025.....	(185,439)	(504,019)	(240,363)	(313,859)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (92,084)	\$ 336,672	\$ (35,457)	\$ 553,324
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 12,882,502	\$ 38,116,442	\$ 17,139,102	\$ 26,737,130
Current discount rate (7.875%).....	\$ 9,313,198	\$ 27,555,870	\$ 12,390,439	\$ 19,329,179
1% increase (8.875%).....	\$ 6,784,580	\$ 20,103,644	\$ 9,039,627	\$ 14,101,886
Covered Payroll as of the January 1, 2020, valuation.....	\$ 5,836,109	\$ 16,723,142	\$ 5,948,619	\$ 10,317,018
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, 2020

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability.....	\$ 17,786	\$ 9,606,700	\$ 9,722,996	\$ 55,321,130
Ending net pension liability.....	\$ 14,067	\$ 8,340,203	\$ 8,740,538	\$ 47,445,200
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,173	\$ 695,272	\$ 728,645	\$ 3,955,216
Changes of assumptions.....	147	87,214	91,400	496,138
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,553	121,005	259,673	279,287
Total Deferred Outflows of Resources.....	\$ 3,883	\$ 903,491	\$ 1,079,718	\$ 4,730,641
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 1,396	\$ 827,605	\$ 867,329	\$ 4,708,029
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	6,351	70,084	26,858	149,122
Total Deferred Inflows of Resources.....	\$ 7,757	\$ 897,689	\$ 894,187	\$ 4,857,151
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,487	\$ 884,396	\$ 927,776	\$ 5,029,295
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(978)	(11,527)	146,543	(270,234)
Total Employer Pension Expense.....	\$ 509	\$ 872,869	\$ 1,074,319	\$ 4,759,061
Contributions				
Statutory required contribution.....	\$ 1,916	\$ 1,143,753	\$ 1,198,637	\$ 6,506,332
Contribution in relation to statutory required contribution.....	(1,916)	(1,143,753)	(1,198,637)	(6,506,332)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	25.52%	25.04%	26.60%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ (1,652)	\$ 226,511	\$ 298,650	\$ 1,281,274
June 30, 2023.....	(1,113)	264,006	354,565	1,587,087
June 30, 2024.....	(767)	(347,334)	(318,788)	(2,096,047)
June 30, 2025.....	(342)	(157,681)	(148,895)	(928,824)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (3,874)	\$ 5,802	\$ 185,531	\$ (128,510)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 19,458	\$ 11,536,604	\$ 12,090,368	\$ 65,628,679
Current discount rate (7.875%).....	\$ 14,067	\$ 8,340,203	\$ 8,740,538	\$ 47,445,200
1% increase (8.875%).....	\$ 10,263	\$ 6,064,718	\$ 6,376,788	\$ 34,614,343
Covered Payroll as of the January 1, 2020, valuation.....	\$ N/A	\$ 4,482,469	\$ 4,786,787	\$ 24,456,407
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, 2020

	Marshfield Housing Authority	Town of Mattapoisett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 290,739	\$ 10,677,304	\$ 62,077,904	\$ 1,023,401
Ending net pension liability.....	\$ 329,411	\$ 9,570,514	\$ 52,717,540	\$ 962,444
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 27,461	\$ 797,835	\$ 4,394,738	\$ 80,233
Changes of assumptions.....	3,445	100,080	551,271	10,054
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	46,554	300,940	300,994	47,740
Total Deferred Outflows of Resources.....	\$ 77,460	\$ 1,198,855	\$ 5,247,003	\$ 138,037
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 32,687	\$ 949,690	\$ 5,231,202	\$ 95,503
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	10,104	95,408	382,494	8,188
Total Deferred Inflows of Resources.....	\$ 42,791	\$ 1,045,098	\$ 5,613,696	\$ 103,691
Pension Expense				
Proportionate share of plan pension expense.....	\$ 35,172	\$ 1,015,794	\$ 5,586,529	\$ 102,287
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	39,072	115,300	(712,387)	34,876
Total Employer Pension Expense.....	\$ 74,244	\$ 1,131,094	\$ 4,874,142	\$ 137,163
Contributions				
Statutory required contribution.....	\$ 45,138	\$ 1,312,405	\$ 7,229,358	\$ 131,978
Contribution in relation to statutory required contribution.....	(45,138)	(1,312,405)	(7,229,358)	(131,978)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	22.66%	22.28%	28.57%	29.67%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 17,994	\$ 302,106	\$ 1,363,931	\$ 36,652
June 30, 2023.....	20,603	368,709	1,701,851	41,642
June 30, 2024.....	(2,107)	(352,550)	(2,371,650)	(29,793)
June 30, 2025.....	(2,021)	(164,508)	(1,060,925)	(14,155)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 34,669	\$ 153,757	\$ (366,693)	\$ 34,346
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 455,658	\$ 13,238,435	\$ 72,921,655	\$ 1,331,303
Current discount rate (7.875%).....	\$ 329,411	\$ 9,570,514	\$ 52,717,540	\$ 962,444
1% increase (8.875%).....	\$ 240,327	\$ 6,962,309	\$ 38,480,856	\$ 702,165
Covered Payroll as of the January 1, 2020, valuation.....	\$ 199,165	\$ 5,891,579	\$ 25,302,455	\$ 444,793
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, 2020

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability.....	\$ 24,043,088	\$ 311,262	\$ 6,465,351	\$ 2,132,314
Ending net pension liability.....	\$ 20,536,043	\$ 263,764	\$ 5,613,474	\$ 1,981,743
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,711,964	\$ 21,988	\$ 467,961	\$ 165,206
Changes of assumptions.....	214,747	2,758	58,701	20,723
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	117,864	9,214	118,304	98,845
Total Deferred Outflows of Resources.....	\$ 2,044,575	\$ 33,960	\$ 644,966	\$ 284,774
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 2,037,808	\$ 26,175	\$ 557,031	\$ 196,650
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	119,759	4,793	25,675	80,262
Total Deferred Inflows of Resources.....	\$ 2,157,567	\$ 30,968	\$ 582,706	\$ 276,932
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,176,603	\$ 27,953	\$ 595,255	\$ 210,546
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(156,392)	(2,943)	6,262	41,068
Total Employer Pension Expense.....	\$ 2,020,211	\$ 25,010	\$ 601,517	\$ 251,616
Contributions				
Statutory required contribution.....	\$ 2,816,209	\$ 36,181	\$ 769,779	\$ 271,801
Contribution in relation to statutory required contribution.....	(2,816,209)	(36,181)	(769,779)	(271,801)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	24.71%	25.98%	26.54%	35.69%
Deferred (Inflows)/Outflows Recognized in				
Future Pension Expense				
June 30, 2022.....	\$ 533,436	\$ 9,570	\$ 185,837	\$ 45,265
June 30, 2023.....	667,675	10,667	216,377	61,622
June 30, 2024.....	(907,424)	(11,903)	(233,852)	(68,710)
June 30, 2025.....	(408,679)	(5,342)	(106,102)	(30,335)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (112,992)	\$ 2,992	\$ 62,260	\$ 7,842
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 28,406,527	\$ 364,852	\$ 7,764,850	\$ 2,741,250
Current discount rate (7.875%).....	\$ 20,536,043	\$ 263,764	\$ 5,613,474	\$ 1,981,743
1% increase (8.875%).....	\$ 14,882,372	\$ 192,433	\$ 4,095,392	\$ 1,445,810
Covered Payroll as of the January 1, 2020, valuation.....	\$ 11,396,561	\$ 139,261	\$ 2,900,256	\$ 761,640
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, 2020

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability.....	\$ 31,158,326	\$ 1,883,304	\$ 4,378,187	\$ 6,948,320
Ending net pension liability.....	\$ 26,980,090	\$ 1,385,052	\$ 3,818,124	\$ 6,169,722
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,249,164	\$ 115,463	\$ 318,294	\$ 514,332
Changes of assumptions.....	282,133	14,484	39,926	64,517
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	375,088	2,557	65,062	151,368
Total Deferred Outflows of Resources.....	\$ 2,906,385	\$ 132,504	\$ 423,282	\$ 730,217
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 2,677,255	\$ 137,439	\$ 378,875	\$ 612,227
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	143,878	185,157	118,844	94,195
Total Deferred Inflows of Resources.....	\$ 2,821,133	\$ 322,596	\$ 497,719	\$ 706,422
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,860,757	\$ 146,097	\$ 404,926	\$ 654,666
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	71,974	(158,602)	49,097	68,015
Total Employer Pension Expense.....	\$ 2,932,731	\$ (12,505)	\$ 454,023	\$ 722,683
Contributions				
Statutory required contribution.....	\$ 3,699,895	\$ 189,900	\$ 523,513	\$ 846,103
Contribution in relation to statutory required contribution.....	(3,699,895)	(189,900)	(523,513)	(846,103)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	29.14%	22.52%	26.76%	26.59%
Deferred (Inflows)/Outflows Recognized in				
Future Pension Expense				
June 30, 2022.....	\$ 773,567	\$ (26,220)	\$ 70,523	\$ 175,024
June 30, 2023.....	961,876	(17,480)	93,374	210,059
June 30, 2024.....	(1,126,259)	(106,552)	(167,087)	(252,149)
June 30, 2025.....	(513,932)	(39,840)	(71,247)	(109,139)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 85,252	\$ (190,092)	\$ (74,437)	\$ 23,795
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 37,320,256	\$ 1,915,876	\$ 5,281,429	\$ 8,534,282
Current discount rate (7.875%).....	\$ 26,980,090	\$ 1,385,052	\$ 3,818,124	\$ 6,169,722
1% increase (8.875%).....	\$ 19,083,714	\$ 1,010,485	\$ 2,785,586	\$ 4,501,211
Covered Payroll as of the January 1, 2020, valuation.....	\$ 12,698,517	\$ 843,089	\$ 1,956,540	\$ 3,182,539
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, 2020

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability.....	\$ 37,151,654	\$ 45,072,067	\$ 874,269	\$ 6,762,247
Ending net pension liability.....	\$ 31,091,660	\$ 38,129,072	\$ 706,300	\$ 6,145,104
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,591,938	\$ 3,176,587	\$ 58,880	\$ 512,280
Changes of assumptions.....	325,130	398,719	7,386	64,280
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	213,660	230,589	22,380	192,486
Total Deferred Outflows of Resources.....	\$ 3,130,928	\$ 3,807,895	\$ 88,646	\$ 769,026
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 3,085,272	\$ 3,783,579	\$ 70,087	\$ 609,786
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	545,589	438,256	91,529	26,314
Total Deferred Inflows of Resources.....	\$ 3,630,861	\$ 4,221,835	\$ 161,616	\$ 636,100
Pension Expense				
Proportionate share of plan pension expense.....	\$ 3,290,384	\$ 4,040,115	\$ 74,734	\$ 662,482
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(683,633)	(502,427)	(39,076)	30,127
Total Employer Pension Expense.....	\$ 2,606,751	\$ 3,537,688	\$ 35,658	\$ 692,609
Contributions				
Statutory required contribution.....	\$ 4,263,777	\$ 5,228,790	\$ 96,873	\$ 842,701
Contribution in relation to statutory required contribution.....	(4,263,777)	(5,228,790)	(96,873)	(842,701)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	27.69%	26.34%	42.50%	22.27%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 707,092	\$ 925,886	\$ (5,372)	\$ 209,462
June 30, 2023.....	913,416	1,177,239	(4,069)	246,415
June 30, 2024.....	(1,469,154)	(1,741,327)	(47,297)	(221,758)
June 30, 2025.....	(851,287)	(775,538)	(16,232)	(101,193)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (499,933)	\$ (413,940)	\$ (72,970)	\$ 132,926
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 43,007,885	\$ 52,742,124	\$ 976,991	\$ 8,500,229
Current discount rate (7.875%).....	\$ 31,091,660	\$ 38,129,072	\$ 706,300	\$ 6,145,104
1% increase (8.875%).....	\$ 22,683,523	\$ 27,817,025	\$ 515,262	\$ 4,483,261
Covered Payroll as of the January 1, 2020, valuation.....	\$ 15,398,021	\$ 19,850,207	\$ 227,923	\$ 3,783,261
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, 2020

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 3,496,393	\$ 36,399,837	\$ 7,159,020	\$ 277,057
Ending net pension liability.....	\$ 3,137,614	\$ 30,515,683	\$ 6,603,467	\$ 393,887
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 261,564	\$ 2,543,906	\$ 550,491	\$ 32,836
Changes of assumptions.....	32,810	319,105	69,053	4,119
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	92,876	27,240	249,682	88,004
Total Deferred Outflows of Resources.....	\$ 387,252	\$ 2,890,251	\$ 869,226	\$ 124,959
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 311,346	\$ 3,026,098	\$ 655,267	\$ 39,086
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	5,688	786,489	26,575	2,204
Total Deferred Inflows of Resources.....	\$ 317,034	\$ 3,814,587	\$ 681,842	\$ 41,290
Pension Expense				
Proportionate share of plan pension expense.....	\$ 333,030	\$ 3,232,520	\$ 701,439	\$ 42,244
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	52,233	(775,769)	213,752	78,921
Total Employer Pension Expense.....	\$ 385,263	\$ 2,456,751	\$ 915,191	\$ 121,165
Contributions				
Statutory required contribution.....	\$ 430,279	\$ 4,184,691	\$ 905,556	\$ 54,019
Contribution in relation to statutory required contribution.....	(430,279)	(4,184,691)	(905,556)	(54,019)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	24.49%	27.13%	26.93%	66.59%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 110,523	\$ 522,132	\$ 237,595	\$ 37,276
June 30, 2023.....	129,254	710,702	277,597	38,723
June 30, 2024.....	(115,819)	(1,520,959)	(224,172)	6,739
June 30, 2025.....	(63,740)	(836,211)	(103,636)	931
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 70,218	\$ (924,336)	\$ 187,384	\$ 83,669
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 4,340,112	\$ 42,210,887	\$ 8,134,260	\$ 544,845
Current discount rate (7.875%).....	\$ 3,137,614	\$ 30,515,683	\$ 6,603,467	\$ 393,887
1% increase (8.875%).....	\$ 2,289,092	\$ 22,263,165	\$ 4,817,656	\$ 287,366
Covered Payroll as of the January 1, 2020, valuation.....	\$ 1,757,100	\$ 15,425,355	\$ 3,352,383	\$ 81,116
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, 2020

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 19,159,357	\$ 18,452,007	\$ 11,200,534	\$ 352,307
Ending net pension liability.....	\$ 17,135,252	\$ 16,122,986	\$ 9,221,760	\$ 601,967
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,428,461	\$ 1,344,075	\$ 768,762	\$ 50,162
Changes of assumptions.....	179,185	168,599	96,433	6,295
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	528,975	262,501	49,013	174,715
Total Deferred Outflows of Resources.....	\$ 2,136,621	\$ 1,795,175	\$ 914,208	\$ 231,192
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 1,700,346	\$ 1,599,897	\$ 915,081	\$ 59,732
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	41,665	112,928	214,239	164,732
Total Deferred Inflows of Resources.....	\$ 1,742,011	\$ 1,712,825	\$ 1,129,320	\$ 224,464
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,818,582	\$ 1,710,009	\$ 976,317	\$ 64,753
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	241,173	14,034	(325,808)	80,374
Total Employer Pension Expense.....	\$ 2,059,755	\$ 1,724,043	\$ 650,509	\$ 145,127
Contributions				
Statutory required contribution.....	\$ 2,349,842	\$ 2,211,038	\$ 1,264,645	\$ 82,579
Contribution in relation to statutory required contribution.....	(2,349,842)	(2,211,038)	(1,264,645)	(82,579)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	26.32%	28.91%	27.80%	28.06%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 614,234	\$ 463,921	\$ 193,922	\$ 2,716
June 30, 2023.....	714,344	572,606	252,962	3,840
June 30, 2024.....	(837,419)	(855,016)	(460,219)	(4,623)
June 30, 2025.....	(298,549)	(299,161)	(201,777)	4,795
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 394,610	\$ 82,350	\$ (215,112)	\$ 6,728
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 23,702,376	\$ 22,302,156	\$ 12,756,020	\$ 832,672
Current discount rate (7.875%).....	\$ 17,135,252	\$ 16,122,986	\$ 9,221,760	\$ 601,967
1% increase (8.875%).....	\$ 12,501,275	\$ 11,762,761	\$ 6,727,870	\$ 439,174
Covered Payroll as of the January 1, 2020, valuation.....	\$ 8,927,767	\$ 7,648,077	\$ 4,582,201	\$ 294,255
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, 2020

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 376,250	\$ 905,053	\$ 277,057	\$ 574,637
Ending net pension liability.....	\$ 334,100	\$ 746,744	\$ 228,009	\$ 321,792
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 27,852	\$ 62,251	\$ 19,008	\$ 26,826
Changes of assumptions.....	3,494	7,809	2,384	3,365
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	11,563	28,403	1,494	15,602
Total Deferred Outflows of Resources.....	\$ 42,909	\$ 98,463	\$ 22,876	\$ 45,793
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 33,151	\$ 74,100	\$ 22,626	\$ 31,933
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,280	24,213	7,531	94,255
Total Deferred Inflows of Resources.....	\$ 34,431	\$ 98,313	\$ 30,157	\$ 126,188
Pension Expense				
Proportionate share of plan pension expense.....	\$ 35,449	\$ 79,063	\$ 24,139	\$ 33,574
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	4,719	(25,347)	(4,758)	(90,232)
Total Employer Pension Expense.....	\$ 40,168	\$ 53,716	\$ 19,381	\$ (56,658)
Contributions				
Statutory required contribution.....	\$ 45,779	\$ 102,395	\$ 31,305	\$ 44,123
Contribution in relation to statutory required contribution.....	(45,779)	(102,395)	(31,305)	(44,123)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	40.27%	24.05%	53.30%	31.67%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ 12,953	\$ 26,049	\$ 3,894	\$ (12,073)
June 30, 2023.....	14,211	27,418	5,261	(11,997)
June 30, 2024.....	(12,778)	(37,068)	(11,542)	(40,568)
June 30, 2025.....	(5,908)	(16,249)	(4,894)	(15,757)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 8,478	\$ 150	\$ (7,281)	\$ (80,395)
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 482,145	\$ 1,032,935	\$ 315,394	\$ 445,120
Current discount rate (7.875%).....	\$ 334,100	\$ 746,744	\$ 228,009	\$ 321,792
1% increase (8.875%).....	\$ 243,748	\$ 544,798	\$ 166,347	\$ 234,768
Covered Payroll as of the January 1, 2020, valuation.....	\$ 113,662	\$ 425,759	\$ 58,730	\$ 139,315
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, 2020

	Halifax Housing Authority	Mattapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 176,496	\$ 180,600	\$ 142,975	\$ 125,189
Ending net pension liability.....	\$ 17,584	\$ 36,927	\$ 132,468	\$ 101,402
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 1,466	\$ 3,078	\$ 11,043	\$ 6,453
Changes of assumptions.....	184	366	1,385	1,060
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	44,506	873	8,093	3,712
Total Deferred Outflows of Resources.....	\$ 46,156	\$ 4,337	\$ 20,521	\$ 13,225
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 1,742	\$ 3,664	\$ 13,144	\$ 10,060
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	202,546	62,775	565	4,256
Total Deferred Inflows of Resources.....	\$ 204,288	\$ 66,439	\$ 13,709	\$ 14,316
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,445	\$ 3,545	\$ 14,073	\$ 10,726
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(116,917)	(62,364)	2,451	(3,456)
Total Employer Pension Expense.....	\$ (115,472)	\$ (58,819)	\$ 16,524	\$ 7,270
Contributions				
Statutory required contribution.....	\$ 2,387	\$ 5,078	\$ 18,197	\$ 13,930
Contribution in relation to statutory required contribution.....	(2,387)	(5,078)	(18,197)	(13,930)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	15.96%	22.97%	24.53%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2022.....	\$ (53,781)	\$ (17,674)	\$ 6,270	\$ 3,164
June 30, 2023.....	(57,691)	(17,428)	6,745	3,389
June 30, 2024.....	(39,018)	(19,754)	(4,163)	(5,329)
June 30, 2025.....	(7,742)	(7,246)	(2,048)	(2,315)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (158,132)	\$ (62,102)	\$ 6,812	\$ (1,091)
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 24,323	\$ 51,079	\$ 183,237	\$ 140,265
Current discount rate (7.875%).....	\$ 17,584	\$ 36,927	\$ 132,468	\$ 101,402
1% increase (8.875%).....	\$ 12,829	\$ 26,941	\$ 96,644	\$ 73,979
Covered Payroll as of the January 1, 2020, valuation.....	\$ N/A	\$ 31,816	\$ 79,231	\$ 56,790
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, 2020

	South Shore Tri-Town Development	Carver Housing Authority	Totals
Net Pension Liability			
Beginning net pension liability.....	\$ 1,130,120	\$ 190,862	\$ 682,247,415
Ending net pension liability.....	\$ 1,038,056	\$ -	\$ 586,141,205
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 86,537	\$ -	\$ 48,863,003
Changes of assumptions.....	10,855	-	6,129,325
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	96,544	2,306	8,848,850
Total Deferred Outflows of Resources.....	\$ 193,936	\$ 2,306	\$ 63,841,178
Deferred Inflows of Resources			
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 103,009	\$ -	\$ 58,163,274
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	22,551	84,832	8,848,850
Total Deferred Inflows of Resources.....	\$ 125,560	\$ 84,832	\$ 67,012,124
Pension Expense			
Proportionate share of plan pension expense.....	\$ 110,251	\$ -	\$ 63,093,811
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	45,956	(88,744)	-
Total Employer Pension Expense.....	\$ 156,207	\$ (88,744)	\$ 63,093,811
Contributions			
Statutory required contribution.....	\$ 142,356	\$ -	\$ 79,735,479
Contribution in relation to statutory required contribution.....	(142,356)	-	(84,456,809)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ (4,721,220)
Contributions as a percentage of covered payroll.....	68.09%	N/A	27.13%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2022.....	\$ 58,682	\$ (24,118)	\$ 15,651,927
June 30, 2023.....	60,662	(24,373)	18,744,265
June 30, 2024.....	(34,452)	(24,985)	(26,061,526)
June 30, 2025.....	(16,516)	(9,050)	(11,505,612)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 68,376	\$ (82,526)	\$ (3,170,946)
Discount Rate Sensitivity			
1% decrease (8.875%).....	\$ 1,435,893	\$ -	\$ 810,781,133
Current discount rate (7.875%).....	\$ 1,038,056	\$ -	\$ 586,141,205
1% increase (8.875%).....	\$ 757,329	\$ -	\$ 427,627,926
Covered Payroll as of the January 1, 2020, valuation.....	\$ 209,055	\$ N/A	\$ 293,870,741
See notes to schedule of employer allocations and schedule of pension amounts by employer.			
N/A - Not Applicable			(concluded)

NOTE I – 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 Association's money-weighted rate of return of 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.

The Plymouth County Hospital was operated by Plymouth County from the early 1900s to 1992, when it was closed, and all employees were terminated. The remaining retirement allowances due from the Plymouth County Retirement Association to the former employees of the Plymouth County Hospital were actuarially determined and are included with the County's liability. Plymouth County paid for the retirement obligations related to previously retired Hospital employees until 2020 when the County paid off the remaining unfunded 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 II – 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.

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2019

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2019

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Financial Section

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Independent Auditor's Report

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

Report on the Financial Statements

We have audited the accompanying financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2019, and the related notes to the financial statements, which collectively comprise the Plymouth County Retirement Association's financial statements as listed in the table of contents.

Management's Responsibility 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; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Plymouth County Retirement Association as of December 31, 2019 and the results of its operations and changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters*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 Return 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. 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 December 15, 2020, on our consideration of the Plymouth County Retirement 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 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 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 Plymouth County Retirement Association's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of the Plymouth County Retirement 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.



December 15, 2020

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, 2019. 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 \$1.1 billion (net position).
- The Association's net position increased by \$158.3 million for the year ended December 31, 2019.
- Total investment income was \$181.7 million; investment expenses were \$12.7 million; and net investment income was \$169 million.
- Total contributions were \$112.4 million including \$28.8 million from members, \$74.5 million from employers and \$9.1 million from other sources.
- Retirement benefits, refunds and transfers amounted to \$121.1 million.
- Administrative expenses were \$1.9 million.
- The Total Pension Liability was \$1.78 billion as of December 31, 2019 while the Net Pension Liability was \$682.2 million.
- The fiduciary net position as a percentage of the total pension liability was 61.61%.

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 and deferred outflows less deferred inflows and 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 Return 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 \$1.11 billion at the close of 2019.

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 include investments of \$1.07 billion, cash of \$23.8 million, as well as accounts receivable and other assets of \$11.7 million.

In 2019, the Association's total contributions were \$112.4 million and net investment income was \$169 million while retirement benefit payments, refunds, transfers and administration expenses were \$123 million, which resulted in a current increase of \$158.4 million.

During 2019, net position increased by \$158.3 million. This increase was primarily the result of the \$169 million net investment income. That increase was offset by current contributions not being sufficient to support the current expenses and therefore a portion of net investment income was needed to support the remaining expenses. The annual money weighted rate of return was 16.88% and -7.10% in 2019 and 2018, respectively. Fluctuations in the Association's annual investment returns are expected.

The following tables present summarized financial information for the year.

	2019	2018
Statement of Fiduciary Net Position		
Assets:		
Cash.....	\$ 23,775,930	\$ 12,099,482
Investments.....	1,070,781,893	926,504,968
Receivables.....	11,390,285	5,101,109
Other assets.....	338,618	1,082,838
Total assets.....	1,106,286,726	944,788,397
Liabilities:		
Accounts payable.....	11,358,622	8,148,591
Net Position Restricted for Pension Benefits.....	\$ 1,094,928,104	\$ 936,639,806

Statement of Changes in Fiduciary Net Position	2019	2018
Additions:		
Contributions:		
Member contributions.....	\$ 28,759,454	\$ 27,326,242
Employer contributions.....	74,462,092	72,811,482
Other contributions.....	9,125,768	6,940,373
Total contributions.....	112,347,314	107,078,097
Net investment income (loss):		
Total investment income (loss).....	181,696,874	(63,921,914)
Less, investment expenses.....	(12,733,502)	(8,646,486)
Net investment income (loss).....	168,963,372	(72,568,400)
Total additions.....	281,310,686	34,509,697
Deductions:		
Administration.....	1,888,516	1,828,777
Retirement benefits, refunds and transfers.....	121,133,872	115,748,560
Total deductions.....	123,022,388	117,577,337
Net increase (decrease) in fiduciary net position.....	158,288,298	(83,067,640)
Fiduciary net position at beginning of year.....	936,639,806	1,019,707,446
Fiduciary net position at end of year.....	\$ 1,094,928,104	\$ 936,639,806

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, 10 Cordage Circle, Suite 234, Plymouth, MA 02360.

Financial Statements

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2019

Assets	
Cash and cash equivalents.....	\$ 23,775,930
Investments:	
Fixed income.....	179,192,331
Domestic equities.....	271,996,135
International equities.....	236,335,022
Real estate funds.....	94,529,485
Venture capital funds.....	202,930,520
Hedge funds.....	63,796,452
Bank loan.....	<u>22,001,948</u>
Total investments.....	<u>1,070,781,893</u>
Accounts receivable:	
Member contributions.....	1,732,042
Employer pension appropriation.....	176,899
3(8)c Reimbursements from other systems.....	3,537,877
Due from Commonwealth - sheriff retirees (See Note 7).....	880,988
Other accounts receivable.....	<u>5,062,479</u>
Total accounts receivable.....	<u>11,390,285</u>
Interest and dividends.....	306,943
Other assets.....	<u>31,675</u>
Total Assets.....	<u>1,106,286,726</u>
Liabilities	
Accounts payable.....	<u>11,358,622</u>
Net Position Restricted for Pensions.....	\$ <u>1,094,928,104</u>

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2019

Additions:	
Contributions:	
Employer pension assessments.....	\$ 73,787,092
Employer additional contributions.....	675,000
Member contributions.....	28,759,454
Transfers from other systems.....	3,083,020
3(8)(c) contributions from other systems.....	4,819,790
Workers' compensation settlements.....	15,000
Federal grant reimbursements.....	31,254
State COLA reimbursements.....	485,005
Members' makeup payments and redeposits.....	511,181
Interest not refunded.....	124,649
Reimbursement of 91A overearnings.....	46,812
Other revenue.....	<u>9,057</u>
 Total contributions.....	 <u>112,347,314</u>
Net investment income:	
Investment income.....	181,696,874
 Less: investment expense.....	 <u>(12,733,502)</u>
 Net investment income.....	 <u>168,963,372</u>
 Total additions.....	 <u>281,310,686</u>
Deductions:	
Administration.....	1,888,516
Retirement benefits and refunds.....	112,659,142
Transfers to other systems.....	2,753,697
3(8)(c) transfer to other systems.....	<u>5,721,033</u>
 Total deductions.....	 <u>123,022,388</u>
 Net increase (decrease) in fiduciary net position.....	 158,288,298
 Fiduciary net position at beginning of year.....	 <u>936,639,806</u>
 Fiduciary net position at end of year.....	 <u>\$ 1,094,928,104</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 53 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 member of the 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 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 deductions, pension fund appropriations, 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 Sciarra
- 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, 2019, the carrying amount of the Association's deposits totaled \$22.3 million and the bank balance of \$24.8 million was covered by Federal Depository Insurance.

Investments

The Association's investments were as follows:

Investment Type	Fair Value	Maturity			
		Under 1 Year	6-10 Years	6-10 Years	Over 10 Years
<u>Debt Securities:</u>					
Fixed Income.....	\$ 179,192,331	\$ 1,791,923	\$ 51,965,776	\$ 69,885,009	\$ 55,549,623
<u>Other Investments:</u>					
Domestic Equities.....	271,996,135				
International Equities.....	236,335,022				
Real Estate Funds.....	94,529,485				
Venture Capital Funds.....	202,930,520				
Hedge Funds.....	63,796,452				
Bank Loan.....	22,001,948				
Total Investments.....	\$ 1,070,781,893				

In addition, the Association's cash balance includes \$1,476,252 of Money Market Mutual Funds.

The Association's annual money-weighted rate of return on pension plan investments was a gain of 16.88%. 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. Because investing is a key part of the plan'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, 2019:

Investment Type	December 31, 2019	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level:				
Debt Securities:				
Fixed Income.....	\$ 179,192,331	\$ -	\$ 179,192,331	\$ -
Other Investments:				
Money Market Mutual Funds.....	-	-	-	-
Domestic Equities.....	271,996,135	271,996,135	-	-
International Equities.....	236,335,022	236,335,022	-	-
Real Estate Funds.....	94,529,485	-	-	94,529,485
Venture Capital Funds.....	202,930,520	-	-	202,930,520
Hedge Funds.....	63,796,452	-	-	63,796,452
Bank Loan.....	22,001,948	-	22,001,948	-
Total Investments by fair value level.....	\$ 1,070,781,893	\$ 508,331,157	\$ 201,194,279	\$ 361,256,457

NOTE 5 – MEMBERSHIP

The following table represents the Association's membership at December 31, 2019:

Retirees and beneficiaries currently receiving benefits....	4,300
Inactive members.....	1,696
Active members.....	5,542
Total.....	11,538

NOTE 6 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2019 were as follows:

Total pension liability.....	\$ 1,777,175,519
The pension plan's fiduciary net position.....	1,094,928,104
The net pension liability.....	\$ 682,247,415
The pension plan's fiduciary net position as a percentage of the total pension liability.....	61.61%

The total pension liability was determined by an actuarial valuation as of January 1, 2020, using the following actuarial assumptions, applied to all periods included in the measurement date of December 31, 2019:

Valuation date.....	January 1, 2020
Actuarial cost method.....	Individual Entry Age Normal Cost Method.
Asset valuation method.....	Assets held by the fund are valued at market 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.
Projected salary increases.....	3.75% per year.
Cost of living adjustments.....	3.0% of the first \$16,000 of retirement income. Previously \$14,000.
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.....	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. 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 3 years for females, fully generational. 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. Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years. 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.
Investment rate of return/Discount rate....	7.875% nominal rate, net of investment expense.

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 January 1, 2020 are summarized in the following table:

Asset Class	Long-Term Expected Nominal Rate of Return	Long-Term Expected Asset Allocation
Domestic equity.....	7.40%	26.00%
International developed equity.....	7.90%	6.00%
Emerging markets equity.....	9.10%	10.00%
Global equity.....	7.80%	10.00%
Core bonds.....	3.00%	9.00%
Value-added fixed income.....	4.90%	6.00%
Hedge funds.....	4.00%	4.00%
Real estate.....	7.50%	10.00%
Private equity.....	9.40%	13.00%
Real assets.....	7.50%	6.00%
		100.00%

Discount rate: The discount rate used to measure the total pension liability was 7.875%. 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 pension plan'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 position liability to changes in the discount rate: The following presents the net position liability, calculated using the discount rate of 7.875%, as well as what the net position 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, 2019.....	\$ 866,436,543	\$ 682,247,415	\$ 525,265,208

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 7 – 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 FY2011 through FY2022 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 received in 2019. The four remaining payments totaling \$880,988, at year-end, have been recorded as a receivable.

NOTE 8 – COMMITMENTS AND CONTINGENCIES

There are no legal actions or claims pending that would materially affect the financial position at December 31, 2019.

NOTE 9 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

In May of 2020, the GASB issued Statement #95, *Postponement of the Effective Dates of Certain Authoritative Guidance*. The objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. This Statement postponed the required implementation of many of the upcoming Statements for one year or longer.

There were no GASB pronouncements required to be implemented in 2019 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 10 – SUBSEQUENT EVENTS

Management has evaluated subsequent events through December 15, 2020, which is the date the financial statements were available to be issued.

On September 24, 2020, the Association purchased a building for approximately \$2.4 million. The capital asset will be recorded in the Association's 2020 financial statements.

Required Supplementary Information

Plymouth County Retirement Association

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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	December 31, 2018	December 31, 2019
Total pension liability:						
Service cost.....	\$ 30,880,169	\$ 32,038,175	\$ 33,239,607	\$ 26,807,632	\$ 27,772,477	\$ 28,883,376
Interest.....	111,727,069	115,962,263	116,054,394	119,404,812	122,120,554	129,044,546
Changes in benefit terms.....	-	-	6,700,296	-	-	15,202,584
Differences between expected and actual experience.....	-	-	21,421,023	-	59,806,942	55,982,071
Changes in assumptions.....	-	-	(23,402,726)	-	19,750,049	-
Benefit payments.....	(90,825,319)	(98,626,669)	(100,786,029)	(110,807,537)	(115,748,560)	(121,133,872)
Net change in total pension liability.....	51,781,919	49,373,769	53,226,565	35,404,907	113,701,462	107,978,705
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>	<u>1,555,495,352</u>	<u>1,669,196,814</u>
Total pension liability - ending (a).....	\$ 1,417,490,111	\$ 1,466,863,880	\$ 1,520,090,445	\$ 1,555,495,352	\$ 1,669,196,814	\$ 1,777,175,519
Plan fiduciary net position:						
Employer pension appropriation.....	\$ 56,266,944	\$ 67,162,327	\$ 66,393,381	\$ 69,896,514	\$ 72,811,482	\$ 74,462,092
Member contributions.....	24,889,464	26,259,167	25,501,976	26,076,090	27,326,242	29,270,635
Other contributions.....	2,910,328	2,801,874	7,357,214	4,788,362	6,940,373	8,614,587
Net investment income (loss).....	32,962,502	(1,710,419)	57,204,478	144,907,116	(72,568,400)	168,963,372
Administrative expenses.....	(1,521,667)	(1,553,871)	(1,723,774)	(1,737,836)	(1,828,777)	(1,888,516)
Retirement benefits and refunds.....	(91,939,449)	(94,903,555)	(100,786,030)	(110,807,537)	(115,748,560)	(121,133,872)
Net increase (decrease) in fiduciary net position.....	23,568,122	(1,944,477)	53,947,245	133,122,709	(83,067,640)	158,288,298
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>	<u>1,019,707,446</u>	<u>936,639,806</u>
Fiduciary net position - end of year (b).....	\$ 834,581,969	\$ 832,637,492	\$ 886,584,737	\$ 1,019,707,446	\$ 936,639,806	\$ 1,094,928,104
Net pension liability - ending (a)-(b).....	\$ 582,908,142	\$ 634,226,388	\$ 633,505,708	\$ 535,787,906	\$ 732,557,008	\$ 682,247,415
Plan fiduciary net position as a percentage of the total pension liability.....	58.88%	56.76%	58.32%	65.56%	56.11%	61.61%
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362	\$ 281,665,696	\$ 294,614,062
Net pension liability as a percentage of covered payroll.....	236.28%	247.79%	239.03%	194.39%	260.08%	231.57%

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 CONTRIBUTIONS

	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019
Actuarially determined contribution.....	\$ 58,130,647	\$ 62,772,260	\$ 66,255,664	\$ 68,534,029	\$ 72,127,482	\$ 73,787,092
Contributions in relation to the actuarially determined contribution.....	<u>(58,130,647)</u>	<u>(62,772,260)</u>	<u>(66,393,381)</u>	<u>(69,896,514)</u>	<u>(72,811,482)</u>	<u>(74,462,092)</u>
Contribution deficiency (excess).....	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (137,717)</u>	<u>\$ (1,362,485)</u>	<u>\$ (684,000)</u>	<u>\$ (675,000)</u>
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362	\$ 281,665,696	\$ 294,614,062
Contributions as a percentage of covered payroll.....	23.56%	24.52%	25.05%	25.36%	25.85%	25.27%

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, 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

The cost of living adjustment assumption was updated from 3.0% of the first \$14,000 of retirement income to 3.0% of the first \$16,000 of retirement income.

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

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Independent Auditor's Report

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

We have audited the accompanying schedule of employer allocations of the Plymouth County Retirement Association as of and for the year ended December 31, 2019, 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 of pension amounts by employer of the Plymouth County Retirement Association as of and for the year ended December 31, 2019, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes 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 Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and row totals titled 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 Plymouth County Retirement Association as of and for the year ended December 31, 2019, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2019, and our report thereon, dated December 15, 2020, expressed an unmodified opinion on those financial statements.

Restriction on Use

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



December 15, 2020

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2019

Employer	Employer Allocation Percentage	Share of Net Pension Liability	Contribution In Excess of Annual Appropriation	Net Pension Liability
Plymouth County.....	4.9405%	\$ 37,526,684	\$ (3,820,116)	\$ 33,706,568
Town of Abington.....	3.6642%	24,998,762	-	24,998,762
Town of Bridgewater.....	4.8365%	32,997,164	-	32,997,164
Bridgewater Housing Authority.....	0.0875%	597,212	-	597,212
Bridgewater/Raynham Regional School.....	2.3308%	15,902,396	-	15,902,396
Town of Carver.....	2.7644%	18,859,725	-	18,859,725
Carver/Marion/Wareham Regional Refuse.....	0.1063%	725,137	-	725,137
Town of Duxbury.....	5.1865%	35,384,645	-	35,384,645
Duxbury Housing Authority.....	0.0327%	223,014	-	223,014
Town of East Bridgewater.....	3.5372%	24,132,704	-	24,132,704
East Bridgewater Housing Authority.....	0.0499%	340,677	-	340,677
Town of Halifax.....	1.6013%	10,924,945	-	10,924,945
Town of Hanover.....	4.5999%	31,382,708	-	31,382,708
Town of Hanson.....	2.1108%	14,400,815	-	14,400,815
Town of Kingston.....	3.1040%	21,176,743	-	21,176,743
Kingston Housing Authority.....	0.0026%	17,786	-	17,786
Town of Lakeville.....	1.4081%	9,606,700	-	9,606,700
Town of Marion.....	1.4251%	9,722,996	-	9,722,996
Town of Marshfield.....	8.1087%	55,321,130	-	55,321,130
Marshfield Housing Authority.....	0.0426%	290,739	-	290,739
Town of Mattapoisett.....	1.5650%	10,677,304	-	10,677,304
Town of Middleborough.....	9.0990%	62,077,904	-	62,077,904
Middleborough Housing Authority.....	0.1500%	1,023,401	-	1,023,401
Town of Norwell.....	3.5241%	24,043,088	-	24,043,088
Norwell Housing Authority.....	0.0456%	311,262	-	311,262
Old Rochester Regional School.....	0.9477%	6,465,351	-	6,465,351
Onset Fire District.....	0.3125%	2,132,314	-	2,132,314
Town of Pembroke.....	4.5670%	31,158,326	-	31,158,326
Plymouth County Mosquito Control.....	0.2760%	1,883,304	-	1,883,304
Town of Plympton.....	0.6417%	4,378,187	-	4,378,187
Town of Rochester.....	1.0184%	6,948,320	-	6,948,320
Town of Rockland.....	5.4455%	37,151,654	-	37,151,654
Town of Scituate.....	6.6064%	45,072,067	-	45,072,067
Scituate Housing Authority.....	0.1281%	874,269	-	874,269
Silver Lake Regional School.....	0.9912%	6,762,247	-	6,762,247
South Shore Regional School.....	0.5125%	3,496,393	-	3,496,393
Town of Wareham.....	5.3353%	36,399,837	-	36,399,837
Wareham Fire District.....	1.0493%	7,159,020	-	7,159,020
Wareham Housing Authority.....	0.0406%	277,057	-	277,057
Town of West Bridgewater.....	2.8083%	19,159,357	-	19,159,357
Town of Whitman.....	2.7046%	18,452,007	-	18,452,007
Whitman/Hanson Regional School.....	1.6417%	11,200,634	-	11,200,634
Whitman Housing Authority.....	0.0516%	352,307	-	352,307
Abington Housing Authority.....	0.0551%	376,250	-	376,250
Pembroke Housing Authority.....	0.1327%	905,053	-	905,053
Hanson Housing Authority.....	0.0406%	277,057	-	277,057
Rockland Housing Authority.....	0.0842%	574,637	-	574,637
Halifax Housing Authority.....	0.0259%	176,496	-	176,496
Mattapoisett Housing Authority.....	0.0265%	180,600	-	180,600
Acushnet/Rochester/Marion Health District.....	0.0210%	142,975	-	142,975
West Bridgewater Housing Authority.....	0.0183%	125,189	-	125,189
South Shore Tri-Town Development.....	0.1656%	1,130,120	-	1,130,120
Carver Housing Authority.....	0.0280%	190,862	-	190,862
Total.....	100.00%	\$ 686,067,531	\$ (3,820,116)	\$ 682,247,415

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, 2019

	Plymouth County	Town of Abington	Town of Bridgewater
Net Pension Liability			
Beginning net pension liability.....	\$ 38,491,745	\$ 26,505,663	\$ 35,916,053
Ending net pension liability.....	\$ 33,706,568	\$ 24,998,762	\$ 32,997,164
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 3,817,950	\$ 3,040,520	\$ 3,737,596
Changes of assumptions.....	525,730	418,678	514,665
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,066,452	342,415	136,474
Total Deferred Outflows of Resources.....	\$ 6,412,132	\$ 3,801,613	\$ 4,388,735
Deferred Inflows of Resources			
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 707,595	\$ 563,515	\$ 692,703
Changes of assumptions.....	109,571	87,257	107,264
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,619,737	211,244	428,112
Total Deferred Inflows of Resources.....	\$ 2,436,903	\$ 862,016	\$ 1,228,079
Pension Expense			
Proportionate share of plan pension expense.....	\$ 6,353,344	\$ 4,073,042	\$ 5,121,885
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	983,474	(23,671)	(277,157)
Total Employer Pension Expense.....	\$ 7,336,818	\$ 4,049,371	\$ 4,844,728
Contributions			
Statutory required contribution.....	\$ 3,646,029	\$ 2,492,984	\$ 3,569,333
Contribution in relation to statutory required contribution.....	(4,321,029)	(2,492,984)	(3,569,333)
Contribution deficiency/(excess).....	\$ (675,000)	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.12%	21.56%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2021.....	\$ 1,566,997	\$ 1,124,354	\$ 1,247,149
June 30, 2022.....	1,836,409	1,117,020	1,235,732
June 30, 2023.....	1,411,597	1,251,972	1,405,729
June 30, 2024.....	(839,774)	(553,749)	(727,854)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 3,975,229	\$ 2,939,597	\$ 3,160,656
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 42,691,062	\$ 33,998,103	\$ 41,792,567
Current discount rate (7.875%).....	\$ 33,706,568	\$ 24,998,762	\$ 32,997,164
1% increase (8.875%).....	\$ 25,880,868	\$ 20,610,881	\$ 25,336,167
Covered Payroll.....	\$ 14,516,224	\$ 11,560,361	\$ 14,210,709
See notes to schedule of employer allocations and schedule of pension amounts by employer.			(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 741,608	\$ 17,327,991	\$ 21,326,193	\$ 519,935
Ending net pension liability.....	\$ 597,212	\$ 15,902,396	\$ 18,859,725	\$ 725,137
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 67,646	\$ 1,801,268	\$ 2,136,245	\$ 82,136
Changes of assumptions.....	9,315	248,034	294,160	11,310
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	32,826	46,614	102,159	148,008
Total Deferred Outflows of Resources.....	\$ <u>109,787</u>	\$ <u>2,095,916</u>	\$ <u>2,532,564</u>	\$ <u>241,454</u>
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 12,537	\$ 333,836	\$ 395,918	\$ 15,223
Changes of assumptions.....	1,941	51,694	61,308	2,357
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	81,888	180,150	593,046	26,081
Total Deferred Inflows of Resources.....	\$ <u>96,366</u>	\$ <u>565,680</u>	\$ <u>1,050,272</u>	\$ <u>43,661</u>
Pension Expense				
Proportionate share of plan pension expense.....	\$ 92,453	\$ 2,468,349	\$ 2,925,291	\$ 113,286
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(6,106)	(25,281)	(141,143)	70,216
Total Employer Pension Expense.....	\$ <u>86,347</u>	\$ <u>2,443,068</u>	\$ <u>2,784,148</u>	\$ <u>183,502</u>
Contributions				
Statutory required contribution.....	\$ 64,571	\$ 1,720,164	\$ 2,040,060	\$ 78,426
Contribution in relation to statutory required contribution.....	(64,571)	(1,720,164)	(2,040,060)	(78,426)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.11%	25.12%	25.12%	25.11%
Deferred (Inflows)/Outflows Recognized in				
Future Pension Expense				
June 30, 2021.....	\$ 21,717	\$ 652,507	\$ 699,627	\$ 69,860
June 30, 2022.....	3,002	571,259	569,596	62,758
June 30, 2023.....	6,768	658,289	671,654	66,824
June 30, 2024.....	(18,066)	(351,819)	(458,585)	(1,649)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ <u>13,421</u>	\$ <u>1,530,236</u>	\$ <u>1,482,292</u>	\$ <u>197,793</u>
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 756,399	\$ 20,141,183	\$ 23,886,789	\$ 918,422
Current discount rate (7.875%).....	\$ 597,212	\$ 15,902,396	\$ 18,859,725	\$ 725,137
1% increase (8.875%).....	\$ 458,557	\$ 12,210,315	\$ 14,481,037	\$ 556,781
Covered Payroll.....	\$ 257,198	\$ 6,848,598	\$ 8,122,215	\$ 312,291
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 37,507,527	\$ 231,982	\$ 25,603,508	\$ 424,197
Ending net pension liability	\$ 35,384,645	\$ 223,014	\$ 24,132,704	\$ 340,677
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 4,008,026	25,261	\$ 2,733,516	\$ 38,589
Changes of assumptions	551,903	3,478	376,404	5,314
Changes in proportion and differences between employer contributions and proportionate share of contributions	599,592	12,839	223,798	10,172
Total Deferred Outflows of Resources	\$ 5,159,521	\$ 41,578	\$ 3,333,718	\$ 54,075
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 742,823	\$ 4,682	\$ 506,613	\$ 7,152
Changes of assumptions	115,025	725	78,449	1,107
Changes in proportion and differences between employer contributions and proportionate share of contributions	301,674	14,547	153,391	33,903
Total Deferred Inflows of Resources	\$ 1,159,522	\$ 19,954	\$ 738,453	\$ 42,162
Pension Expense				
Proportionate share of plan pension expense	\$ 5,495,194	\$ 34,646	\$ 3,747,722	\$ 52,735
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	174,060	(4,351)	7,784	1,895
Total Employer Pension Expense	\$ 5,669,274	\$ 30,295	\$ 3,755,506	\$ 54,630
Contributions				
Statutory required contribution	\$ 3,827,610	\$ 24,117	\$ 2,610,451	\$ 36,860
Contribution in relation to statutory required contribution	(3,827,610)	(24,117)	(2,610,451)	(36,860)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.11%	25.12%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 1,549,495	\$ 9,531	\$ 1,047,573	\$ 13,017
June 30, 2022	1,501,060	7,352	954,779	3,606
June 30, 2023	1,676,409	9,091	1,089,944	5,666
June 30, 2024	(726,965)	(4,350)	(497,031)	(10,376)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 3,999,999	\$ 21,624	\$ 2,595,265	\$ 11,913
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 44,816,431	\$ 282,459	\$ 30,565,282	\$ 431,485
Current discount rate (7.875%)	\$ 35,384,645	\$ 223,014	\$ 24,132,704	\$ 340,677
1% increase (8.875%)	\$ 27,169,343	\$ 171,237	\$ 18,529,781	\$ 261,582
Covered Payroll	\$ 15,238,913	\$ 96,044	\$ 10,393,100	\$ 146,718
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability	\$ 11,588,080	\$ 33,311,220	\$ 15,257,087	\$ 22,452,965
Ending net pension liability	\$ 10,924,945	\$ 31,382,708	\$ 14,400,815	\$ 21,176,743
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 1,237,471	\$ 3,554,726	\$ 1,631,183	\$ 2,398,694
Changes of assumptions	170,399	489,484	224,613	330,299
Changes in proportion and differences between employer contributions and proportionate share of contributions	173,976	314,065	189,974	175,213
Total Deferred Outflows of Resources	\$ 1,581,846	\$ 4,358,275	\$ 2,045,770	\$ 2,904,206
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 229,345	\$ 658,811	\$ 302,313	\$ 444,559
Changes of assumptions	35,514	102,016	46,813	68,840
Changes in proportion and differences between employer contributions and proportionate share of contributions	189,381	154,388	187,997	107,975
Total Deferred Inflows of Resources	\$ 454,240	\$ 915,215	\$ 537,123	\$ 621,374
Pension Expense				
Proportionate share of plan pension expense	\$ 1,696,611	\$ 4,873,577	\$ 2,236,454	\$ 3,288,707
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(40,154)	31,806	(69,243)	4,225
Total Employer Pension Expense	\$ 1,656,457	\$ 4,905,383	\$ 2,167,211	\$ 3,292,932
Contributions				
Statutory required contribution	\$ 1,181,789	\$ 3,394,659	\$ 1,557,775	\$ 2,290,716
Contribution in relation to statutory required contribution	(1,181,789)	(3,394,659)	(1,557,775)	(2,290,716)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.12%	25.12%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 460,439	\$ 1,335,737	\$ 601,640	\$ 910,316
June 30, 2022	413,104	1,296,113	559,292	845,236
June 30, 2023	478,918	1,458,392	643,161	962,627
June 30, 2024	(224,855)	(647,182)	(295,446)	(435,347)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 1,127,606	\$ 3,443,060	\$ 1,508,647	\$ 2,282,832
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 13,836,991	\$ 39,747,776	\$ 18,239,355	\$ 26,821,410
Current discount rate (7.875%)	\$ 10,924,945	\$ 31,382,708	\$ 14,400,815	\$ 21,176,743
1% increase (8.875%)	\$ 8,388,485	\$ 24,096,541	\$ 11,057,358	\$ 16,260,110
Covered Payroll	\$ 4,704,986	\$ 13,515,420	\$ 6,201,920	\$ 9,120,073
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability.....	\$ 18,412	\$ 10,188,821	\$ 10,311,809	\$ 58,714,414
Ending net pension liability.....	\$ 17,786	\$ 9,606,700	\$ 9,722,996	\$ 55,321,130
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 2,015	\$ 1,088,153	\$ 1,101,326	\$ 6,266,236
Changes of assumptions.....	277	149,838	151,652	862,857
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	8,163	132,324	74,507	473,817
Total Deferred Outflows of Resources.....	\$ 10,455	\$ 1,370,315	\$ 1,327,485	\$ 7,602,910
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 373	\$ 201,671	\$ 204,113	\$ 1,161,345
Changes of assumptions.....	58	31,229	31,607	179,833
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	11,586	136,000	48,094	259,583
Total Deferred Inflows of Resources.....	\$ 12,017	\$ 368,900	\$ 283,814	\$ 1,800,761
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,761	\$ 1,491,894	\$ 1,509,955	\$ 8,591,109
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(2,657)	(23,503)	(8,549)	189,841
Total Employer Pension Expense.....	\$ 104	\$ 1,468,391	\$ 1,501,406	\$ 8,780,950
Contributions				
Statutory required contribution.....	\$ 1,935	\$ 1,039,150	\$ 1,051,710	\$ 5,984,136
Contribution in relation to statutory required contribution.....	(1,935)	(1,039,150)	(1,051,710)	(5,984,136)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.26%	25.12%	25.12%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021.....	\$ 515	\$ 405,040	\$ 413,439	\$ 2,429,954
June 30, 2022.....	(1,140)	368,711	388,250	2,203,565
June 30, 2023.....	(596)	425,332	442,005	2,509,139
June 30, 2024.....	(341)	(197,668)	(200,023)	(1,140,509)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (1,562)	\$ 1,001,415	\$ 1,043,671	\$ 6,002,149
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 22,527	\$ 12,167,368	\$ 12,314,663	\$ 70,066,991
Current discount rate (7.875%).....	\$ 17,786	\$ 9,606,700	\$ 9,722,996	\$ 55,321,130
1% increase (8.875%).....	\$ 13,657	\$ 7,376,299	\$ 7,465,595	\$ 42,477,147
Covered Payroll.....	\$ 7,660	\$ 4,137,265	\$ 4,187,350	\$ 23,824,850
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Marshfield Housing Authority	Town of Mattapoisett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 308,574	\$ 11,312,647	\$ 65,813,816	\$ 1,101,733
Ending net pension liability.....	\$ 290,739	\$ 10,677,304	\$ 62,077,904	\$ 1,023,401
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 32,932	\$ 1,209,420	\$ 7,031,577	\$ 115,921
Changes of assumptions.....	4,535	166,537	968,245	15,962
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	14,646	176,472	442,077	11,955
Total Deferred Outflows of Resources.....	\$ 52,115	\$ 1,552,429	\$ 8,441,899	\$ 143,838
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 6,103	\$ 224,146	\$ 1,303,169	\$ 21,484
Changes of assumptions.....	945	34,709	201,798	3,327
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	19,964	214,338	298,467	18,539
Total Deferred Inflows of Resources.....	\$ 27,012	\$ 473,193	\$ 1,803,454	\$ 43,350
Pension Expense				
Proportionate share of plan pension expense.....	\$ 45,147	\$ 1,658,186	\$ 9,640,599	\$ 158,886
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(3,145)	(112,494)	(170,581)	(14,253)
Total Employer Pension Expense.....	\$ 42,002	\$ 1,545,692	\$ 9,470,018	\$ 144,633
Contributions				
Statutory required contribution.....	\$ 31,454	\$ 1,154,986	\$ 6,715,034	\$ 110,732
Contribution in relation to statutory required contribution.....	(31,454)	(1,154,986)	(6,715,034)	(110,732)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.12%	25.12%	25.12%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021.....	\$ 11,920	\$ 422,866	\$ 2,587,624	\$ 41,034
June 30, 2022.....	8,393	405,538	2,493,143	38,422
June 30, 2023.....	10,779	469,910	2,833,654	42,961
June 30, 2024.....	(5,889)	(219,076)	(1,275,976)	(21,929)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 25,103	\$ 1,079,236	\$ 6,638,445	\$ 100,488
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 368,235	\$ 13,523,342	\$ 78,624,765	\$ 1,296,189
Current discount rate (7.875%).....	\$ 290,739	\$ 10,677,304	\$ 62,077,904	\$ 1,023,401
1% increase (8.875%).....	\$ 223,238	\$ 8,198,340	\$ 47,665,192	\$ 785,797
Covered Payroll.....	\$ 125,211	\$ 4,598,336	\$ 26,734,753	\$ 440,743
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability	\$ 25,523,971	\$ 329,194	\$ 6,860,055	\$ 2,372,113
Ending net pension liability	\$ 24,043,088	\$ 311,262	\$ 6,465,351	\$ 2,132,314
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 2,723,366	\$ 35,257	\$ 732,332	\$ 241,528
Changes of assumptions	375,006	4,855	100,842	33,258
Changes in proportion and differences between employer contributions and proportionate share of contributions	233,067	17,842	156,254	63,940
Total Deferred Outflows of Resources	\$ 3,331,439	\$ 57,954	\$ 989,428	\$ 338,726
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 504,732	\$ 6,534	\$ 135,726	\$ 44,763
Changes of assumptions	78,157	1,012	21,017	6,932
Changes in proportion and differences between employer contributions and proportionate share of contributions	150,495	11,089	86,810	148,803
Total Deferred Inflows of Resources	\$ 733,384	\$ 18,635	\$ 243,553	\$ 200,498
Pension Expense				
Proportionate share of plan pension expense	\$ 3,733,760	\$ 48,340	\$ 1,004,044	\$ 330,846
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	71,907	3,862	45,247	(69,125)
Total Employer Pension Expense	\$ 3,805,667	\$ 52,202	\$ 1,049,291	\$ 261,721
Contributions				
Statutory required contribution	\$ 2,600,777	\$ 33,683	\$ 699,331	\$ 230,621
Contribution in relation to statutory required contribution	(2,600,777)	(33,683)	(699,331)	(230,621)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.13%	25.12%	25.11%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 1,060,574	\$ 13,886	\$ 286,402	\$ 66,027
June 30, 2022	949,444	15,334	281,251	53,207
June 30, 2023	1,084,023	16,446	311,400	68,747
June 30, 2024	(495,986)	(6,347)	(133,176)	(49,753)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 2,598,055	\$ 39,319	\$ 745,875	\$ 138,228
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 30,451,779	\$ 394,229	\$ 8,188,691	\$ 2,700,682
Current discount rate (7.875%)	\$ 24,043,088	\$ 311,262	\$ 6,465,351	\$ 2,132,314
1% increase (8.875%)	\$ 18,460,971	\$ 238,996	\$ 4,964,281	\$ 1,637,252
Covered Payroll	\$ 10,354,506	\$ 134,050	\$ 2,784,397	\$ 918,312
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability	\$ 32,896,598	\$ 2,206,412	\$ 4,843,648	\$ 7,668,680
Ending net pension liability	\$ 31,158,326	\$ 1,883,304	\$ 4,378,187	\$ 6,948,320
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 3,529,310	\$ 213,322	\$ 495,918	\$ 787,038
Changes of assumptions	485,984	29,374	68,288	108,375
Changes in proportion and differences between employer contributions and proportionate share of contributions	486,892	9,430	149,067	128,352
Total Deferred Outflows of Resources	\$ 4,502,186	\$ 252,126	\$ 713,273	\$ 1,023,765
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 654,100	\$ 39,536	\$ 91,910	\$ 145,865
Changes of assumptions	101,287	6,122	14,232	22,587
Changes in proportion and differences between employer contributions and proportionate share of contributions	250,455	100,713	191,095	176,340
Total Deferred Inflows of Resources	\$ 1,005,842	\$ 146,371	\$ 297,237	\$ 344,792
Pension Expense				
Proportionate share of plan pension expense	\$ 4,839,207	\$ 291,909	\$ 679,381	\$ 1,078,246
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	287,047	(51,573)	89,141	48,849
Total Employer Pension Expense	\$ 5,126,254	\$ 240,336	\$ 768,522	\$ 1,127,095
Contributions				
Statutory required contribution	\$ 3,370,446	\$ 203,688	\$ 473,604	\$ 751,595
Contribution in relation to statutory required contribution	(3,370,446)	(203,688)	(473,604)	(751,595)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.11%	25.12%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 1,459,599	\$ 52,303	\$ 230,082	\$ 298,274
June 30, 2022	1,246,530	46,701	132,103	252,859
June 30, 2023	1,423,344	56,648	154,600	286,753
June 30, 2024	(633,129)	(49,897)	(100,749)	(158,913)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 3,496,344	\$ 105,755	\$ 416,036	\$ 678,973
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 39,463,585	\$ 2,385,300	\$ 5,545,193	\$ 8,800,396
Current discount rate (7.875%)	\$ 31,158,326	\$ 1,883,304	\$ 4,378,187	\$ 6,948,320
1% increase (8.875%)	\$ 23,924,254	\$ 1,446,055	\$ 3,361,697	\$ 5,335,119
Covered Payroll	\$ 13,418,787	\$ 811,072	\$ 1,885,530	\$ 2,992,395
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability.....	\$ 39,383,272	\$ 47,847,320	\$ 1,113,516	\$ 7,307,819
Ending net pension liability.....	\$ 37,151,654	\$ 45,072,067	\$ 874,269	\$ 6,762,247
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 4,208,176	\$ 5,105,323	\$ 99,029	\$ 765,961
Changes of assumptions.....	579,464	703,000	13,636	105,472
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	375,498	445,144	57,508	19,368
Total Deferred Outflows of Resources.....	\$ 5,163,138	\$ 6,253,467	\$ 170,173	\$ 890,801
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 779,917	\$ 946,189	\$ 18,353	\$ 141,958
Changes of assumptions.....	120,770	146,517	2,842	21,982
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	356,616	322,808	115,196	136,884
Total Deferred Inflows of Resources.....	\$ 1,257,303	\$ 1,415,514	\$ 136,391	\$ 300,824
Pension Expense				
Proportionate share of plan pension expense.....	\$ 5,768,601	\$ 6,999,447	\$ 135,355	\$ 1,049,791
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(182,019)	96,749	(4,871)	(258,089)
Total Employer Pension Expense.....	\$ 5,587,582	\$ 7,096,196	\$ 130,484	\$ 791,702
Contributions				
Statutory required contribution.....	\$ 4,018,752	\$ 4,875,453	\$ 94,553	\$ 731,463
Contribution in relation to statutory required contribution.....	(4,018,752)	(4,875,453)	(94,553)	(731,463)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.12%	25.12%	25.11%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021.....	\$ 1,527,964	\$ 1,969,468	\$ 26,062	\$ 181,574
June 30, 2022.....	1,465,514	1,772,054	17,052	259,843
June 30, 2023.....	1,675,744	2,026,188	18,581	294,944
June 30, 2024.....	(763,387)	(929,757)	(27,913)	(146,384)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 3,905,835	\$ 4,837,953	\$ 33,782	\$ 589,977
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 47,054,436	\$ 57,086,038	\$ 1,107,306	\$ 8,564,726
Current discount rate (7.875%).....	\$ 37,151,654	\$ 45,072,067	\$ 874,269	\$ 6,762,247
1% increase (8.875%).....	\$ 28,526,103	\$ 34,607,623	\$ 671,289	\$ 5,192,247
Covered Payroll.....	\$ 15,999,901	\$ 19,410,942	\$ 376,517	\$ 2,912,260
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 3,719,085	\$ 40,225,037	\$ 7,738,643	\$ 293,844
Ending net pension liability	\$ 3,496,393	\$ 36,399,837	\$ 7,159,020	\$ 277,057
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 396,037	\$ 4,123,017	\$ 810,904	\$ 31,382
Changes of assumptions	54,534	567,737	111,661	4,321
Changes in proportion and differences between employer contributions and proportionate share of contributions	37,408	128,547	58,603	12,501
Total Deferred Outflows of Resources	\$ 487,979	\$ 4,819,301	\$ 981,168	\$ 48,204
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 73,399	\$ 764,134	\$ 150,288	\$ 5,816
Changes of assumptions	11,366	118,326	23,272	901
Changes in proportion and differences between employer contributions and proportionate share of contributions	19,233	704,963	55,038	7,502
Total Deferred Inflows of Resources	\$ 103,998	\$ 1,587,423	\$ 228,598	\$ 14,219
Pension Expense				
Proportionate share of plan pension expense	\$ 542,951	\$ 5,648,426	\$ 1,111,113	\$ 43,029
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	10,514	(302,441)	56,455	(955)
Total Employer Pension Expense	\$ 553,465	\$ 5,345,985	\$ 1,167,568	\$ 42,074
Contributions				
Statutory required contribution	\$ 378,178	\$ 3,937,419	\$ 774,365	\$ 29,943
Contribution in relation to statutory required contribution	(378,178)	(3,937,419)	(774,365)	(29,943)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.12%	25.12%	25.09%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 151,044	\$ 1,363,745	\$ 323,539	\$ 11,670
June 30, 2022	143,732	1,255,643	273,286	13,696
June 30, 2023	161,715	1,447,761	310,810	14,319
June 30, 2024	(72,510)	(835,271)	(155,065)	(5,700)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 383,981	\$ 3,231,878	\$ 752,570	\$ 33,985
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 4,428,358	\$ 46,102,222	\$ 9,067,258	\$ 350,907
Current discount rate (7.875%)	\$ 3,496,393	\$ 36,399,837	\$ 7,159,020	\$ 277,057
1% increase (8.875%)	\$ 2,684,631	\$ 27,948,837	\$ 5,496,900	\$ 212,732
Covered Payroll	\$ 1,505,773	\$ 15,676,120	\$ 3,083,136	\$ 119,319
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 20,311,361	\$ 19,555,024	\$ 11,886,343	\$ 828,509
Ending net pension liability	\$ 19,159,357	\$ 18,452,007	\$ 11,200,634	\$ 352,307
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 2,170,184	\$ 2,090,063	\$ 1,268,698	\$ 39,906
Changes of assumptions	298,833	287,801	174,699	5,495
Changes in proportion and differences between employer contributions and proportionate share of contributions	265,964	232,202	69,781	34,327
Total Deferred Outflows of Resources	\$ 2,734,981	\$ 2,610,066	\$ 1,513,178	\$ 79,728
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 402,208	\$ 387,359	\$ 235,133	\$ 7,396
Changes of assumptions	62,282	59,982	36,410	1,145
Changes in proportion and differences between employer contributions and proportionate share of contributions	141,863	238,349	92,009	251,571
Total Deferred Inflows of Resources	\$ 606,353	\$ 685,690	\$ 363,552	\$ 260,112
Pension Expense				
Proportionate share of plan pension expense	\$ 2,975,422	\$ 2,865,584	\$ 1,739,410	\$ 53,483
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	12,250	(87,119)	(143,159)	(139,317)
Total Employer Pension Expense	\$ 2,987,672	\$ 2,778,465	\$ 1,596,251	\$ (85,834)
Contributions				
Statutory required contribution	\$ 2,072,457	\$ 1,995,986	\$ 1,211,606	\$ 38,139
Contribution in relation to statutory required contribution	(2,072,457)	(1,995,986)	(1,211,606)	(38,139)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.12%	25.12%	25.14%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 812,667	\$ 760,638	\$ 419,466	\$ (57,416)
June 30, 2022	806,701	717,783	449,990	(45,509)
June 30, 2023	903,017	824,817	511,010	(45,969)
June 30, 2024	(393,757)	(378,862)	(230,840)	(31,490)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 2,128,628	\$ 1,924,376	\$ 1,149,626	\$ (180,384)
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 24,266,288	\$ 23,370,394	\$ 14,186,166	\$ 446,214
Current discount rate (7.875%)	\$ 19,159,357	\$ 18,452,007	\$ 11,200,634	\$ 352,307
1% increase (8.875%)	\$ 14,711,102	\$ 14,167,979	\$ 8,600,167	\$ 270,511
Covered Payroll	\$ 8,251,256	\$ 7,946,625	\$ 4,823,716	\$ 151,726
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 399,157	\$ 961,807	\$ 296,790	\$ 617,884
Ending net pension liability	\$ 376,250	\$ 905,053	\$ 277,057	\$ 574,637
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 42,618	\$ 102,516	\$ 31,382	\$ 65,089
Changes of assumptions	5,868	14,116	4,321	8,963
Changes in proportion and differences between employer contributions and proportionate share of contributions	10,000	48,304	5,533	31,839
Total Deferred Outflows of Resources	\$ 58,486	\$ 164,936	\$ 41,236	\$ 105,891
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments	\$ 7,899	\$ 19,000	\$ 5,816	\$ 12,063
Changes of assumptions	1,223	2,942	901	1,868
Changes in proportion and differences between employer contributions and proportionate share of contributions	4,347	33,214	4,676	20,291
Total Deferred Inflows of Resources	\$ 13,469	\$ 55,156	\$ 11,393	\$ 34,222
Pension Expense				
Proportionate share of plan pension expense	\$ 58,433	\$ 140,549	\$ 43,022	\$ 89,157
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	2,177	(6,608)	3,956	7,910
Total Employer Pension Expense	\$ 60,610	\$ 133,941	\$ 46,978	\$ 97,067
Contributions				
Statutory required contribution	\$ 40,707	\$ 97,937	\$ 29,999	\$ 62,117
Contribution in relation to statutory required contribution	(40,707)	(97,937)	(29,999)	(62,117)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.12%	25.13%	25.14%	25.10%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021	\$ 17,221	\$ 34,062	\$ 13,692	\$ 26,221
June 30, 2022	17,164	46,453	10,346	28,368
June 30, 2023	18,361	47,972	11,662	29,344
June 30, 2024	(7,729)	(18,707)	(5,857)	(12,264)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 45,017	\$ 109,780	\$ 29,843	\$ 71,669
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 476,540	\$ 1,146,295	\$ 350,907	\$ 727,807
Current discount rate (7.875%)	\$ 376,250	\$ 905,053	\$ 277,057	\$ 574,637
1% increase (8.875%)	\$ 288,896	\$ 694,926	\$ 212,732	\$ 441,223
Covered Payroll	\$ 162,038	\$ 389,774	\$ 119,319	\$ 247,476
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	Halifax Housing Authority	Mattapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 521,408	\$ 193,687	\$ 149,500	\$ 133,298
Ending net pension liability.....	\$ 176,496	\$ 180,600	\$ 142,975	\$ 125,189
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 19,992	\$ 20,457	\$ 16,195	\$ 14,180
Changes of assumptions.....	2,753	2,817	2,230	1,953
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	88,972	2,947	4,721	7,095
Total Deferred Outflows of Resources.....	\$ 111,717	\$ 26,221	\$ 23,146	\$ 23,228
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 3,705	\$ 3,791	\$ 3,001	\$ 2,628
Changes of assumptions.....	574	587	465	407
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	224,517	4,169	4,034	4,157
Total Deferred Inflows of Resources.....	\$ 228,796	\$ 8,547	\$ 7,500	\$ 7,192
Pension Expense				
Proportionate share of plan pension expense.....	\$ 26,507	\$ 28,040	\$ 22,210	\$ 19,443
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(82,385)	(3,558)	(5,977)	1,531
Total Employer Pension Expense.....	\$ (55,878)	\$ 24,482	\$ 16,233	\$ 20,974
Contributions				
Statutory required contribution.....	\$ 19,075	\$ 19,503	\$ 15,465	\$ 13,543
Contribution in relation to statutory required contribution.....	(19,075)	(19,503)	(15,465)	(13,543)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.10%	25.08%	25.12%	25.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021.....	\$ (39,128)	\$ 7,405	\$ 4,308	\$ 5,711
June 30, 2022.....	(26,700)	6,621	6,885	6,327
June 30, 2023.....	(29,805)	7,488	7,299	6,583
June 30, 2024.....	(21,446)	(3,840)	(2,846)	(2,585)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (117,079)	\$ 17,674	\$ 15,646	\$ 16,036
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 223,541	\$ 228,739	\$ 181,086	\$ 158,558
Current discount rate (7.875%).....	\$ 176,496	\$ 180,600	\$ 142,975	\$ 125,189
1% increase (8.875%).....	\$ 135,519	\$ 138,670	\$ 109,781	\$ 96,123
Covered Payroll.....	\$ 76,011	\$ 77,778	\$ 61,574	\$ 53,914
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2019

	South Shore Tri-Town Development	Carver Housing Authority	Plymouth County Retirement Association	Totals
Net Pension Liability				
Beginning net pension liability.....	\$ 1,195,262	\$ 201,788	\$ -	\$ 732,557,005
Ending net pension liability.....	\$ 1,130,120	\$ 190,862	\$ -	\$ 682,247,415
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 128,009	\$ 21,619	\$ -	\$ 77,487,215
Changes of assumptions.....	17,627	2,977	-	10,669,949
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	132,295	3,688	-	9,227,629
Total Deferred Outflows of Resources.....	\$ 277,931	\$ 28,284	\$ -	\$ 97,384,793
Deferred Inflows of Resources				
Net difference between projected and actual investment earnings on pension plan investments.....	\$ 23,724	\$ 4,007	\$ -	\$ 14,360,999
Changes of assumptions.....	3,674	620	-	2,223,789
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	76,242	4,065	-	9,227,629
Total Deferred Inflows of Resources.....	\$ 103,640	\$ 8,692	\$ -	\$ 25,812,417
Pension Expense				
Proportionate share of plan pension expense.....	\$ 175,513	\$ 29,554	\$ 199,497	\$ 107,443,103
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	65,186	(6,618)	-	-
Total Employer Pension Expense.....	\$ 240,699	\$ 22,936	\$ 199,497	\$ 107,443,103
Contributions				
Statutory required contribution.....	\$ 122,242	\$ 20,267	\$ 199,497	\$ 73,787,092
Contribution in relation to statutory required contribution.....	(122,242)	(20,267)	(199,497)	(74,462,092)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ (675,000)
Contributions as a percentage of covered payroll.....	25.12%	24.66%	N/A	25.05%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2021.....	\$ 65,536	\$ 5,690	\$ -	\$ 28,720,637
June 30, 2022.....	65,104	8,600	-	27,157,580
June 30, 2023.....	66,716	9,207	-	30,249,950
June 30, 2024.....	(23,065)	(3,905)	-	(14,555,791)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 174,291	\$ 19,592	\$ -	\$ 71,572,376
Discount Rate Sensitivity				
1% decrease (8.875%).....	\$ 1,431,354	\$ 241,736	\$ -	\$ 866,436,543
Current discount rate (7.875%).....	\$ 1,130,120	\$ 190,862	\$ -	\$ 682,247,415
1% increase (8.875%).....	\$ 867,738	\$ 146,549	\$ -	\$ 525,265,208
Covered Payroll.....	\$ 486,703	\$ 82,197	\$ -	\$ 294,614,062
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(concluded)

NOTE I – 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 Association's money-weighted rate of return of 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.

The Plymouth County Hospital was operated by Plymouth County from the early 1900s to 1992, when it was closed, and all employees were terminated. The remaining retirement allowances due from the Plymouth County Retirement Association to the former employees of the Plymouth County Hospital were actuarially determined and are included with the County's liability. Plymouth County continues to pay for the retirement obligations related to previously retired Hospital employees.

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 II – 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.

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2018

PLYMOUTH COUNTY RETIREMENT ASSOCIATION
FINANCIAL STATEMENTS
YEAR ENDED DECEMBER 31, 2018

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Financial Section

Independent Auditor's Report

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Independent Auditor's Report

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

Report on the Financial Statements

We have audited the accompanying financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the Plymouth County Retirement Association's financial statements as listed in the table of contents.

Management's Responsibility 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; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Plymouth County Retirement Association as of December 31, 2018 and the results of its operations and changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters*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 Return 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. 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 October 24, 2019, on our consideration of the Plymouth County Retirement 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 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 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 Plymouth County Retirement Association's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of the Plymouth County Retirement 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.



October 24, 2019

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, 2018. 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 \$936.6 million (net position).
- The Association's net position decreased by \$83.1 million for the year ended December 31, 2018.
- Total investment loss was \$63.9 million; investment expenses were \$8.6 million; and net investment loss was \$72.6 million.
- Total contributions were \$107.1 million including \$72.8 million from employers, \$27.3 million from members and \$7.0 million from other sources.
- Retirement benefits, refunds and transfers amounted to \$115.7 million.
- Administrative expenses were \$1.8 million.
- The Total Pension Liability is \$1.669 billion as of December 31, 2018 while the Net Pension Liability is \$732.6 million.
- The Plan fiduciary net position as a percentage of the total pension liability is 56.11%.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Association fiduciary financial statements. These fiduciary financial statements comprise 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 and deferred outflows less deferred inflows and 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 Return 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 \$936.6 million at the close of 2018.

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 include investments of \$926.5 million, cash of \$12.1 million, as well as accounts receivable and other assets of \$6.2 million.

In 2018, the Association's total contributions were \$107.1 million and net investment loss was \$72.6 million while retirement benefit payments, refunds, transfers and administration expenses were \$117.6 million, which resulted in a current decrease of \$83.1 million.

During 2018 net position decreased by \$83.1 million. This decrease was primarily the result of the \$72.6 million net investment loss. Net position also decreased due to current contributions not being sufficient to support the current expenses and therefore a portion of net investment income was needed to support the remaining expenses. The annual money weighted rate of return was a loss of (-7.1%) and a gain of 16.30% in 2018 and 2017 respectively. Fluctuations in the Association's annual investment returns are expected.

The following tables present summarized financial information for the year.

	2018	2017
Statement of Fiduciary Net Position		
Assets:		
Cash.....	\$ 12,099,482	\$ 7,607,381
Investments.....	926,504,968	1,012,111,628
Receivables.....	5,101,109	7,699,564
Other assets.....	1,082,838	1,099,153
Total assets.....	944,788,397	1,028,517,726
Liabilities:		
Accounts payable.....	8,148,591	8,810,280
Net Position Restricted for Pension Benefits.....	\$ 936,639,806	\$ 1,019,707,446

Statement of Changes in Fiduciary Net Position	2018	2017
Additions:		
Contributions:		
Member contributions.....	\$ 27,326,242	\$ 26,076,090
Employer contributions.....	72,811,482	69,896,514
Other contributions.....	6,940,373	4,788,362
Total contributions.....	107,078,097	100,760,966
Net investment income (loss):		
Total investment income (loss).....	(63,921,914)	152,487,999
Less, investment expenses.....	(8,646,486)	(7,580,883)
Net investment income (loss).....	(72,568,400)	144,907,116
Total additions.....	34,509,697	245,668,082
Deductions:		
Administration.....	1,828,777	1,737,836
Retirement benefits, refunds and transfers.....	115,748,560	110,807,537
Total deductions.....	117,577,337	112,545,373
Net increase (decrease) in fiduciary net position.....	(83,067,640)	133,122,709
Fiduciary net position at beginning of year.....	1,019,707,446	886,584,737
Fiduciary net position at end of year.....	\$ 936,639,806	\$ 1,019,707,446

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, 10 Cordage Circle, Suite 234, Plymouth, MA 02360.

Financial Statements

Plymouth County Retirement Association

9

Management's Discussion and Analysis

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2018

Assets	
Cash and cash equivalents.....	\$ 12,099,482
Investments:	
Fixed income.....	108,472,228
Domestic equities.....	208,039,745
International equities.....	398,009,658
Real estate funds.....	110,167,658
Venture capital funds.....	21,304,419
Hedge funds.....	45,958,916
Bank loan.....	34,552,344
Total investments.....	<u>926,504,968</u>
Accounts receivable:	
Member contributions.....	1,394,873
Employer pension appropriation.....	347,292
3(8)c Reimbursements from other systems.....	1,952,207
Due from Commonwealth - sheriff retirees (See Note 7).....	1,101,247
Other accounts receivable.....	305,490
Total accounts receivable.....	<u>5,101,109</u>
Interest and dividends.....	1,051,163
Other assets.....	31,675
Total Assets.....	<u>944,788,397</u>
Liabilities	
Accounts payable.....	<u>8,148,591</u>
Net Position Restricted for Pensions.....	\$ <u>936,639,806</u>

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2018

Additions:	
Contributions:	
Employer pension assessments.....	\$ 72,127,482
Employer additional contributions.....	684,000
Member contributions.....	27,326,242
Transfers from other systems.....	2,467,211
3(8)(c) contributions from other systems.....	3,119,006
State COLA reimbursements.....	526,967
Members' makeup payments and redeposits.....	565,125
Other revenue.....	<u>262,064</u>
 Total contributions.....	 <u>107,078,097</u>
Net investment income:	
Investment income (loss).....	(63,921,914)
 Less: investment expense.....	 <u>(8,646,486)</u>
Net investment income (loss).....	<u>(72,568,400)</u>
 Total additions.....	 <u>34,509,697</u>
Deductions:	
Administration.....	1,828,777
Retirement benefits and refunds.....	105,591,653
Transfers to other systems.....	2,248,109
3(8)(c) transfer to other systems.....	<u>7,908,798</u>
 Total deductions.....	 <u>117,577,337</u>
 Net increase (decrease) in fiduciary net position.....	 (83,067,640)
 Fiduciary net position at beginning of year.....	 <u>1,019,707,446</u>
 Fiduciary net position at end of year.....	 \$ <u><u>936,639,806</u></u>

See notes to financial statements.

NOTE 1 – PLAN DESCRIPTION

Established in 1937, the Plymouth County Retirement 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 54 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 member of the 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 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 or not 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 deductions, pension fund appropriations, 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, which are generally included in this category, include 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 is 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 County Finance Director/Treasurer, who shall be a member ex-officio, a second member appointed by the governing authority (the 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 Sciarra
Member	Mary Beth Carter

Board members are required to meet at least once a month. The Board must keep a record of all of 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 INVESTMENTS

Custodial Credit Risk - Deposits

At December 31, 2018, the carrying amount of the Association’s deposits totaled \$12.1 million and the bank balance of \$13.0 million was covered by Federal Depository Insurance.

Investments

The Association’s investments are as follows:

Investment Type	Fair Value	Maturity			
		Under 1 Year	6-10 Years	6-10 Years	Over 10 Years
<u>Debt Securities:</u>					
Fixed Income.....	\$ 108,472,228	\$ 870,559	\$ 31,524,180	\$ 42,596,097	\$ 33,481,392
<u>Other Investments:</u>					
Money Market Mutual Funds.....	3,448				
Domestic Equities.....	208,039,745				
International Equities.....	398,009,658				
Real Estate Funds.....	110,167,658				
Venture Capital Funds.....	21,304,419				
Hedge Funds.....	45,958,916				
Bank Loan.....	34,552,344				
Total Investments.....	\$ 926,508,416				

The Administration’s annual money-weighted rate of return on pension plan investments was a loss of (-7.1%). 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 retiree pension defined benefit plan holds significant amounts of investments that are measured at fair value on a recurring basis. Because investing is a key part of the plan's activities, the plan shows greater disaggregation in its disclosures. The plan 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 has the following recurring fair value measurements as of December 31, 2018:

Investment Type	December 31, 2018	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level:				
<u>Debt Securities</u>				
Fixed Income.....	\$ 108,472,228	\$ -	\$ 108,472,228	\$ -
<u>Other Investments</u>				
Money Market Mutual Funds.....	3,448	3,448	-	-
Domestic Equities.....	208,039,745	208,039,745	-	-
International Equities.....	398,009,658	398,009,658	-	-
Real Estate Funds.....	110,167,658	-	-	110,167,658
Venture Capital Funds.....	21,304,419	-	-	21,304,419
Hedge Funds.....	45,958,916	-	-	45,958,916
Bank Loan.....	34,552,344	-	34,552,344	-
Total Investments by fair value level.....	\$ 926,508,416	\$ 606,052,851	\$ 143,024,572	\$ 177,430,993

NOTE 5 – MEMBERSHIP

The following table represents the Association's membership at December 31, 2018:

Retirees and beneficiaries currently receiving benefits.....	4,104
Inactive members.....	1,808
Active members.....	5,747
Total.....	11,659

NOTE 6 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2018 were as follows:

Total pension liability.....	\$ 1,669,196,814
The pension plan's fiduciary net position.....	<u>936,639,806</u>
The net pension liability.....	<u>\$ 732,557,008</u>
The pension plan's fiduciary net position as a percentage of the total pension liability.....	56.11%

The total pension liability was determined by an actuarial valuation as of January 1, 2019, using the following actuarial assumptions, applied to all periods included in the measurement date of December 31, 2018:

Valuation date.....	January 1, 2019
Actuarial cost method.....	Individual Entry Age Normal Cost Method.
Amortization method.....	Payments increase at 7.0% for the unfunded actuarial accrued liability, and level amortization of the 2003, and 2013 Early Retirement Incentives.
Remaining amortization period.....	Amortization of the unfunded actuarial accrued liability over 10 years, the 2003 ERI over one year, and the 2013 ERI over 9 years; all as of January 1, 2019.
Asset valuation method.....	Market value for GASB 68 and for the actuarial report market value with a five-year smoothing of asset returns greater than or less than the assumed rate of return, with a 20% corridor.
Projected salary increases.....	3.75% per year.
Cost of living adjustments.....	3.0% of the first \$14,000 of retirement income.
Rates of retirement.....	Varies based upon age for general employees, police and fire employees.
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..... 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. 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 3 years for females, fully generational. 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. Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years. 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.

Investment rate of return/Discount rate..... 7.875% nominal rate, net of investment expense.

Investment policy: The pension plan’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 pension plan’s target asset allocation as of January 1, 2019 are summarized in the following table:

Asset Class	Long-Term Expected Nominal Rate of Return	Long-Term Expected Asset Allocation
Domestic equity.....	13.20%	22.00%
International developed equity	6.30%	14.00%
Emerging markets equity.....	8.00%	9.00%
Global equity.....	9.50%	10.00%
Domestic fixed income.....	3.40%	8.00%
Value-added fixed income.....	6.00%	11.00%
Hedge funds.....	3.10%	4.00%
Real estate.....	4.20%	11.00%
Private equity.....	9.20%	5.00%
Real assets.....	4.60%	5.00%
Cash.....	0.00%	1.00%
		<u>100.00%</u>

Discount rate: The discount rate used to measure the total pension liability was 7.875%. 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 pension plan'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 position liability to changes in the discount rate. The following presents the net position liability, calculated using the discount rate of 7.875%, as well as what the net position 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, 2018.....	\$ 905,753,273	\$ 732,557,008	\$ 584,902,368

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 7 – 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 FY2011 through FY2022 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 received in 2018. The five remaining payments totaling \$1,101,247, at year-end, has been recorded as a receivable.

NOTE 8 – COMMITMENTS AND CONTINGENCIES

There are no legal actions or claims pending that would materially affect the financial position at December 31, 2018.

NOTE 9 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

During 2018, the following GASB pronouncements were implemented:

- The GASB issued Statement #85, *Omnibus 2017*. The financial statements and related notes were not impacted by the implementation of this pronouncement.
- The GASB issued Statement #86, *Certain Debt Extinguishment Issues*. The financial statements and related notes were not impacted by the implementation of this pronouncement.

The following GASB pronouncements will be implemented in the future:

- The GASB issued Statement #83, *Certain Asset Retirement Obligations*, which is required to be implemented in 2019.
- The GASB issued Statement #84, *Fiduciary Activities*, which is required to be implemented in 2019.
- The GASB issued Statement #87, *Leases*, which is required to be implemented in 2020.
- The GASB issued Statement #88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*, which is required to be implemented in 2019.
- The GASB issued Statement #89, *Accounting for Interest Costs Incurred Before the End of a Construction Period*, which is required to be implemented in 2020.
- The GASB issued Statement #90, *Majority Equity Interests – An Amendment of GASB Statements No. 14 and No. 61*, which is required to be implemented in 2019.
- The GASB issued Statement #91, *Conduit Debt Obligations*, which is required to be implemented in 2021.

Management is currently assessing the impact the implementation of these pronouncements will have on the basic financial statements.

NOTE 10 – SUBSEQUENT EVENTS

Management has evaluated subsequent events through October 24, 2019, which is the date the financial statements were available to be issued.

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	December 31, 2018
Total pension liability:					
Service cost.....	\$ 30,880,169	\$ 32,038,175	\$ 33,239,607	\$ 26,807,632	\$ 27,772,477
Interest.....	111,727,069	115,962,263	116,054,394	119,404,812	122,120,554
Changes in benefit terms.....	-	-	6,700,296	-	-
Differences between expected and actual experience.....	-	-	21,421,023	-	59,806,942
Changes in assumptions.....	-	-	(23,402,726)	-	19,750,049
Benefit payments.....	<u>(90,825,319)</u>	<u>(98,626,669)</u>	<u>(100,786,029)</u>	<u>(110,807,537)</u>	<u>(115,748,560)</u>
Net change in total pension liability.....	51,781,919	49,373,769	53,226,565	35,404,907	113,701,462
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>	<u>1,555,495,352</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>	\$ <u>1,669,196,814</u>
Plan fiduciary net position:					
Employer pension appropriation.....	\$ 56,266,944	\$ 67,162,327	\$ 66,393,381	\$ 69,896,514	\$ 72,811,482
Member contributions.....	24,889,464	26,259,167	25,501,976	26,076,090	27,326,242
Other contributions.....	2,910,328	2,801,874	7,357,214	4,788,362	6,940,373
Net investment income (loss).....	32,962,502	(1,710,419)	57,204,478	144,907,116	(72,568,400)
Administrative expenses.....	(1,521,667)	(1,553,871)	(1,723,774)	(1,737,836)	(1,828,777)
Retirement benefits and refunds.....	<u>(91,939,449)</u>	<u>(94,903,555)</u>	<u>(100,786,030)</u>	<u>(110,807,537)</u>	<u>(115,748,560)</u>
Net increase (decrease) in fiduciary net position.....	23,568,122	(1,944,477)	53,947,245	133,122,709	(83,067,640)
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>	<u>1,019,707,446</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>	\$ <u>936,639,806</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>	\$ <u>732,557,008</u>
Plan fiduciary net position as a percentage of the total pension liability.....	58.88%	56.76%	58.32%	65.56%	58.11%
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362	\$ 281,665,686
Net pension liability as a percentage of covered payroll.....	236.28%	247.79%	239.03%	194.39%	260.08%

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 CONTRIBUTIONS

	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018
Actuarially determined contribution.....	\$ 58,130,647	\$ 62,772,260	\$ 66,255,684	\$ 68,534,029	\$ 72,127,482
Contributions in relation to the actuarially determined contribution.....	<u>(58,130,647)</u>	<u>(62,772,260)</u>	<u>(66,393,381)</u>	<u>(69,896,514)</u>	<u>(72,811,482)</u>
Contribution deficiency (excess).....	\$ -	\$ -	\$ (137,717)	\$ (1,362,485)	\$ (684,000)
Covered payroll.....	\$ 246,703,688	\$ 255,955,074	\$ 265,029,190	\$ 275,630,362	\$ 281,665,696
Contributions as a percentage of covered payroll.....	23.56%	24.52%	25.05%	25.36%	25.85%

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, 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

The following changes in assumptions were included in the January 1, 2019 actuarial valuation:

The discount rate was reduced to 7.875%; it was previously 8.00%.

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 Retirement Board
Plymouth County Retirement Association
Plymouth, Massachusetts

We have audited the accompanying schedule of employer allocations of the Plymouth County Retirement Association as of and for the year ended December 31, 2018, 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 of pension amounts by employer of the Plymouth County Retirement Association Pension Plan as of and for the year ended December 31, 2018, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes 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 Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and row totals titled 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 Plymouth County Retirement Association as of and for the year ended December 31, 2018, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2018, and our report thereon, dated October 24, 2019, expressed an unmodified opinion on those financial statements.

Restriction on Use

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



October 24, 2019

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2018

Employer	Employer Allocation Percentage	Share of Net Pension Liability	Contribution In Excess of Annual Appropriation	Net Pension Liability
Plymouth County.....	5.6098%	\$ 41,247,907	\$ (2,756,162)	\$ 38,491,745
Town of Abington.....	3.6047%	26,505,663	-	26,505,663
Town of Bridgewater.....	4.8845%	35,916,053	-	35,916,053
Bridgewater Housing Authority.....	0.1009%	741,608	-	741,608
Bridgewater/Raynham Regional School.....	2.3565%	17,327,991	-	17,327,991
Town of Carver.....	2.9003%	21,326,193	-	21,326,193
Carver/Marion/Wareham Regional Refuse.....	0.0707%	519,935	-	519,935
Town of Duxbury.....	5.1009%	37,507,527	-	37,507,527
Duxbury Housing Authority.....	0.0315%	231,982	-	231,982
Town of East Bridgewater.....	3.4820%	25,603,508	-	25,603,508
East Bridgewater Housing Authority.....	0.0577%	424,197	-	424,197
Town of Halifax.....	1.5759%	11,588,080	-	11,588,080
Town of Hanover.....	4.5302%	33,311,220	-	33,311,220
Town of Hanson.....	2.0749%	15,257,087	-	15,257,087
Town of Kingston.....	3.0535%	22,452,965	-	22,452,965
Kingston Housing Authority.....	0.0025%	18,412	-	18,412
Town of Lakeville.....	1.3856%	10,188,821	-	10,188,821
Town of Marion.....	1.4024%	10,311,809	-	10,311,809
Town of Marshfield.....	7.9850%	58,714,414	-	58,714,414
Marshfield Housing Authority.....	0.0420%	308,574	-	308,574
Town of Mattapoisett.....	1.5385%	11,312,647	-	11,312,647
Town of Middleborough.....	8.9504%	65,813,816	-	65,813,816
Middleborough Housing Authority.....	0.1498%	1,101,733	-	1,101,733
Town of Norwell.....	3.4712%	25,523,971	-	25,523,971
Norwell Housing Authority.....	0.0448%	329,194	-	329,194
Old Rochester Regional School.....	0.9329%	6,860,055	-	6,860,055
Onset Fire District.....	0.3226%	2,372,113	-	2,372,113
Town of Pembroke.....	4.4738%	32,896,598	-	32,896,598
Plymouth County Mosquito Control.....	0.3001%	2,206,412	-	2,206,412
Town of Plympton.....	0.6587%	4,843,648	-	4,843,648
Town of Rochester.....	1.0429%	7,668,680	-	7,668,680
Town of Rockland.....	5.3560%	39,383,272	-	39,383,272
Town of Scituate.....	6.5071%	47,847,320	-	47,847,320
Scituate Housing Authority.....	0.1514%	1,113,516	-	1,113,516
Silver Lake Regional School.....	0.9938%	7,307,819	-	7,307,819
South Shore Regional School.....	0.5058%	3,719,085	-	3,719,085
Town of Wareham.....	5.4705%	40,225,037	-	40,225,037
Wareham Fire District.....	1.0524%	7,738,643	-	7,738,643
Wareham Housing Authority.....	0.0400%	293,844	-	293,844
Town of West Bridgewater.....	2.7623%	20,311,361	-	20,311,361
Town of Whitman.....	2.6594%	19,555,024	-	19,555,024
Whitman/Hanson Regional School.....	1.6165%	11,886,343	-	11,886,343
Whitman Housing Authority.....	0.1127%	828,509	-	828,509
Abington Housing Authority.....	0.0543%	399,157	-	399,157
Pembroke Housing Authority.....	0.1308%	961,807	-	961,807
Hanson Housing Authority.....	0.0404%	296,790	-	296,790
Rockland Housing Authority.....	0.0840%	617,884	-	617,884
Halifax Housing Authority.....	0.0709%	521,408	-	521,408
Mattapoisett Housing Authority.....	0.0263%	193,687	-	193,687
Acushnet/Rochester/Marion Health District.....	0.0203%	149,500	-	149,500
West Bridgewater Housing Authority.....	0.0181%	133,298	-	133,298
South Shore Tri-Town Development.....	0.1626%	1,195,262	-	1,195,262
Carver Housing Authority.....	0.0274%	201,788	-	201,788
Total.....	100.00%	\$ 735,313,167	\$ (2,756,162)	\$ 732,557,005

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, 2018

	Plymouth County	Town of Abington	Town of Bridgewater
Net Pension Liability			
Beginning net pension liability.....	\$ 23,389,390	\$ 19,513,320	\$ 25,974,816
Ending net pension liability.....	\$ 38,491,745	\$ 26,505,663	\$ 35,916,053
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 4,207,705	\$ 2,047,881	\$ 2,581,834
Net difference between projected and actual investment earnings on pension plan investments.....	5,098,425	3,594,748	4,532,024
Changes of assumptions.....	834,471	588,361	741,767
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	3,741,172	291,162	218,493
Total Deferred Outflows of Resources.....	\$ 13,881,773	\$ 6,522,152	\$ 8,074,118
Deferred Inflows of Resources			
Changes of assumptions.....	\$ 412,496	\$ 290,838	\$ 366,671
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,693,082	228,429	352,507
Total Deferred Inflows of Resources.....	\$ 2,105,578	\$ 519,267	\$ 719,178
Pension Expense			
Proportionate share of plan pension expense.....	\$ 5,178,838	\$ 2,548,513	\$ 4,641,155
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,701,513	63,006	(602)
Total Employer Pension Expense.....	\$ 6,880,351	\$ 2,611,519	\$ 4,640,553
Contributions			
Statutory required contribution.....	\$ 3,310,510	\$ 2,620,527	\$ 3,550,969
Contribution in relation to statutory required contribution.....	(3,994,510)	(2,620,527)	(3,550,969)
Contribution deficiency/(excess).....	\$ (684,000)	\$ -	\$ -
Contributions as a percentage of covered payroll.....	86.13%	26.41%	26.29%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2020.....	\$ 3,607,157	\$ 1,793,711	\$ 2,277,373
June 30, 2021.....	2,728,515	1,303,961	1,643,475
June 30, 2022.....	3,034,673	1,297,496	1,631,222
June 30, 2023.....	2,405,850	1,607,717	1,802,870
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 11,776,195	\$ 6,002,885	\$ 7,354,940
Discount Rate Sensitivity			
1% decrease (6.875%).....	\$ 47,463,781	\$ 35,128,503	\$ 44,287,722
Current discount rate (7.875%).....	\$ 38,491,745	\$ 26,505,663	\$ 35,916,053
1% increase (8.875%).....	\$ 30,650,376	\$ 22,684,704	\$ 28,599,392
Covered Payroll.....	\$ 3,843,717	\$ 9,922,438	\$ 13,505,950
See notes to schedule of employer allocations and schedule of pension amounts by employer.			(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 619,641	\$ 12,798,569	\$ 15,652,446	\$ 437,470
Ending net pension liability.....	\$ 741,608	\$ 17,327,991	\$ 21,326,193	\$ 519,935
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 53,311	\$ 1,245,628	\$ 1,533,040	\$ 37,376
Net difference between projected and actual investment earnings on pension plan investments.....	93,579	2,186,513	2,691,022	65,607
Changes of assumptions.....	15,316	357,872	440,446	10,738
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	70,341	157,596	345,399	33,073
Total Deferred Outflows of Resources.....	<u>\$ 232,547</u>	<u>\$ 3,947,609</u>	<u>\$ 5,009,907</u>	<u>\$ 146,794</u>
Deferred Inflows of Resources				
Changes of assumptions.....	\$ 7,571	\$ 176,904	\$ 217,722	\$ 5,308
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	45,383	91,970	99,337	43,819
Total Deferred Inflows of Resources.....	<u>\$ 52,954</u>	<u>\$ 268,874</u>	<u>\$ 317,059</u>	<u>\$ 49,127</u>
Pension Expense				
Proportionate share of plan pension expense.....	\$ 95,615	\$ 2,238,626	\$ 2,755,367	\$ 67,078
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,800	40,572	188,435	(19,619)
Total Employer Pension Expense.....	<u>\$ 98,415</u>	<u>\$ 2,279,198</u>	<u>\$ 2,943,802</u>	<u>\$ 47,459</u>
Contributions				
Statutory required contribution.....	\$ 73,324	\$ 1,713,192	\$ 2,108,507	\$ 51,427
Contribution in relation to statutory required contribution.....	(73,324)	(1,713,192)	(2,108,507)	(51,427)
Contribution deficiency/(excess).....	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Contributions as a percentage of covered payroll.....	30.27%	25.24%	29.00%	113.40%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020.....	\$ 72,723	\$ 1,212,685	\$ 1,604,140	\$ 30,112
June 30, 2021.....	46,846	847,175	1,082,253	25,893
June 30, 2022.....	27,921	765,485	950,050	19,345
June 30, 2023.....	32,103	853,360	1,056,405	22,317
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	<u>\$ 179,593</u>	<u>\$ 3,678,735</u>	<u>\$ 4,692,848</u>	<u>\$ 97,667</u>
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 914,469	\$ 21,366,971	\$ 26,297,112	\$ 641,127
Current discount rate (7.875%).....	\$ 741,608	\$ 17,327,991	\$ 21,326,193	\$ 519,935
1% increase (8.875%).....	\$ 590,531	\$ 13,798,009	\$ 16,981,714	\$ 414,017
Covered Payroll.....	\$ 242,261	\$ 6,786,878	\$ 7,271,380	\$ 45,349
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 26,793,727	\$ 199,915	\$ 19,102,197	\$ 321,650
Ending net pension liability	\$ 37,507,527	\$ 231,982	\$ 25,603,508	\$ 424,197
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 2,696,238	16,676	\$ 1,840,515	\$ 30,494
Net difference between projected and actual investment earnings on pension plan investments	4,732,844	29,272	3,230,750	53,526
Changes of assumptions	774,636	4,791	528,784	8,761
Changes in proportion and differences between employer contributions and proportionate share of contributions	687,524	15,652	145,184	31,418
Total Deferred Outflows of Resources	\$ 8,891,242	\$ 66,391	\$ 5,745,233	\$ 124,199
Deferred Inflows of Resources				
Changes of assumptions	\$ 382,919	\$ 2,368	\$ 261,389	\$ 4,331
Changes in proportion and differences between employer contributions and proportionate share of contributions	543,778	27,253	272,720	6,665
Total Deferred Inflows of Resources	\$ 926,697	\$ 29,621	\$ 534,109	\$ 10,996
Pension Expense				
Proportionate share of plan pension expense	\$ 4,847,498	\$ 29,883	\$ 3,307,395	\$ 54,783
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	265,251	(14,418)	(144,468)	16,096
Total Employer Pension Expense	\$ 5,112,749	\$ 15,465	\$ 3,162,927	\$ 70,879
Contributions				
Statutory required contribution	\$ 3,708,285	\$ 22,939	\$ 2,531,361	\$ 41,911
Contribution in relation to statutory required contribution	(3,708,285)	(22,939)	(2,531,361)	(41,911)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	20.84%	48.81%	23.24%	18.70%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 2,553,557	\$ 9,012	\$ 1,638,763	\$ 47,145
June 30, 2021	1,777,493	10,126	1,207,590	27,606
June 30, 2022	1,730,301	7,964	1,115,593	18,074
June 30, 2023	1,903,194	9,668	1,249,178	20,378
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 7,964,545	\$ 36,770	\$ 5,211,124	\$ 113,203
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 46,250,152	\$ 286,055	\$ 31,571,427	\$ 523,073
Current discount rate (7.875%)	\$ 37,507,527	\$ 231,982	\$ 25,603,508	\$ 424,197
1% increase (8.875%)	\$ 29,866,658	\$ 184,724	\$ 20,387,674	\$ 337,781
Covered Payroll	\$ 17,792,029	\$ 46,995	\$ 10,891,412	\$ 224,175
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
FOR THE YEAR ENDED DECEMBER 31, 2018

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability	\$ 8,888,119	\$ 24,148,907	\$ 11,552,942	\$ 16,687,404
Ending net pension liability	\$ 11,588,080	\$ 33,311,220	\$ 15,257,087	\$ 22,452,965
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 833,012	\$ 2,394,586	\$ 1,096,760	\$ 1,614,038
Net difference between projected and actual investment earnings on pension plan investments	1,462,230	4,203,338	1,925,197	2,833,201
Changes of assumptions	239,326	687,970	315,102	463,717
Changes in proportion and differences between employer contributions and proportionate share of contributions	175,704	234,861	149,422	65,397
Total Deferred Outflows of Resources	\$ 2,710,272	\$ 7,520,755	\$ 3,486,481	\$ 4,976,353
Deferred Inflows of Resources				
Changes of assumptions	\$ 118,304	\$ 340,077	\$ 155,761	\$ 229,225
Changes in proportion and differences between employer contributions and proportionate share of contributions	326,559	298,382	356,365	185,858
Total Deferred Inflows of Resources	\$ 444,863	\$ 638,459	\$ 512,126	\$ 415,083
Pension Expense				
Proportionate share of plan pension expense	\$ 1,496,452	\$ 4,304,440	\$ 1,970,499	\$ 2,900,557
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(176,354)	30,067	(212,574)	(116,105)
Total Employer Pension Expense	\$ 1,320,098	\$ 4,334,507	\$ 1,757,925	\$ 2,784,452
Contributions				
Statutory required contribution	\$ 1,145,686	\$ 3,293,420	\$ 1,508,408	\$ 2,219,898
Contribution in relation to statutory required contribution	(1,145,686)	(3,293,420)	(1,508,408)	(2,219,898)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	22.62%	20.49%	25.91%	23.04%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 697,267	\$ 2,158,601	\$ 896,430	\$ 1,430,555
June 30, 2021	532,330	1,546,881	692,914	1,047,823
June 30, 2022	485,363	1,508,261	651,088	983,475
June 30, 2023	550,449	1,668,553	733,923	1,099,417
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 2,265,409	\$ 6,882,296	\$ 2,974,355	\$ 4,561,270
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 14,289,145	\$ 41,075,729	\$ 18,813,360	\$ 27,686,523
Current discount rate (7.875%)	\$ 11,588,080	\$ 33,311,220	\$ 15,257,087	\$ 22,452,965
1% increase (8.875%)	\$ 9,227,408	\$ 26,525,205	\$ 12,148,980	\$ 17,878,945
Covered Payroll	\$ 5,064,885	\$ 16,072,154	\$ 5,822,446	\$ 9,636,972
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
FOR THE YEAR ENDED DECEMBER 31, 2018

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability	\$ 37,747	\$ 7,749,171	\$ 7,657,010	\$ 43,582,541
Ending net pension liability	\$ 18,412	\$ 10,188,821	\$ 10,311,809	\$ 58,714,414
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 1,323	\$ 732,426	\$ 741,267	\$ 4,220,702
Net difference between projected and actual investment earnings on pension plan investments	2,322	1,255,664	1,301,182	7,408,809
Changes of assumptions	380	210,428	212,968	1,212,617
Changes in proportion and differences between employer contributions and proportionate share of contributions	13,289	118,416	18,014	355,871
Total Deferred Outflows of Resources	\$ 17,314	\$ 2,346,934	\$ 2,273,431	\$ 13,197,999
Deferred Inflows of Resources				
Changes of assumptions	\$ 188	\$ 104,019	\$ 105,275	\$ 599,422
Changes in proportion and differences between employer contributions and proportionate share of contributions	19,893	230,138	85,976	406,330
Total Deferred Inflows of Resources	\$ 20,081	\$ 334,157	\$ 191,251	\$ 1,005,752
Pension Expense				
Proportionate share of plan pension expense	\$ 2,299	\$ 1,315,873	\$ 1,332,158	\$ 7,584,906
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(9,425)	(125,737)	(60,929)	(94,227)
Total Employer Pension Expense	\$ (7,126)	\$ 1,190,136	\$ 1,271,229	\$ 7,490,679
Contributions				
Statutory required contribution	\$ 1,834	\$ 1,007,318	\$ 1,019,533	\$ 5,804,983
Contribution in relation to statutory required contribution	(1,834)	(1,007,318)	(1,019,533)	(5,804,983)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	N/A	23.60%	22.34%	25.99%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ (1,606)	\$ 624,642	\$ 647,493	\$ 3,936,624
June 30, 2021	536	468,056	477,101	2,800,929
June 30, 2022	(1,119)	432,052	452,242	2,576,325
June 30, 2023	(578)	488,027	505,344	2,878,369
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (2,767)	\$ 2,012,777	\$ 2,082,180	\$ 12,192,247
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 22,703	\$ 12,563,732	\$ 12,715,386	\$ 72,400,150
Current discount rate (7.875%)	\$ 18,412	\$ 10,188,821	\$ 10,311,809	\$ 58,714,414
1% increase (8.875%)	\$ 14,661	\$ 8,113,199	\$ 8,211,132	\$ 46,753,371
Covered Payroll	\$ -	\$ 4,268,584	\$ 4,562,725	\$ 22,333,198
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Marshfield Housing Authority	Town of Mattapoisett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 268,310	\$ 8,677,987	\$ 48,732,595	\$ 836,225
Ending net pension liability	\$ 308,574	\$ 11,312,647	\$ 65,813,816	\$ 1,101,733
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 22,182	\$ 813,212	\$ 4,731,044	\$ 79,198
Net difference between projected and actual investment earnings on pension plan investments	38,936	1,427,472	6,304,639	139,022
Changes of assumptions	6,373	233,638	1,359,240	22,754
Changes in proportion and differences between employer contributions and proportionate share of contributions	22,245	171,865	39,865	20,375
Total Deferred Outflows of Resources	\$ 89,736	\$ 2,646,187	\$ 14,434,788	\$ 261,349
Deferred Inflows of Resources				
Changes of assumptions	\$ 3,150	\$ 115,492	\$ 671,900	\$ 11,248
Changes in proportion and differences between employer contributions and proportionate share of contributions	33,100	425,410	633,547	37,380
Total Deferred Inflows of Resources	\$ 36,250	\$ 540,902	\$ 1,305,447	\$ 48,628
Pension Expense				
Proportionate share of plan pension expense	\$ 39,784	\$ 1,460,893	\$ 8,502,357	\$ 142,243
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(15,358)	(249,222)	(475,688)	(20,052)
Total Employer Pension Expense	\$ 24,426	\$ 1,211,671	\$ 8,026,669	\$ 122,191
Contributions				
Statutory required contribution	\$ 30,517	\$ 1,118,486	\$ 6,506,872	\$ 108,892
Contribution in relation to statutory required contribution	(30,517)	(1,118,486)	(6,506,872)	(108,892)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	15.75%	20.36%	27.34%	26.22%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 16,575	\$ 603,678	\$ 4,008,217	\$ 60,550
June 30, 2021	13,859	490,628	2,989,843	50,952
June 30, 2022	10,342	473,684	2,897,518	48,340
June 30, 2023	12,710	537,295	3,233,763	52,879
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 53,486	\$ 2,105,285	\$ 13,129,341	\$ 212,721
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 380,499	\$ 13,949,511	\$ 81,154,351	\$ 1,358,536
Current discount rate (7.875%)	\$ 308,574	\$ 11,312,647	\$ 65,813,816	\$ 1,101,733
1% increase (8.875%)	\$ 245,712	\$ 9,008,084	\$ 52,406,515	\$ 877,293
Covered Payroll	\$ 193,801	\$ 5,493,964	\$ 23,802,868	\$ 415,320
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability	\$ 19,037,029	\$ 209,594	\$ 4,802,058	\$ 1,952,482
Ending net pension liability	\$ 25,523,971	\$ 329,194	\$ 6,860,055	\$ 2,372,113
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 1,834,798	\$ 23,664	\$ 493,137	\$ 170,520
Net difference between projected and actual investment earnings on pension plan investments	3,220,711	41,539	865,627	299,323
Changes of assumptions	527,142	6,799	141,679	48,991
Changes in proportion and differences between employer contributions and proportionate share of contributions	207,183	26,428	214,935	108,967
Total Deferred Outflows of Resources	\$ 5,789,834	\$ 98,430	\$ 1,715,378	\$ 627,801
Deferred Inflows of Resources				
Changes of assumptions	\$ 260,577	\$ 3,361	\$ 70,035	\$ 24,217
Changes in proportion and differences between employer contributions and proportionate share of contributions	245,429	19,299	154,604	194,457
Total Deferred Inflows of Resources	\$ 506,006	\$ 22,660	\$ 224,839	\$ 218,674
Pension Expense				
Proportionate share of plan pension expense	\$ 3,297,108	\$ 42,585	\$ 886,820	\$ 306,088
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(74,118)	11,523	91,080	(100,780)
Total Employer Pension Expense	\$ 3,222,990	\$ 54,108	\$ 977,900	\$ 205,308
Contributions				
Statutory required contribution	\$ 2,523,519	\$ 32,577	\$ 678,267	\$ 234,534
Contribution in relation to statutory required contribution	(2,523,519)	(32,577)	(678,267)	(234,534)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	23.58%	21.88%	22.91%	27.59%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 1,702,621	\$ 24,576	\$ 482,609	\$ 114,405
June 30, 2021	1,222,957	15,729	329,359	101,608
June 30, 2022	1,112,590	17,189	324,421	88,625
June 30, 2023	1,245,660	18,276	354,150	104,489
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 5,283,828	\$ 75,770	\$ 1,490,539	\$ 409,127
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 31,473,351	\$ 405,926	\$ 8,459,065	\$ 2,925,029
Current discount rate (7.875%)	\$ 25,523,971	\$ 329,194	\$ 6,860,055	\$ 2,372,113
1% increase (8.875%)	\$ 20,324,340	\$ 262,132	\$ 5,462,555	\$ 1,888,877
Covered Payroll	\$ 10,700,440	\$ 148,908	\$ 2,960,708	\$ 849,951
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability	\$ 24,672,623	\$ 1,803,410	\$ 3,834,420	\$ 5,443,207
Ending net pension liability	\$ 32,896,598	\$ 2,206,412	\$ 4,843,648	\$ 7,668,680
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 2,364,781	\$ 158,608	\$ 348,187	\$ 551,264
Net difference between projected and actual investment earnings on pension plan investments	4,151,020	278,413	611,190	967,663
Changes of assumptions	679,407	45,569	100,035	158,380
Changes in proportion and differences between employer contributions and proportionate share of contributions	516,079	23,177	337,827	300,137
Total Deferred Outflows of Resources	\$ 7,711,287	\$ 505,767	\$ 1,397,239	\$ 1,977,444
Deferred Inflows of Resources				
Changes of assumptions	\$ 335,844	\$ 22,525	\$ 49,449	\$ 78,290
Changes in proportion and differences between employer contributions and proportionate share of contributions	385,019	17,731	171,375	124,321
Total Deferred Inflows of Resources	\$ 720,863	\$ 40,256	\$ 220,824	\$ 202,611
Pension Expense				
Proportionate share of plan pension expense	\$ 4,249,186	\$ 285,083	\$ 625,276	\$ 991,192
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	8,062	8,024	57,814	166,060
Total Employer Pension Expense	\$ 4,257,248	\$ 293,107	\$ 683,090	\$ 1,157,252
Contributions				
Statutory required contribution	\$ 3,252,447	\$ 218,123	\$ 478,880	\$ 758,181
Contribution in relation to statutory required contribution	(3,252,447)	(218,123)	(478,880)	(758,181)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.10%	26.73%	23.55%	24.95%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 2,335,750	\$ 150,084	\$ 456,042	\$ 624,577
June 30, 2021	1,634,657	105,564	297,946	402,401
June 30, 2022	1,422,959	99,582	199,691	356,585
June 30, 2023	1,597,058	110,281	222,736	391,270
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 6,990,424	\$ 465,511	\$ 1,176,415	\$ 1,774,833
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 40,564,462	\$ 2,720,704	\$ 5,972,654	\$ 9,456,172
Current discount rate (7.875%)	\$ 32,896,598	\$ 2,206,412	\$ 4,843,648	\$ 7,668,680
1% increase (8.875%)	\$ 26,195,047	\$ 1,756,931	\$ 3,856,921	\$ 6,106,450
Covered Payroll	\$ 12,960,237	\$ 815,928	\$ 2,033,653	\$ 3,038,290
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
FOR THE YEAR ENDED DECEMBER 31, 2018

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability	\$ 29,499,523	\$ 35,785,407	\$ 720,298	\$ 5,299,427
Ending net pension liability	\$ 39,383,272	\$ 47,847,320	\$ 1,113,516	\$ 7,307,819
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 2,831,077	\$ 3,439,518	\$ 80,046	\$ 525,325
Net difference between projected and actual investment earnings on pension plan investments	4,969,531	6,037,558	140,508	922,130
Changes of assumptions	813,375	988,181	22,997	150,927
Changes in proportion and differences between employer contributions and proportionate share of contributions	209,073	361,784	124,911	27,610
Total Deferred Outflows of Resources	\$ 8,823,056	\$ 10,827,041	\$ 368,462	\$ 1,625,992
Deferred Inflows of Resources				
Changes of assumptions	\$ 402,068	\$ 488,479	\$ 11,368	\$ 74,607
Changes in proportion and differences between employer contributions and proportionate share of contributions	714,705	504,613	48,134	355,597
Total Deferred Inflows of Resources	\$ 1,116,773	\$ 993,092	\$ 59,502	\$ 430,204
Pension Expense				
Proportionate share of plan pension expense	\$ 5,087,111	\$ 6,180,513	\$ 144,104	\$ 944,255
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(457,892)	(204,661)	73,141	(220,205)
Total Employer Pension Expense	\$ 4,629,219	\$ 5,975,852	\$ 217,245	\$ 724,050
Contributions				
Statutory required contribution	\$ 3,893,717	\$ 4,730,553	\$ 110,121	\$ 722,524
Contribution in relation to statutory required contribution	(3,893,717)	(4,730,553)	(110,121)	(722,524)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.85%	25.66%	51.52%	19.04%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 2,317,494	\$ 3,153,393	\$ 120,720	\$ 246,588
June 30, 2021	1,767,811	2,273,740	68,248	252,521
June 30, 2022	1,706,659	2,077,758	58,871	330,731
June 30, 2023	1,914,319	2,329,058	61,121	365,948
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 7,706,283	\$ 9,833,949	\$ 308,960	\$ 1,195,788
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 48,563,114	\$ 59,000,047	\$ 1,373,066	\$ 9,011,197
Current discount rate (7.875%)	\$ 39,383,272	\$ 47,847,320	\$ 1,113,516	\$ 7,307,819
1% increase (8.875%)	\$ 31,360,284	\$ 38,100,074	\$ 886,676	\$ 5,819,102
Covered Payroll	\$ 15,062,375	\$ 18,435,372	\$ 213,764	\$ 3,794,468
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 2,690,095	\$ 29,313,050	\$ 5,631,293	\$ 190,237
Ending net pension liability	\$ 3,719,085	\$ 40,225,037	\$ 7,738,643	\$ 293,844
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 267,347	\$ 2,891,588	\$ 556,295	\$ 21,123
Net difference between projected and actual investment earnings on pension plan investments	469,287	5,075,749	976,491	37,079
Changes of assumptions	76,810	830,760	159,825	6,069
Changes in proportion and differences between employer contributions and proportionate share of contributions	42,367	341,885	173,752	16,073
Total Deferred Outflows of Resources	\$ 855,811	\$ 9,139,982	\$ 1,866,363	\$ 80,344
Deferred Inflows of Resources				
Changes of assumptions	\$ 37,968	\$ 410,661	\$ 79,005	\$ 3,000
Changes in proportion and differences between employer contributions and proportionate share of contributions	35,883	263,677	61,962	14,441
Total Deferred Inflows of Resources	\$ 73,851	\$ 674,338	\$ 140,967	\$ 17,441
Pension Expense				
Proportionate share of plan pension expense	\$ 480,590	\$ 5,197,535	\$ 1,000,177	\$ 37,964
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	14,330	119,470	91,193	5,242
Total Employer Pension Expense	\$ 494,920	\$ 5,317,005	\$ 1,091,370	\$ 43,206
Contributions				
Statutory required contribution	\$ 367,693	\$ 3,976,952	\$ 765,127	\$ 29,054
Contribution in relation to statutory required contribution	(367,693)	(3,976,952)	(765,127)	(29,054)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	20.21%	27.50%	24.98%	33.15%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 250,350	\$ 2,731,774	\$ 591,685	\$ 17,777
June 30, 2021	176,083	1,919,335	398,987	13,484
June 30, 2022	168,866	1,809,027	348,668	15,519
June 30, 2023	186,661	2,005,508	386,056	16,123
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 781,960	\$ 8,465,644	\$ 1,725,396	\$ 62,903
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 4,585,966	\$ 49,601,086	\$ 9,542,443	\$ 362,337
Current discount rate (7.875%)	\$ 3,719,085	\$ 40,225,037	\$ 7,738,643	\$ 293,844
1% increase (8.875%)	\$ 2,961,450	\$ 32,030,569	\$ 6,162,161	\$ 233,984
Covered Payroll	\$ 1,819,022	\$ 14,460,244	\$ 3,062,815	\$ 87,650
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 14,579,742	\$ 14,781,808	\$ 8,777,677	\$ 523,179
Ending net pension liability	\$ 20,311,361	\$ 19,555,024	\$ 11,886,343	\$ 828,509
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 1,460,088	\$ 1,405,718	\$ 854,454	\$ 59,557
Net difference between projected and actual investment earnings on pension plan investments	2,562,965	2,467,528	1,499,865	104,544
Changes of assumptions	419,487	403,866	245,486	17,111
Changes in proportion and differences between employer contributions and proportionate share of contributions	234,772	177,181	-	50,327
Total Deferred Outflows of Resources	\$ 4,677,312	\$ 4,454,293	\$ 2,599,805	\$ 231,539
Deferred Inflows of Resources				
Changes of assumptions	\$ 207,361	\$ 199,639	\$ 121,349	\$ 8,459
Changes in proportion and differences between employer contributions and proportionate share of contributions	274,104	444,782	258,476	51,235
Total Deferred Inflows of Resources	\$ 481,465	\$ 644,421	\$ 379,825	\$ 59,694
Pension Expense				
Proportionate share of plan pension expense	\$ 2,624,910	\$ 2,525,651	\$ 1,535,640	\$ 107,185
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	42,777	(263,338)	(188,858)	15,097
Total Employer Pension Expense	\$ 2,667,687	\$ 2,262,313	\$ 1,346,782	\$ 122,282
Contributions				
Statutory required contribution	\$ 2,008,165	\$ 1,933,377	\$ 1,175,190	\$ 81,932
Contribution in relation to statutory required contribution	(2,008,165)	(1,933,377)	(1,175,190)	(81,932)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	23.40%	25.64%	25.70%	27.82%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 1,301,601	\$ 1,152,396	\$ 614,982	\$ 46,848
June 30, 2021	936,616	878,713	494,308	33,887
June 30, 2022	931,317	836,515	525,196	44,842
June 30, 2023	1,026,313	942,248	585,494	46,268
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 4,195,847	\$ 3,809,872	\$ 2,219,980	\$ 171,845
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 25,045,733	\$ 24,113,102	\$ 14,656,930	\$ 1,021,626
Current discount rate (7.875%)	\$ 20,311,361	\$ 19,555,024	\$ 11,886,343	\$ 828,509
1% increase (8.875%)	\$ 16,173,619	\$ 15,571,360	\$ 9,464,910	\$ 659,729
Covered Payroll	\$ 8,581,947	\$ 7,539,224	\$ 4,572,893	\$ 294,553
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 276,376	\$ 599,102	\$ 228,413	\$ 386,281
Ending net pension liability	\$ 399,157	\$ 961,807	\$ 296,790	\$ 617,884
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 28,694	\$ 69,139	\$ 21,334	\$ 44,417
Net difference between projected and actual investment earnings on pension plan investments	50,368	121,364	37,451	77,968
Changes of assumptions	8,244	19,864	6,130	12,761
Changes in proportion and differences between employer contributions and proportionate share of contributions	12,539	61,568	11,335	54,987
Total Deferred Outflows of Resources	\$ 99,845	\$ 271,935	\$ 76,250	\$ 190,133
Deferred Inflows of Resources				
Changes of assumptions	\$ 4,075	\$ 9,819	\$ 3,030	\$ 6,308
Changes in proportion and differences between employer contributions and proportionate share of contributions	7,943	59,578	6,665	33,959
Total Deferred Inflows of Resources	\$ 12,018	\$ 69,397	\$ 9,695	\$ 40,267
Pension Expense				
Proportionate share of plan pension expense	\$ 51,618	\$ 124,495	\$ 38,350	\$ 79,986
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	5,800	20,589	1,098	27,086
Total Employer Pension Expense	\$ 57,418	\$ 145,084	\$ 39,448	\$ 107,072
Contributions				
Statutory required contribution	\$ 39,490	\$ 95,075	\$ 29,357	\$ 61,080
Contribution in relation to statutory required contribution	(39,490)	(95,075)	(29,357)	(61,080)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	37.12%	25.23%	52.15%	44.52%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020	\$ 27,743	\$ 55,247	\$ 23,689	\$ 49,737
June 30, 2021	19,667	40,329	16,080	31,619
June 30, 2022	19,622	52,748	12,738	33,768
June 30, 2023	20,795	54,214	14,048	34,742
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 87,827	\$ 202,538	\$ 66,555	\$ 149,866
Discount Rate Sensitivity				
1% decrease (6.875%)	\$ 492,197	\$ 1,185,994	\$ 365,969	\$ 761,906
Current discount rate (7.875%)	\$ 399,157	\$ 961,807	\$ 296,790	\$ 617,884
1% increase (8.875%)	\$ 317,843	\$ 765,872	\$ 236,330	\$ 492,011
Covered Payroll	\$ 106,394	\$ 376,778	\$ 56,294	\$ 137,209
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	Halifax Housing Authority	Mattapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 194,000	\$ 149,802	\$ 102,377	\$ 84,096
Ending net pension liability.....	\$ 521,408	\$ 193,687	\$ 149,500	\$ 133,298
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 37,481	\$ 13,923	\$ 10,747	\$ 9,582
Net difference between projected and actual investment earnings on pension plan investments.....	65,794	24,440	18,865	16,821
Changes of assumptions.....	10,769	4,000	3,088	2,753
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	149,319	5,021	4,126	10,867
Total Deferred Outflows of Resources.....	\$ 263,363	\$ 47,384	\$ 36,826	\$ 40,023
Deferred Inflows of Resources				
Changes of assumptions.....	\$ 5,323	\$ 1,978	\$ 1,526	\$ 1,361
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	105,160	9,666	12,361	7,086
Total Deferred Inflows of Resources.....	\$ 110,483	\$ 11,644	\$ 13,887	\$ 8,447
Pension Expense				
Proportionate share of plan pension expense.....	\$ 67,702	\$ 24,986	\$ 19,320	\$ 17,202
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	65,848	(5,646)	(5,166)	5,266
Total Employer Pension Expense.....	\$ 133,550	\$ 19,340	\$ 14,154	\$ 22,468
Contributions				
Statutory required contribution.....	\$ 51,545	\$ 19,137	\$ 14,796	\$ 13,186
Contribution in relation to statutory required contribution.....	(51,545)	(19,137)	(14,796)	(13,186)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	149.37%	36.71%	19.23%	23.83%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020.....	\$ 48,847	\$ 9,310	\$ 2,732	\$ 10,338
June 30, 2021.....	27,433	9,043	4,880	6,582
June 30, 2022.....	39,157	8,261	7,466	7,203
June 30, 2023.....	37,443	9,126	7,861	7,453
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 152,880	\$ 35,740	\$ 22,939	\$ 31,576
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 642,943	\$ 238,833	\$ 184,347	\$ 164,368
Current discount rate (7.875%).....	\$ 521,408	\$ 193,687	\$ 149,500	\$ 133,298
1% increase (8.875%).....	\$ 415,189	\$ 154,230	\$ 119,044	\$ 106,143
Covered Payroll.....	\$ 34,509	\$ 52,124	\$ 76,957	\$ 55,331

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

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2018

	South Shore Tri-Town Development	Carver Housing Authority	Plymouth County Retirement Association	Totals
Net Pension Liability				
Beginning net pension liability.....	\$ 646,526	\$ 142,275	\$ -	\$ 535,787,906
Ending net pension liability.....	\$ 1,195,262	\$ 201,788	\$ -	\$ 732,557,005
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 85,922	\$ 14,506	\$ -	\$ 54,243,288
Net difference between projected and actual investment earnings on pension plan investments.....	150,822	25,461	-	92,928,397
Changes of assumptions.....	24,686	4,167	-	15,209,814
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	238,595	3,174	-	11,168,337
Total Deferred Outflows of Resources.....	\$ 500,025	\$ 47,308	\$ -	\$ 173,549,836
Deferred Inflows of Resources				
Changes of assumptions.....	\$ 12,202	\$ 2,060	\$ -	\$ 7,518,522
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	129,933	12,061	-	11,168,337
Total Deferred Inflows of Resources.....	\$ 142,135	\$ 14,121	\$ -	\$ 18,886,859
Pension Expense				
Proportionate share of plan pension expense.....	\$ 154,893	\$ 25,776	\$ 195,995	\$ 94,166,508
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	124,070	(5,868)	-	-
Total Employer Pension Expense.....	\$ 278,963	\$ 19,908	\$ 195,995	\$ 94,166,508
Contributions				
Statutory required contribution.....	\$ 118,161	\$ 19,928	\$ 195,995	\$ 72,127,482
Contribution in relation to statutory required contribution.....	(118,161)	(19,928)	(195,995)	(72,811,482)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ (684,000)
Contributions as a percentage of covered payroll.....	31.45%	N/A	N/A	25.61%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2020.....	\$ 140,324	\$ 5,947	\$ -	\$ 48,735,590
June 30, 2021.....	72,273	8,848	-	35,371,493
June 30, 2022.....	71,886	9,765	-	33,853,920
June 30, 2023.....	73,407	10,627	-	36,901,974
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 357,890	\$ 33,187	\$ -	\$ 154,862,977
Discount Rate Sensitivity				
1% decrease (6.875%).....	\$ 1,473,866	\$ 248,823	\$ -	\$ 905,753,273
Current discount rate (7.875%).....	\$ 1,195,262	\$ 201,788	\$ -	\$ 732,557,005
1% increase (8.875%).....	\$ 951,769	\$ 160,681	\$ -	\$ 584,902,368
Covered Payroll.....	\$ 375,662	\$ -	\$ 722,495	\$ 281,665,696
See notes to schedule of employer allocations and schedule of pension amounts by employer. (concluded)				

NOTE I – 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 Association's money-weighted rate of return of 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 unit's based on their proportionate share of the total pension liability. The excess contributions net of investment income are 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.

The Plymouth County Hospital was operated by Plymouth County from the early 1900s to 1992, when it was closed and all employees were terminated. The remaining retirement allowances due from the Plymouth County Retirement Association to the former employees of the Plymouth County Hospital were actuarially determined and are included with the County's liability. Plymouth County continues to pay for the retirement obligations related to previously retired Hospital employees.

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 II – 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.

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2017

PLYMOUTH COUNTY RETIREMENT ASSOCIATION
FINANCIAL STATEMENTS
YEAR ENDED DECEMBER 31, 2017

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Financial Section

Independent Auditor's Report

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Independent Auditor's Report

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

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Report on the Financial Statements

We have audited the accompanying financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2017, and the related notes to the financial statements, which collectively comprise the Plymouth County Retirement Association's financial statements as listed in the table of contents.

Management's Responsibility 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; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Plymouth County Retirement Association as of December 31, 2017 and the results of its operations and changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

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 Return 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. 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 October 18, 2018, on our consideration of the Plymouth County Retirement 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 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 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 Plymouth County Retirement Association's internal control over financial reporting and compliance.

Restriction on Use

This report is intended solely for the information and use of the Plymouth County Retirement 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.



October 18, 2018

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, 2017. 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 \$1.02 billion (net position).
- The Association's net position increased by \$133.1 million for the year ended December 31, 2017.
- Total investment income was \$152.5 million; investment expenses were \$7.6 million; and net investment income was \$144.9 million.
- Total contributions were \$100.8 million including \$69.9 million from employers and \$26.1 million from members.
- Retirement benefits, refunds and transfers amounted to \$110.8 million.
- Administrative expenses were \$1.7 million.
- The Total Pension Liability is \$1.56 billion as of December 31, 2017 while the Net Pension Liability is \$536 million.
- The Plan fiduciary net position as a percentage of the total pension liability is 65.56%.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Association fiduciary financial statements. These fiduciary financial statements comprise 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 and deferred outflows less deferred inflows and 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 Return 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 \$1.02 billion at the close of 2017.

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 include investments of \$1.01 billion, cash of \$7.6 million, as well as accounts receivable and other assets of \$8.8 million.

In 2017, the Association's total contributions were \$100.8 million and net investment income was \$144.9 million while retirement benefit payments, refunds, transfers and administration expenses were \$112.5 million, which resulted in a current increase of \$133.1 million.

The current contributions were not sufficient to support the current expenses and therefore a portion of net investment income was needed to support the remaining expenses. The primary reason for the increase in net position was investment income. The annual money weighted rate of return was 16.30% and 7.40% in 2017 and 2016 respectively. Fluctuations in the Association's annual investment returns are expected.

The following tables present summarized financial information for the year.

Statement of Fiduciary Net Position	2017	2016
Assets:		
Cash.....	\$ 7,607,381	\$ 3,126,640
Investments.....	1,012,111,628	877,917,400
Receivables.....	7,699,564	8,251,710
Other assets.....	1,099,153	1,189,116
Total assets.....	1,028,517,726	890,484,866
Liabilities:		
Accounts payable.....	8,810,280	3,900,129
Net Position Restricted for Pension Benefits.....	\$ 1,019,707,446	\$ 886,584,737

Statement of Changes in Fiduciary Net Position	2017	2016
Additions:		
Contributions:		
Member contributions.....	\$ 26,076,090	\$ 25,501,976
Employer contributions.....	69,896,514	66,393,381
Other contributions.....	4,788,362	7,186,747
Total contributions.....	100,760,966	99,082,104
Net investment income (loss):		
Total investment income (loss).....	152,487,999	63,760,222
Less, investment expenses.....	(7,580,883)	(6,123,852)
Net investment income (loss).....	144,907,116	57,636,370
Total additions.....	245,668,082	156,718,474
Deductions:		
Administration.....	1,737,836	1,985,199
Retirement benefits, refunds and transfers.....	110,807,537	100,786,030
Total deductions.....	112,545,373	102,771,229
Net increase (decrease) in fiduciary net position.....	133,122,709	53,947,245
Fiduciary net position at beginning of year.....	886,584,737	832,637,492
Fiduciary net position at end of year.....	\$ 1,019,707,446	\$ 886,584,737

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, 10 Cordage Circle, Suite 234, Plymouth, MA 02360.

Financial Statements

Plymouth County Retirement Association

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Management's Discussion and Analysis

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2017

Assets	
Cash and cash equivalents.....	\$ 7,607,381
Investments.....	1,012,111,628
Accounts receivable.....	7,699,564
Interest and dividends.....	1,067,478
Other assets.....	<u>31,675</u>
Total Assets.....	<u>1,028,517,726</u>
Liabilities	
Accounts payable.....	<u>8,810,280</u>
Net Position Restricted for Pensions.....	\$ <u>1,019,707,446</u>

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

YEAR ENDED DECEMBER 31, 2017

Additions:	
Contributions:	
Employer pension assessments.....	\$ 68,636,514
Employer additional contributions.....	1,260,000
Member contributions.....	26,076,090
Transfers from other systems.....	1,722,883
3(8)(c) contributions from other systems.....	2,060,049
Workers' compensation settlements.....	61,800
Federal grant reimbursements.....	40,615
State COLA reimbursements.....	368,130
Members' makeup payments and redeposits.....	418,252
Interest not refunded.....	100,860
Reimbursement of 91A overearnings.....	450
Other revenue.....	<u>15,323</u>
 Total contributions.....	 <u>100,760,966</u>
Net investment income:	
Investment income (loss).....	152,487,999
 Less: investment expense.....	 <u>(7,580,883)</u>
Net investment income (loss).....	<u>144,907,116</u>
 Total additions.....	 <u>245,668,082</u>
Deductions:	
Administration.....	1,737,836
Retirement benefits and refunds.....	99,910,970
Transfers to other systems.....	2,503,814
3(8)(c) transfer to other systems.....	<u>8,392,753</u>
 Total deductions.....	 <u>112,545,373</u>
 Net increase (decrease) in fiduciary net position.....	 133,122,709
 Fiduciary net position at beginning of year.....	 <u>886,584,737</u>
 Fiduciary net position at end of year.....	 <u>\$ 1,019,707,446</u>

See notes to financial statements.

NOTE 1 – PLAN DESCRIPTION

Established in 1937, the Plymouth County Retirement 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 54 participating employers.

The Association is governed by a five member Board that establishes the policies under which the Association operates. Board members also approve all 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 member of the 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 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 or not 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 deductions, pension fund appropriations, 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, which are generally included in this category, include 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 is 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 County Finance Director/Treasurer, who shall be a member ex-officio, a second member appointed by the governing authority (the 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 Sciarra
Member	Mary Beth Carter

Board members are required to meet at least once a month. The Board must keep a record of all of 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 three persons designated by 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 INVESTMENTS

Custodial Credit Risk - Deposits

At December 31, 2017, the carrying amount of the Association's deposits totaled \$6,921,177 million and the bank balance of \$9,239,301 million was covered by Federal Depository Insurance.

Investments

The Association's investments are as follows:

	<u>Fair Value</u>	<u>Maturity</u>			
		<u>Under 1 Year</u>	<u>6-10 Years</u>	<u>6-10 Years</u>	<u>Over 10 Years</u>
Investment Type					
<u>Debt Securities:</u>					
Fixed Income.....	\$ 119,784,802	\$ <u>749,153</u>	\$ <u>36,752,262</u>	\$ <u>41,719,196</u>	\$ <u>40,564,191</u>
<u>Other Investments:</u>					
Money Market Mutual Funds.....	686,202				
Domestic Equities.....	322,108,769				
International Equities.....	356,056,251				
Real Estate Funds.....	114,844,104				
Venture Capital Funds.....	25,601,400				
Hedge Funds.....	39,406,442				
Bank Loan.....	<u>34,307,862</u>				
Total Investments.....	\$ <u>1,012,797,832</u>				

The Administration's annual money-weighted rate of return on pension plan investments was 16.30%. 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 retiree pension defined benefit plan holds significant amounts of investments that are measured at fair value on a recurring basis. Because investing is a key part of the plan's activities, the plan shows greater disaggregation in its disclosures. The plan 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 has the following recurring fair value measurements as of December 31, 2017:

Investment Type	December 31, 2017	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level:				
<u>Debt Securities</u>				
Fixed Income.....	\$ 119,784,802	\$ -	\$ 119,784,802	\$ -
<u>Other Investments</u>				
Money Market Mutual Funds.....	686,202	686,202	-	-
Domestic Equities.....	322,108,769	322,108,769	-	-
International Equities.....	356,056,251	356,056,251	-	-
Real Estate Funds.....	114,844,104	-	-	114,844,104
Venture Capital Funds.....	25,601,400	-	-	25,601,400
Hedge Funds.....	39,408,442	-	-	39,408,442
Bank Loan.....	34,307,862	-	34,307,862	-
Total Investments by fair value level.....	\$ 1,012,797,832	\$ 678,851,222	\$ 154,092,664	\$ 179,853,946

NOTE 5 – MEMBERSHIP

The following table represents the Association's membership at December 31, 2017:

Retirees and beneficiaries currently receiving benefits.....	4,012
Inactive members.....	1,823
Active members.....	5,794
Total.....	11,629

NOTE 6 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2017 were as follows:

Total pension liability.....	\$ 1,555,495,352
The pension plan's fiduciary net position.....	<u>1,019,707,446</u>
The net pension liability.....	<u>\$ 535,787,906</u>
The pension plan's fiduciary net position as a percentage of the total pension liability.....	65.56%

The total pension liability was determined by an actuarial valuation as of January 1, 2017, using the following actuarial assumptions, applied to all periods included in the measurement date of December 31, 2017:

Valuation date.....	January 1, 2017
Actuarial cost method.....	Individual Entry Age Normal Cost Method.
Amortization method.....	Payments increase at 3.5% for the unfunded actuarial accrued liability, and level amortization of the 2002, 2003, and 2013 Early Retirement Incentives
Remaining amortization period.....	Amortization of the unfunded actuarial accrued liability over 12 years, the 2002 ERI over two years, 2003 ERI over three years, and the 2013 ERI over 11 years; all as of July 1, 2017.
Asset valuation method.....	Market value with a five-year smoothing of asset returns greater than or less than the assumed rate of return, with a 20% corridor.
Projected salary increases.....	3.75% per year.
Cost of living adjustments.....	3.0% of the first \$14,000 of retirement income.
Rates of retirement.....	Varies based upon age for general employees, police and fire employees.
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..... 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. 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 3 years for females, fully generational. 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. Mortality for disabled members for Group 1 and 2 is represented by the RP-2000 Mortality Table set forward six years. 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.

Investment rate of return/Discount rate..... 8% nominal rate, net of investment expense

Investment policy: The pension plan’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 pension plan’s target asset allocation as of January 1, 2017 are summarized in the following table:

Asset Class	Long-Term Expected Nominal Rate of Return	Long-Term Expected Asset Allocation
US equity.....	7.50%	26.50%
Developed markets equity.....	7.30%	16.00%
Emerging markets equity.....	9.80%	4.00%
Core bonds.....	4.20%	11.50%
Foreign bonds.....	2.40%	3.00%
Emerging markets bonds.....	5.50%	4.00%
High yield bonds.....	6.00%	4.00%
Bank loans.....	5.50%	3.00%
Private equity.....	9.60%	10.00%
Real estate.....	6.90%	10.00%
Natural resources.....	7.00%	1.00%
Infrastructure.....	7.80%	2.00%
Hedge fund of funds.....	5.30%	4.00%
Cash.....	2.80%	1.00%
		100.00%

Discount rate: The discount rate used to measure the total pension liability was 8.00%. 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 pension plan'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 position liability to changes in the discount rate. The following presents the net position liability, calculated using the discount rate of 8.00%, as well as what the net position liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.00%) or 1-percentage-point higher (9.00%) than the current rate:

	1% Decrease (7.00%)	Current Discount (8.00%)	1% Increase (9.00%)
Plymouth County Retirement Association's net pension liability as of December 31, 2017.....	\$ 695,089,721	\$ 535,787,906	\$ 397,853,354

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 7 – 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 FY2011 through FY2022 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 one required payment of \$220,247 was paid for 2017 and received before December 31, 2017. The six remaining payments totaling \$1,321,482, at year-end, has been recorded as a receivable.

NOTE 8 – COMMITMENTS AND CONTINGENCIES

There are no legal actions or claims pending that would materially affect the financial position at December 31, 2017.

NOTE 9 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

During 2017, the following GASB pronouncements were implemented:

- GASB Statement #82, Pension Issues – an amendment of GASB Statements #67, #68, and #73. The basic financial statements and related notes were updated to be in compliance with this pronouncement.

The following GASB pronouncements will be implemented in the future:

- The GASB issued Statement #83, Certain Asset Retirement Obligations, which is required to be implemented in 2019.
- The GASB issued Statement #84, Fiduciary Activities, which is required to be implemented in 2020.
- The GASB issued Statement #85, Omnibus 2017, which is required to be implemented in 2018.
- The GASB issued Statement #86, Certain Debt Extinguishment Issues, which is required to be implemented in 2018.
- The GASB issued Statement #87, Leases, which is required to be implemented in 2021.
- The GASB issued Statement #88, Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements, which is required to be implemented in 2019.

Management is currently assessing the impact the implementation of these pronouncements will have on the basic financial statements.

NOTE 10 – SUBSEQUENT EVENTS

Management has evaluated subsequent events through October 18, 2018, which is the date the financial statements were available to be issued.

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.....	(90,825,319)	(98,626,666)	(100,786,029)	(110,807,537)
Net change in total pension liability.....	51,781,919	49,373,769	53,226,565	35,404,907
Total pension liability - beginning.....	1,365,708,192	1,417,490,111	1,466,863,880	1,520,090,445
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.....	\$ 56,266,944	\$ 67,162,327	\$ 66,393,381	\$ 69,896,514
Member contributions.....	24,889,464	26,259,167	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)
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.....	811,013,847	834,581,969	832,637,492	886,584,737
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.....	58.88%	56.76%	58.32%	65.56%
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,359
Net pension liability as a percentage of covered payroll.....	236.28%	247.79%	239.03%	194.39%

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 CONTRIBUTIONS

	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017
Actuarially determined contribution.....	\$ 58,130,647	\$ 62,772,260	\$ 66,255,664	\$ 68,534,029
Contributions in relation to the actuarially determined contribution.....	<u>(58,130,647)</u>	<u>(62,772,260)</u>	<u>(66,393,381)</u>	<u>(69,896,514)</u>
Contribution deficiency (excess).....	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (137,717)</u>	<u>\$ (1,362,485)</u>
Covered payroll.....	\$ 246,703,686	\$ 255,955,074	\$ 265,029,190	\$ 275,630,359
Contributions as a percentage of covered payroll.....	23.56%	24.52%	25.05%	25.36%

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, 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

The following changes in assumptions were included in the January 1, 2017 actuarial valuation:

- Cost of living increases were 3.0% of the first \$14,000 of retirement income, as compared to \$13,000 in the prior year.
- The annual rate of both pre-retirement and beneficiary mortality was changed to the RP-2014 Blue Collar Mortality with Scale MP-2017, fully generational table.
- The mortality for retired group 1 and 2 members was changed to the RP-2014 Blue Collar Mortality Table set forward five years for males and 3 years for females, fully generational. Group 4 retired members were changed to the RP-2014 Blue Collar Mortality table set forward three years for males, and six years for females, fully generational.
- The assumed family composition was changed to assume that 80% of all male members and 60% of all female members will be survived by a spouse, as compared to the prior valuation assumption that 80% of all members will be survived by a spouse.
- The amortization method changed from the level percent open group method to a method where payments increase at 3.5% for the unfunded actuarial accrued liability and level amortization for the 2002, 2003 and 2013 ERI.
- The amortization period changed from 17 years to amortization of the unfunded liability over 12 years, the 2002 ERI over 2 years, the 2003 ERI over 3 years, and the 2013 ERI over 11 years.
- The assumed annual increase in administrative expenses was changed to 3.75%, from 4.00%.

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 Retirement Board
Plymouth County Retirement Association
Plymouth, Massachusetts

We have audited the accompanying schedule of employer allocations of the Plymouth County Retirement Association as of and for the year ended December 31, 2017, 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 of pension amounts by employer of the Plymouth County Retirement Association Pension Plan as of and for the year ended December 31, 2017, and the related notes.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes 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 Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified row totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and the specified row totals included in the schedule of pension amounts by employer.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and row totals titled 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 Plymouth County Retirement Association as of and for the year ended December 31, 2017, in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the Plymouth County Retirement Association as of and for the year ended December 31, 2017, and our report thereon, dated October 18, 2018, expressed an unmodified opinion on those financial statements.

Restriction on Use

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



October 18, 2018

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2017

Employer	Employer Allocation Percentage	Share of Net Pension Liability	Contribution In Excess of Annual Appropriation	Net Pension Liability
Plymouth County	4.7064%	\$ 25,307,213	\$ (1,907,823)	\$ 23,399,390
Town of Abington	3.6290%	19,513,320	-	19,513,320
Town of Bridgewater	4.8308%	25,974,816	-	25,974,816
Bridgewater Housing Authority	0.1153%	619,641	-	619,641
Bridgewater/Raynham Regional School	2.3803%	12,798,569	-	12,798,569
Town of Carver	2.9109%	15,652,446	-	15,652,446
Carver/Marion/Wareham Regional Refuse	0.0814%	437,470	-	437,470
Town of Duxbury	4.9831%	26,793,727	-	26,793,727
Duxbury Housing Authority	0.0372%	199,915	-	199,915
Town of East Bridgewater	3.5526%	19,102,197	-	19,102,197
East Bridgewater Housing Authority	0.0599%	321,650	-	321,650
Town of Halifax	1.6531%	8,888,119	-	8,888,119
Town of Hanover	4.4912%	24,148,907	-	24,148,907
Town of Hanson	2.1486%	11,552,942	-	11,552,942
Town of Kingston	3.1035%	16,687,404	-	16,687,404
Kingston Housing Authority	0.0070%	37,747	-	37,747
Town of Lakeville	1.4412%	7,749,171	-	7,749,171
Town of Marion	1.4241%	7,657,010	-	7,657,010
Town of Marshfield	8.1055%	43,582,541	-	43,582,541
Marshfield Housing Authority	0.0499%	268,310	-	268,310
Town of Mattapoisett	1.6139%	8,677,987	-	8,677,987
Town of Middleborough	9.0631%	48,732,595	-	48,732,595
Middleborough Housing Authority	0.1555%	836,225	-	836,225
Town of Norwell	3.5405%	19,037,029	-	19,037,029
Norwell Housing Authority	0.0390%	209,594	-	209,594
Old Rochester Regional School	0.8931%	4,802,058	-	4,802,058
Onset Fire District	0.3631%	1,952,482	-	1,952,482
Town of Pembroke	4.5886%	24,672,623	-	24,672,623
Plymouth County Mosquito Control	0.2982%	1,603,410	-	1,603,410
Town of Plympton	0.7132%	3,834,420	-	3,834,420
Town of Rochester	1.0124%	5,443,207	-	5,443,207
Town of Rockland	5.4863%	29,499,523	-	29,499,523
Town of Scituate	6.6295%	35,785,407	-	35,785,407
Scituate Housing Authority	0.1598%	720,298	-	720,298
Silver Lake Regional School	0.9856%	5,299,427	-	5,299,427
South Shore Regional School	0.5003%	2,690,095	-	2,690,095
Town of Wareham	5.4517%	29,313,050	-	29,313,050
Wareham Fire District	1.0473%	5,631,293	-	5,631,293
Wareham Housing Authority	0.0353%	190,237	-	190,237
Town of West Bridgewater	2.7115%	14,579,742	-	14,579,742
Town of Whitman	2.7491%	14,781,808	-	14,781,808
Whitman/Hanson Regional School	1.6325%	8,777,677	-	8,777,677
Whitman Housing Authority	0.0973%	523,179	-	523,179
Abington Housing Authority	0.0514%	276,376	-	276,376
Pembroke Housing Authority	0.1114%	599,102	-	599,102
Hanson Housing Authority	0.0425%	228,413	-	228,413
Rockland Housing Authority	0.0719%	386,281	-	386,281
Halifax Housing Authority	0.0361%	194,000	-	194,000
Mattapoisett Housing Authority	0.0279%	149,802	-	149,802
Acushnet/Rochester/Marion Health District	0.0191%	102,377	-	102,377
West Bridgewater Housing Authority	0.0156%	84,096	-	84,096
South Shore Tri-Town Development	0.1202%	646,526	-	646,526
Carver Housing Authority	0.0285%	142,275	-	142,275
Plymouth County Retirement Association	0.0000%	-	-	-
Total	100.00%	\$ 537,695,729	\$ (1,907,823)	\$ 535,787,906

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, 2017

	Plymouth County	Town of Abington	Town of Bridgewater
Net Pension Liability			
Beginning net pension liability.....	\$ 28,713,717	\$ 23,110,375	\$ 31,316,202
Ending net pension liability.....	\$ 23,399,390	\$ 19,513,320	\$ 25,974,816
Deferred Outflows of Resources			
Differences between expected and actual experience.....	\$ 1,558,899	\$ 424,773	\$ 565,431
Changes of assumptions.....	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,492,784	-	70,562
Total Deferred Outflows of Resources.....	\$ 4,051,683	\$ 424,773	\$ 635,993
Deferred Inflows of Resources			
Differences between expected and actual experience.....	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments.....	971,939	749,418	997,576
Changes of assumptions.....	601,864	464,071	617,739
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,608,199	209,750	517,391
Total Deferred Inflows of Resources.....	\$ 4,182,002	\$ 1,423,239	\$ 2,132,706
Pension Expense			
Proportionate share of plan pension expense.....	\$ 2,043,306	\$ 2,076,427	\$ 2,764,002
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(1,122,834)	(228,734)	(361,609)
Total Employer Pension Expense.....	\$ 920,474	\$ 1,847,693	\$ 2,402,393
Contributions			
Statutory required contribution.....	\$ 3,268,477	\$ 2,479,907	\$ 3,301,134
Contribution in relation to statutory required contribution.....	(4,613,162)	(2,479,907)	(3,301,134)
Contribution deficiency(excess).....	\$ (1,344,685)	\$ -	\$ -
Contributions as a percentage of covered payroll.....	90.22%	25.57%	25.70%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense			
June 30, 2019.....	\$ 429,884	\$ 159,207	\$ 186,304
June 30, 2020.....	136,720	(85,575)	(139,582)
June 30, 2021.....	(536,500)	(521,601)	(766,026)
June 30, 2022.....	(360,423)	(550,497)	(777,409)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (430,319)	\$ (998,466)	\$ (1,496,713)
Discount Rate Sensitivity			
1% decrease (7.00%).....	\$ 30,351,902	\$ 25,315,237	\$ 33,697,965
Current discount rate (8.00%).....	\$ 23,399,390	\$ 19,513,320	\$ 25,974,816
1% increase (9.00%).....	\$ 17,372,730	\$ 14,489,859	\$ 19,287,940
Covered Payroll.....	\$ 3,622,962	\$ 9,696,930	\$ 12,843,061
See notes to schedule of employer allocations and schedule of pension amounts by employer.			(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 634,737	\$ 15,108,505	\$ 18,595,425	\$ 444,760
Ending net pension liability.....	\$ 619,641	\$ 12,798,569	\$ 15,652,446	\$ 437,470
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 13,487	\$ 278,805	\$ 340,729	\$ 9,523
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	107,761	268,578	568,639	46,740
Total Deferred Outflows of Resources.....	\$ 121,248	\$ 547,383	\$ 929,368	\$ 56,263
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments.....	23,796	491,535	601,139	16,802
Changes of assumptions.....	14,735	304,378	372,252	10,404
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	35,951	101,581	17,823
Total Deferred Inflows of Resources.....	\$ 38,531	\$ 831,864	\$ 1,074,972	\$ 45,029
Pension Expense				
Proportionate share of plan pension expense.....	\$ 26,952	\$ 1,351,895	\$ 1,665,579	\$ 19,161
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	78,991	2,322	90,758	35,413
Total Employer Pension Expense.....	\$ 105,943	\$ 1,354,217	\$ 1,756,337	\$ 54,574
Contributions				
Statutory required contribution.....	\$ 80,272	\$ 1,626,551	\$ 1,989,254	\$ 56,702
Contribution in relation to statutory required contribution.....	(80,272)	(1,626,551)	(1,989,254)	(56,702)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	35.63%	25.22%	28.07%	31.30%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019.....	\$ 45,101	\$ 253,851	\$ 405,219	\$ 11,447
June 30, 2020.....	37,447	93,489	209,270	5,923
June 30, 2021.....	8,559	(275,039)	(313,872)	289
June 30, 2022.....	(8,490)	(357,062)	(446,221)	(6,425)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ 82,717	\$ (284,881)	\$ (145,604)	\$ 11,234
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 803,814	\$ 16,603,994	\$ 20,306,430	\$ 567,562
Current discount rate (8.00%).....	\$ 619,641	\$ 12,798,569	\$ 15,652,446	\$ 437,470
1% increase (9.00%).....	\$ 480,084	\$ 9,503,744	\$ 11,622,933	\$ 324,860
Covered Payroll.....	\$ 225,322	\$ 6,450,426	\$ 7,087,175	\$ 181,185
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 32,703,852	\$ 202,049	\$ 22,324,421	\$ 369,780
Ending net pension liability	\$ 26,793,727	\$ 199,915	\$ 19,102,197	\$ 321,650
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 583,259	\$ 4,351	\$ 415,826	\$ 7,001
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	523,210	22,119	220,015	52,625
Total Deferred Outflows of Resources	\$ 1,106,469	\$ 26,470	\$ 635,841	\$ 59,626
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	1,029,026	7,677	733,629	12,352
Changes of assumptions	637,215	4,753	454,294	7,650
Changes in proportion and differences between employer contributions and proportionate share of contributions	785,019	16,811	106,539	-
Total Deferred Inflows of Resources	\$ 2,451,260	\$ 29,241	\$ 1,294,462	\$ 20,002
Pension Expense				
Proportionate share of plan pension expense	\$ 2,851,129	\$ 8,800	\$ 2,032,648	\$ 34,242
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(280,851)	12,623	(103,536)	19,447
Total Employer Pension Expense	\$ 2,570,278	\$ 21,423	\$ 1,929,109	\$ 53,689
Contributions				
Statutory required contribution	\$ 3,405,229	\$ 25,908	\$ 2,427,677	\$ 40,902
Contribution in relation to statutory required contribution	(3,405,229)	(25,908)	(2,427,677)	(40,902)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	20.31%	58.01%	22.19%	19.65%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 307,147	\$ 1,615	\$ 256,175	\$ 25,196
June 30, 2020	(28,841)	(956)	18,677	21,211
June 30, 2021	(788,889)	(591)	(421,700)	1,392
June 30, 2022	(634,208)	(2,839)	(514,773)	(8,174)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (1,344,791)	\$ (2,771)	\$ (658,621)	\$ 39,624
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 34,760,397	\$ 259,317	\$ 24,781,925	\$ 417,284
Current discount rate (8.00%)	\$ 26,793,727	\$ 199,915	\$ 19,102,197	\$ 321,650
1% increase (9.00%)	\$ 19,896,051	\$ 148,427	\$ 14,184,603	\$ 238,844
Covered Payroll	\$ 16,762,991	\$ 44,683	\$ 10,940,724	\$ 208,122
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability	\$ 10,103,681	\$ 29,044,748	\$ 13,302,778	\$ 19,577,709
Ending net pension liability	\$ 8,888,119	\$ 24,148,907	\$ 11,552,942	\$ 16,667,404
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 193,481	\$ 525,684	\$ 251,489	\$ 363,259
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	248,309	178,503	211,167	97,701
Total Deferred Outflows of Resources	\$ 441,790	\$ 704,187	\$ 462,656	\$ 460,960
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	341,354	927,450	443,695	640,889
Changes of assumptions	211,380	574,317	274,755	396,865
Changes in proportion and differences between employer contributions and proportionate share of contributions	149,199	441,350	224,478	62,943
Total Deferred Inflows of Resources	\$ 701,930	\$ 1,943,117	\$ 942,929	\$ 1,100,697
Pension Expense				
Proportionate share of plan pension expense	\$ 945,780	\$ 2,569,687	\$ 1,229,379	\$ 1,775,680
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(34,246)	(275,229)	(101,584)	(112,980)
Total Employer Pension Expense	\$ 911,534	\$ 2,294,458	\$ 1,127,815	\$ 1,662,700
Contributions				
Statutory required contribution	\$ 1,129,620	\$ 3,069,053	\$ 1,468,264	\$ 2,120,777
Contribution in relation to statutory required contribution	(1,129,620)	(3,069,053)	(1,468,264)	(2,120,777)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	21.68%	20.36%	27.25%	20.96%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 118,332	\$ 230,187	\$ 106,457	\$ 208,185
June 30, 2020	6,640	(72,885)	(39,114)	(1,485)
June 30, 2021	(168,477)	(679,127)	(252,328)	(390,576)
June 30, 2022	(216,635)	(717,105)	(295,285)	(455,781)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (260,140)	\$ (1,238,930)	\$ (480,273)	\$ (639,737)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 11,530,882	\$ 31,329,162	\$ 14,987,979	\$ 21,649,148
Current discount rate (8.00%)	\$ 8,888,119	\$ 24,148,907	\$ 11,552,942	\$ 16,667,404
1% increase (9.00%)	\$ 6,600,011	\$ 17,932,091	\$ 8,578,774	\$ 12,391,474
Covered Payroll	\$ 5,210,403	\$ 15,072,632	\$ 5,389,049	\$ 10,105,048
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability	\$ 15,884	\$ 8,883,767	\$ 8,991,145	\$ 51,194,441
Ending net pension liability	\$ 37,747	\$ 7,749,171	\$ 7,657,010	\$ 43,582,541
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 820	\$ 168,688	\$ 168,682	\$ 948,722
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	18,780	167,348	25,457	579,158
Total Deferred Outflows of Resources	\$ 19,600	\$ 336,036	\$ 192,139	\$ 1,527,880
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	1,447	297,611	294,073	1,673,805
Changes of assumptions	898	184,293	182,103	1,036,491
Changes in proportion and differences between employer contributions and proportionate share of contributions	9,647	98,187	38,889	71,514
Total Deferred Inflows of Resources	\$ 11,992	\$ 580,091	\$ 513,062	\$ 2,781,810
Pension Expense				
Proportionate share of plan pension expense	\$ 4,050	\$ 824,582	\$ 814,768	\$ 4,637,712
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	2,907	(34,270)	(62,982)	(113,988)
Total Employer Pension Expense	\$ 6,957	\$ 790,312	\$ 751,786	\$ 4,523,724
Contributions				
Statutory required contribution	\$ 4,889	\$ 984,828	\$ 973,158	\$ 5,538,881
Contribution in relation to statutory required contribution	(4,889)	(984,828)	(973,158)	(5,538,881)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	N/A	24.38%	19.97%	24.06%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 1,923	\$ 103,042	\$ 84,817	\$ 728,386
June 30, 2020	1,442	5,869	(11,385)	182,217
June 30, 2021	2,983	(158,048)	(184,585)	(969,054)
June 30, 2022	1,260	(194,908)	(209,770)	(1,195,478)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 7,608	\$ (244,055)	\$ (320,923)	\$ (1,253,930)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 48,928	\$ 10,053,262	\$ 9,933,739	\$ 56,540,952
Current discount rate (8.00%)	\$ 37,747	\$ 7,749,171	\$ 7,657,010	\$ 43,582,541
1% increase (9.00%)	\$ 28,005	\$ 5,754,266	\$ 5,685,843	\$ 32,362,739
Covered Payroll	\$ -	\$ 4,038,389	\$ 4,873,684	\$ 23,034,352
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Marshfield Housing Authority	Town of Mattapoisett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 268,397	\$ 9,864,140	\$ 57,384,233	\$ 942,250
Ending net pension liability	\$ 268,310	\$ 8,677,987	\$ 48,732,595	\$ 836,225
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 5,840	\$ 188,908	\$ 1,060,831	\$ 18,203
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	31,657	242,884	56,339	28,795
Total Deferred Outflows of Resources	\$ 37,497	\$ 431,792	\$ 1,117,170	\$ 46,998
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	10,305	333,284	1,871,599	32,114
Changes of assumptions	6,381	206,383	1,158,972	19,885
Changes in proportion and differences between employer contributions and proportionate share of contributions	13,680	328,315	518,682	34,487
Total Deferred Inflows of Resources	\$ 30,366	\$ 667,982	\$ 3,549,253	\$ 86,486
Pension Expense				
Proportionate share of plan pension expense	\$ 28,542	\$ 923,381	\$ 5,185,640	\$ 36,748
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	4,458	(110,010)	(558,728)	44,347
Total Employer Pension Expense	\$ 33,040	\$ 813,371	\$ 4,626,912	\$ 81,095
Contributions				
Statutory required contribution	\$ 34,078	\$ 1,102,860	\$ 6,193,391	\$ 108,316
Contribution in relation to statutory required contribution	(34,078)	(1,102,860)	(6,193,391)	(108,316)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	15.97%	20.85%	26.48%	27.84%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 7,088	\$ 38,951	\$ 391,177	\$ 3,908
June 30, 2020	3,741	(70,333)	(221,168)	(6,688)
June 30, 2021	(28)	(193,348)	(1,254,035)	(17,014)
June 30, 2022	(3,688)	(211,459)	(1,348,055)	(19,714)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ 7,131	\$ (436,190)	\$ (2,432,083)	\$ (39,488)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 348,086	\$ 11,258,284	\$ 63,222,391	\$ 1,084,799
Current discount rate (8.00%)	\$ 268,310	\$ 8,677,987	\$ 48,732,595	\$ 836,225
1% increase (9.00%)	\$ 199,237	\$ 6,443,983	\$ 36,187,041	\$ 620,914
Covered Payroll	\$ 213,339	\$ 5,289,801	\$ 23,392,363	\$ 389,118
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability	\$ 22,255,166	\$ 267,824	\$ 5,981,388	\$ 2,068,134
Ending net pension liability	\$ 19,037,029	\$ 209,594	\$ 4,802,058	\$ 1,952,482
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 414,408	\$ 4,582	\$ 104,534	\$ 42,503
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	326,700	13,670	148,872	153,994
Total Deferred Outflows of Resources	\$ 741,112	\$ 18,232	\$ 253,406	\$ 196,497
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	731,127	8,049	184,427	74,987
Changes of assumptions	452,743	4,985	114,205	46,435
Changes in proportion and differences between employer contributions and proportionate share of contributions	60,885	27,497	222,599	114,805
Total Deferred Inflows of Resources	\$ 1,244,755	\$ 40,531	\$ 521,231	\$ 236,227
Pension Expense				
Proportionate share of plan pension expense	\$ 2,026,732	\$ 22,317	\$ 510,980	\$ 207,730
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(36,329)	(8,374)	(58,960)	(3,908)
Total Employer Pension Expense	\$ 1,989,403	\$ 15,943	\$ 452,020	\$ 203,822
Contributions				
Statutory required contribution	\$ 2,419,382	\$ 26,641	\$ 610,322	\$ 248,134
Contribution in relation to statutory required contribution	(2,419,382)	(26,641)	(610,322)	(248,134)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	23.47%	18.20%	20.73%	32.81%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 325,547	\$ 48	\$ 53,258	\$ 20,989
June 30, 2020	86,540	(2,584)	(7,005)	(3,582)
June 30, 2021	(402,153)	(10,657)	(154,884)	(21,781)
June 30, 2022	(513,577)	(9,106)	(159,194)	(35,376)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (503,643)	\$ (22,299)	\$ (267,825)	\$ (39,730)
Discount Rate Sensitivity				
1% decrease (7.00%)	24,697,349	\$ 271,899	\$ 6,229,905	\$ 2,533,061
Current discount rate (8.00%)	19,037,029	\$ 209,594	\$ 4,802,058	\$ 1,952,482
1% increase (9.00%)	14,136,194	\$ 155,629	\$ 3,565,854	\$ 1,449,866
Covered Payroll	\$ 10,307,611	\$ 146,381	\$ 2,944,787	\$ 756,207
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability	\$ 28,683,221	\$ 1,923,905	\$ 4,143,259	\$ 6,686,652
Ending net pension liability	\$ 24,672,623	\$ 1,603,410	\$ 3,834,420	\$ 5,443,207
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 537,083	\$ 34,904	\$ 83,471	\$ 118,480
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	823,659	28,682	526,383	344,138
Total Deferred Outflows of Resources	\$ 1,360,742	\$ 63,586	\$ 609,854	\$ 462,628
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	947,563	61,579	147,264	209,050
Changes of assumptions	586,770	38,132	91,193	129,453
Changes in proportion and differences between employer contributions and proportionate share of contributions	55,159	26,382	-	175,694
Total Deferred Inflows of Resources	\$ 1,589,492	\$ 126,093	\$ 238,457	\$ 514,197
Pension Expense				
Proportionate share of plan pension expense	\$ 2,626,454	\$ 170,631	\$ 408,005	\$ 578,205
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	126,434	(10,220)	191,938	36,609
Total Employer Pension Expense	\$ 2,751,888	\$ 160,411	\$ 599,944	\$ 615,814
Contributions				
Statutory required contribution	\$ 3,135,629	\$ 203,766	\$ 496,716	\$ 691,796
Contribution in relation to statutory required contribution	(3,135,629)	(203,766)	(496,716)	(691,796)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.15%	30.28%	24.71%	20.35%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 588,294	\$ 23,080	\$ 236,065	\$ 158,486
June 30, 2020	276,884	2,966	188,339	90,446
June 30, 2021	(439,236)	(41,296)	23,031	(127,589)
June 30, 2022	(652,692)	(47,247)	(78,068)	(172,921)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (228,750)	\$ (62,507)	\$ 371,397	\$ (51,569)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 32,008,559	\$ 2,080,130	\$ 4,974,558	\$ 7,061,678
Current discount rate (8.00%)	\$ 24,672,623	\$ 1,603,410	\$ 3,834,420	\$ 5,443,207
1% increase (9.00%)	\$ 18,320,962	\$ 1,190,619	\$ 2,847,323	\$ 4,041,942
Covered Payroll	\$ 12,480,592	\$ 672,741	\$ 2,010,088	\$ 3,399,750
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability	\$ 34,338,665	\$ 41,548,935	\$ 953,057	\$ 6,372,144
Ending net pension liability	\$ 29,499,523	\$ 35,785,407	\$ 720,298	\$ 5,299,427
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 642,157	\$ 778,901	\$ 15,681	\$ 115,359
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	295,467	551,337	120,004	-
Total Deferred Outflows of Resources	\$ 937,624	\$ 1,330,238	\$ 135,685	\$ 115,359
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	1,132,941	1,374,353	27,664	203,526
Changes of assumptions	701,565	676,862	17,131	126,031
Changes in proportion and differences between employer contributions and proportionate share of contributions	545,062	261,778	68,024	596,880
Total Deferred Inflows of Resources	\$ 2,379,568	\$ 2,312,993	\$ 112,819	\$ 926,437
Pension Expense				
Proportionate share of plan pension expense	\$ 3,139,109	\$ 3,978,209	\$ 4,789	\$ 563,972
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(336,534)	(101,232)	93,280	(266,389)
Total Employer Pension Expense	\$ 2,802,575	\$ 3,876,977	\$ 48,069	\$ 297,583
Contributions				
Statutory required contribution	\$ 3,749,072	\$ 4,530,275	\$ 93,333	\$ 673,517
Contribution in relation to statutory required contribution	(3,749,072)	(4,530,275)	(111,133)	(673,517)
Contribution deficiency/(excess)	\$ -	\$ -	\$ (17,800)	\$ -
Contributions as a percentage of covered payroll	25.27%	24.72%	31.97%	18.51%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 216,793	\$ 590,068	\$ 39,672	\$ (175,582)
June 30, 2020	(154,052)	141,187	30,856	(242,678)
June 30, 2021	(720,780)	(757,834)	(19,280)	(235,582)
June 30, 2022	(783,925)	(956,086)	(28,382)	(157,236)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (1,441,964)	\$ (982,665)	\$ 22,866	\$ (511,078)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 38,270,617	\$ 46,425,481	\$ 934,521	\$ 6,875,053
Current discount rate (8.00%)	\$ 29,499,523	\$ 35,785,407	\$ 720,298	\$ 5,299,427
1% increase (9.00%)	\$ 21,905,220	\$ 26,572,877	\$ 534,898	\$ 3,935,122
Covered Payroll	\$ 14,835,033	\$ 18,325,307	\$ 291,965	\$ 3,638,343
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 3,242,937	\$ 35,073,155	\$ 6,747,647	\$ 251,608
Ending net pension liability	\$ 2,690,095	\$ 29,313,050	\$ 5,631,293	\$ 190,237
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 58,550	\$ 638,000	\$ 122,583	\$ 4,141
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	41,373	467,440	205,824	2,515
Total Deferred Outflows of Resources	\$ 99,923	\$ 1,105,545	\$ 388,407	\$ 6,656
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	103,314	1,125,783	216,272	7,305
Changes of assumptions	63,977	697,132	133,925	4,523
Changes in proportion and differences between employer contributions and proportionate share of contributions	52,444	388,920	93,921	21,380
Total Deferred Inflows of Resources	\$ 219,735	\$ 2,211,835	\$ 444,118	\$ 33,208
Pension Expense				
Proportionate share of plan pension expense	\$ 286,247	\$ 3,119,229	\$ 596,250	\$ 8,380
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(22,842)	(171,727)	31,004	3,529
Total Employer Pension Expense	\$ 263,405	\$ 2,947,502	\$ 630,254	\$ 11,909
Contributions				
Statutory required contribution	\$ 341,872	\$ 3,725,405	\$ 715,653	\$ 24,616
Contribution in relation to statutory required contribution	(341,872)	(3,725,405)	(715,653)	(24,616)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	18.75%	25.18%	25.12%	29.12%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 33,886	\$ 431,332	\$ 147,429	\$ (3,541)
June 30, 2020	149	63,846	78,995	(5,920)
June 30, 2021	(73,355)	(745,745)	(114,952)	(9,599)
June 30, 2022	(80,483)	(855,722)	(165,184)	(7,492)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (119,803)	\$ (1,106,290)	\$ (55,711)	\$ (26,552)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 3,489,949	\$ 38,028,774	\$ 7,305,618	\$ 246,736
Current discount rate (8.00%)	\$ 2,690,095	\$ 29,313,050	\$ 5,631,293	\$ 190,237
1% increase (9.00%)	\$ 1,997,567	\$ 21,766,795	\$ 4,181,567	\$ 141,226
Covered Payroll	\$ 1,823,124	\$ 14,793,194	\$ 2,849,094	\$ 84,543
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson/ Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 17,710,352	\$ 17,050,830	\$ 10,364,164	\$ 709,074
Ending net pension liability	\$ 14,579,742	\$ 14,781,808	\$ 8,777,677	\$ 523,179
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 317,378	\$ 321,778	\$ 191,076	\$ 11,388
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	119,400	250,398	-	2,864
Total Deferred Outflows of Resources	\$ 436,778	\$ 572,172	\$ 191,076	\$ 14,252
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	559,942	567,702	337,112	20,091
Changes of assumptions	348,740	351,544	208,754	12,441
Changes in proportion and differences between employer contributions and proportionate share of contributions	406,348	287,334	362,304	74,855
Total Deferred Inflows of Resources	\$ 1,313,028	\$ 1,206,580	\$ 908,170	\$ 107,387
Pension Expense				
Proportionate share of plan pension expense	\$ 1,561,416	\$ 1,572,946	\$ 904,017	\$ 23,022
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(217,280)	(134,198)	(215,944)	2,725
Total Employer Pension Expense	\$ 1,334,136	\$ 1,438,748	\$ 718,073	\$ 25,747
Contributions				
Statutory required contribution	\$ 1,852,901	\$ 1,878,591	\$ 1,115,553	\$ 67,761
Contribution in relation to statutory required contribution	(1,852,901)	(1,878,591)	(1,115,553)	(67,761)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	24.13%	27.13%	22.55%	21.38%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 97,854	\$ 133,094	\$ (43,243)	\$ (15,723)
June 30, 2020	(84,504)	(51,190)	(153,031)	(22,266)
June 30, 2021	(442,557)	(338,667)	(275,735)	(33,170)
June 30, 2022	(447,043)	(380,245)	(245,085)	(21,976)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (876,250)	\$ (634,408)	\$ (717,094)	\$ (93,135)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 18,914,784	\$ 19,176,897	\$ 11,387,593	\$ 678,698
Current discount rate (8.00%)	\$ 14,579,742	\$ 14,781,808	\$ 8,777,677	\$ 523,179
1% increase (9.00%)	\$ 10,826,387	\$ 10,976,414	\$ 6,517,995	\$ 388,471
Covered Payroll	\$ 7,678,138	\$ 6,925,668	\$ 4,946,883	\$ 316,808
See notes to schedule of employer allocations and schedule of pension amounts by employer				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability	\$ 341,830	\$ 822,808	\$ 254,149	\$ 528,630
Ending net pension liability	\$ 276,376	\$ 599,102	\$ 228,413	\$ 366,281
Deferred Outflows of Resources				
Differences between expected and actual experience	\$ 6,016	\$ 13,041	\$ 4,973	\$ 8,409
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	5,685	-	17,501	27,859
Total Deferred Outflows of Resources	\$ 11,701	\$ 13,041	\$ 22,474	\$ 36,268
Deferred Inflows of Resources				
Differences between expected and actual experience	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments	10,615	23,009	8,772	14,835
Changes of assumptions	6,573	14,249	5,433	9,188
Changes in proportion and differences between employer contributions and proportionate share of contributions	11,539	85,941	-	47,992
Total Deferred Inflows of Resources	\$ 28,727	\$ 123,199	\$ 14,205	\$ 72,013
Pension Expense				
Proportionate share of plan pension expense	\$ 29,411	\$ 26,363	\$ 9,968	\$ 16,947
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	(4,126)	1,538	20,280	15,717
Total Employer Pension Expense	\$ 25,285	\$ 27,891	\$ 30,248	\$ 32,664
Contributions				
Statutory required contribution	\$ 35,155	\$ 77,596	\$ 29,608	\$ 50,064
Contribution in relation to statutory required contribution	(35,155)	(77,596)	(29,608)	(50,064)
Contribution deficiency/(excess)	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	22.77%	25.38%	15.53%	28.96%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019	\$ 2,180	\$ (18,936)	\$ 8,969	\$ 2,347
June 30, 2020	(1,276)	(26,420)	8,142	(2,485)
June 30, 2021	(8,965)	(38,757)	(1,748)	(18,973)
June 30, 2022	(8,965)	(28,036)	(5,124)	(16,634)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense	\$ (17,026)	\$ (110,158)	\$ 8,269	\$ (35,745)
Discount Rate Sensitivity				
1% decrease (7.00%)	\$ 358,571	\$ 777,253	\$ 296,363	\$ 501,160
Current discount rate (8.00%)	\$ 276,376	\$ 599,102	\$ 228,413	\$ 366,281
1% increase (9.00%)	\$ 205,238	\$ 444,882	\$ 169,631	\$ 286,853
Covered Payroll	\$ 154,399	\$ 305,718	\$ 190,637	\$ 172,960
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	Halifax Housing Authority	Martapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 446,030	\$ 165,832	\$ 127,710	\$ 114,567
Ending net pension liability.....	\$ 194,000	\$ 149,802	\$ 102,377	\$ 84,096
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 4,223	\$ 3,260	\$ 2,220	\$ 1,830
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	66,256	7,095	-	5,068
Total Deferred Outflows of Resources.....	\$ 70,479	\$ 10,355	\$ 2,220	\$ 6,898
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments.....	7,449	5,752	3,931	3,228
Changes of assumptions.....	4,613	3,562	2,435	1,999
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	150,940	8,963	20,689	10,015
Total Deferred Inflows of Resources.....	\$ 163,002	\$ 18,297	\$ 27,055	\$ 15,242
Pension Expense				
Proportionate share of plan pension expense.....	\$ 8,551	\$ 15,972	\$ 4,528	\$ 8,982
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(19,564)	(2,067)	(2,819)	(2,066)
Total Employer Pension Expense.....	\$ (11,013)	\$ 13,885	\$ 1,709	\$ 6,916
Contributions				
Statutory required contribution.....	\$ 25,139	\$ 19,423	\$ 13,280	\$ 10,876
Contribution in relation to statutory required contribution.....	(25,139)	(19,423)	(13,280)	(10,876)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	106.72%	19.85%	17.95%	20.06%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019.....	\$ (15,965)	\$ (146)	\$ (7,058)	\$ 248
June 30, 2020.....	(18,421)	(2,019)	(8,339)	(803)
June 30, 2021.....	(35,188)	(2,485)	(6,018)	(4,224)
June 30, 2022.....	(22,919)	(3,292)	(3,411)	(3,565)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (92,523)	\$ (7,942)	\$ (24,826)	\$ (8,344)
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 251,629	\$ 194,313	\$ 132,804	\$ 109,039
Current discount rate (8.00%).....	\$ 194,000	\$ 149,802	\$ 102,377	\$ 84,096
1% increase (9.00%).....	\$ 144,026	\$ 111,220	\$ 76,014	\$ 62,411
Covered Payroll.....	\$ 23,557	\$ 97,870	\$ 73,971	\$ 54,230
See notes to schedule of employer allocations and schedule of pension amounts by employer.				

(continued)

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2017

	South Shore Tri-Town Development	Carver Housing Authority	Plymouth County Retirement Association	Totals
Net Pension Liability				
Beginning net pension liability.....	\$ 1,042,010	\$ 172,185	\$ -	\$ 633,505,708
Ending net pension liability.....	\$ 646,526	\$ 142,275	\$ -	\$ 535,787,906
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 14,075	\$ 3,095	\$ -	\$ 12,712,783
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	179,712	-	-	11,071,037
Total Deferred Outflows of Resources.....	\$ 193,787	\$ 3,095	\$ -	\$ 23,783,820
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Net difference between projected and actual investment earnings on pension plan investments.....	24,830	5,462	-	20,850,450
Changes of assumptions.....	15,377	3,383	-	12,613,429
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	183,624	20,596	-	11,071,037
Total Deferred Inflows of Resources.....	\$ 223,831	\$ 29,441	\$ -	\$ 44,334,916
Pension Expense				
Proportionate share of plan pension expense.....	\$ 71,779	\$ 15,187	\$ 139,663	\$ 56,536,073
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,651	(9,185)	-	(4,325,339)
Total Employer Pension Expense.....	\$ 74,430	\$ 6,001	\$ 139,663	\$ 52,212,734
Contributions				
Statutory required contribution.....	\$ 83,720	\$ 18,444	\$ 139,663	\$ 68,534,029
Contribution in relation to statutory required contribution.....	(83,720)	(18,444)	(139,663)	(59,896,514)
Contribution deficiency(excess).....	\$ -	\$ -	\$ -	\$ (1,362,485)
Contributions as a percentage of covered payroll.....	31.15%	N/A	N/A	24.86%
Deferred (Inflows)/Outflows Recognized in Future Pension Expense				
June 30, 2019.....	\$ 29,686	\$ (8,502)	\$ -	\$ 6,957,963
June 30, 2020.....	21,598	(8,281)	-	235,738
June 30, 2021.....	(40,801)	(7,248)	-	(13,080,826)
June 30, 2022.....	(40,526)	(4,315)	-	(14,663,871)
Total Deferred (Inflows)/Outflows Recognized in Future Pension Expense.....	\$ (30,044)	\$ (26,346)	\$ -	\$ (20,551,096)
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 838,762	\$ 184,528	\$ -	\$ 695,089,721
Current discount rate (8.00%).....	\$ 646,526	\$ 142,275	\$ -	\$ 535,787,906
1% increase (9.00%).....	\$ 480,088	\$ 105,619	\$ -	\$ 397,853,354
Covered Payroll.....	\$ 268,731	\$ -	\$ -	\$ 275,630,359
See notes to schedule of employer allocations and schedule of pension amounts by employer.				(concluded)

NOTE I – 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 Association's money-weighted rate of return of 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 unit's based on their proportionate share of the total pension liability. The excess contributions net of investment income are 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.

The Plymouth County Hospital was operated by Plymouth County from the early 1900s to 1992, when it was closed and all employees were terminated. The remaining retirement allowances due from the Plymouth County Retirement Association to the former employees of the Plymouth County Hospital were actuarially determined and are included with the County's liability. Plymouth County continues to pay for the retirement obligations related to previously retired Hospital employees.

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 II – 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.



COMMONWEALTH OF MASSACHUSETTS

Public Employee Retirement Administration Commission

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