

PLYMOUTH COUNTY RETIREMENT ASSOCIATION

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2016

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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 (PCRA) as of and for the year ended December 31, 2016, and the related notes to the financial statements, which collectively comprise the Plymouth County Retirement Associations' 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, 2016 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 26, 2017, 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 26, 2017

Management's Discussion and Analysis

As management of the Plymouth County Retirement Association, we offer readers of these financial statements this narrative overview and analysis of the financial activities for the year ended December 31, 2016. 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 \$886.6 million (net position).
- The Association's net position increased by \$54.0 million for the year ended December 31, 2016.
- Total investment income was \$63.8 million; investment expenses were \$6.1 million; and net investment income was \$57.7 million.
- Total contributions were \$99.1 million including \$72.0 from employers and \$27.1 from members.
- Retirement benefits, refunds and transfers amounted to \$100.8 million.
- Administrative expenses were \$2.0 million.
- The Total Pension Liability is \$1.5 billion as of December 31, 2016 while the Net Pension Liability is \$633.5 million.
- The Plan fiduciary net position as a percentage of the total pension liability is 58.32%.

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 \$886.6 million at the close of 2016.

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 \$877.9 million, cash of \$3.1 million, and accounts receivable of \$9.4 million.

In 2016 the Association's contributions were \$99.1 million and net investment income was \$57.7 million while retirement benefit payments, refunds, transfers and administration expenses were \$102.8 million which resulted in a current increase of \$54.0 million.

The current contributions supported the current expenses and therefore net investment income less administration expense was the reason for the increase in net position. The annual money weighted rate of return was 7.40% and 0.25% in 2016 and 2015 respectively. Fluctuations in the Association's annual investment returns are expected.

The following tables present summarized financial information for the year.

	<u>2016</u>
Statement of Fiduciary Net Position	
Assets:	
Cash.....	\$ 3,126,640
Investments.....	877,917,400
Receivables.....	8,251,710
Other assets.....	<u>1,189,116</u>
Total assets.....	<u>890,484,866</u>
Liabilities:	
Accounts payable.....	<u>3,900,129</u>
Net Position Restricted for Pension Benefits.....	<u>\$ 886,584,737</u>

	<u>2016</u>
Statement of Changes in Fiduciary Net Position	
Additions:	
Contributions:	
Member contributions.....	\$ 25,501,976
Employer contributions.....	66,393,381
Other contributions.....	<u>7,186,747</u>
Total contributions.....	<u>99,082,104</u>
Net investment income (loss):	
Total investment income (loss).....	63,760,222
Less, investment expenses.....	<u>(6,123,852)</u>
Net investment income (loss).....	<u>57,636,370</u>
Total additions.....	<u>156,718,474</u>
Deductions:	
Administration.....	1,985,199
Retirement benefits, refunds and transfers.....	<u>100,786,030</u>
Total deductions.....	<u>102,771,229</u>
Net increase (decrease) in fiduciary net position.....	53,947,245
Fiduciary net position at beginning of year.....	<u>832,637,492</u>
Fiduciary net position at end of year.....	<u>\$ <u>886,584,737</u></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, 10 Cordage Circle, Suite 234, Plymouth, MA 02360.

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2016

Assets

Cash.....	\$ 3,126,640
Investments:	
Pooled investments.....	681,089,574
Pooled real estate funds.....	111,742,431
Venture capital funds.....	25,530,548
Hedge funds.....	26,634,364
Bank loan.....	<u>32,920,483</u>
Total investments.....	<u>877,917,400</u>
Prepaid expenses.....	31,675
Interest due and accrued.....	1,157,441
Receivables.....	<u>8,251,710</u>
Total assets.....	<u>890,484,866</u>

Liabilities

Accounts payable.....	<u>3,900,129</u>
Net Position Restricted for Pensions.....	\$ <u>886,584,737</u>

See notes to financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

FOR THE YEAR ENDED DECEMBER 31, 2016

Additions:

Contributions:

Member contributions.....	\$ 25,501,976
Member contributions - transfers from other systems.....	1,625,574
Retirement benefits - 3(8)c contributions from other systems.....	4,880,225
Retirement benefits - worker's compensation settlements.....	49,784
Retirement benefits - state COLA reimbursements.....	631,164
Employer contributions.....	<u>66,393,381</u>

Total contributions..... 99,082,104

Net investment income (loss):

Investment income.....	63,760,222
Less, investment expenses.....	<u>(6,123,852)</u>
Net investment income (loss).....	<u>57,636,370</u>

Total additions..... 156,718,474

Deductions:

Administration.....	1,985,199
Retirement benefits - transfers to other systems.....	2,265,031
Retirement benefits - 3(8)c payments to other systems.....	3,691,553
Retirement benefits and refunds.....	<u>94,829,446</u>

Total deductions..... 102,771,229

Net increase (decrease) in fiduciary net position..... 53,947,245

Fiduciary net position at beginning of year..... 832,637,492

Fiduciary net position at end of year..... \$ 886,584,737

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 which 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 or age 55.

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, which were previously appropriated from the governmental entities whose employees are members of the Association, are now 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 Plymouth County Retirement 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.

PCRA 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 do 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 PCRA 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 PCRA 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 Sciara
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, 2016, the carrying amount of the Association's deposits totaled \$3.1 million and the bank balance of \$4.9 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.....	\$ 134,004,160	\$ <u>4,348,499</u>	\$ <u>34,616,825</u>	\$ <u>55,126,789</u>	\$ <u>39,912,047</u>
<u>Other Investments:</u>					
Domestic Equities.....	321,823,851				
International Equities.....	225,261,563				
Real Estate Funds.....	111,742,431				
Venture Capital Funds.....	25,530,548				
Hedge Funds.....	26,634,364				
Bank Loan.....	<u>32,920,483</u>				
Total Investments.....	\$ <u>877,917,400</u>				

The Administration's annual money-weighted rate of return on pension plan investments was 7.4%. 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 Value 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, 2016:

Investment Type	December 31, 2016	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.....	\$ 134,004,160	\$ -	\$ 134,004,160	\$ -
<u>Other Investments</u>				
Domestic Equities.....	321,823,851	321,823,851	-	-
International Equities.....	225,261,563	225,261,563	-	-
Real Estate Funds.....	111,742,431	-	-	111,742,431
Venture Capital Funds.....	25,530,548	-	-	25,530,548
Hedge Funds.....	26,634,364	-	-	26,634,364
Bank Loan.....	32,920,483	-	32,920,483	-
Total Investments by fair value level.....	\$ 877,917,400	\$ 547,085,414	\$ 166,924,643	\$ 163,907,343

NOTE 5 – MEMBERSHIP

The following table represents the Association’s membership at January 1, 2017:

Retirees and beneficiaries currently receiving benefits.....	3,968
Inactive members.....	1,808
Active members.....	<u>5,815</u>
Total.....	<u>11,591</u>

NOTE 6 – ACTUARIAL VALUATION

Components of the net pension liability as of December 31, 2016 were as follows:

Total pension liability.....	\$ 1,520,090,445
The pension plan's fiduciary net position.....	<u>886,584,737</u>
The net pension liability.....	\$ <u>633,505,708</u>
The pension plan's fiduciary net position as a percentage of the total pension liability.....	58.32%

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, 2016:

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%
		<u>100.00%</u>

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, 2016.....	\$ 792,114,439	\$ 633,505,708	\$ 498,613,279

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. Three payments of \$220,247 were paid for FY2015, FY2016 and FY2017 and received before December 31, 2016. The seven remaining payments totaling \$1,541,729, 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, 2016.

NOTE 9 – IMPLEMENTATION OF GASB PRONOUNCEMENTS

The following GASB pronouncements will be implemented in the future:

- The GASB issued Statement #72, *Fair Value Measurement and Application*. Notes to the basic financial statements were changed to provide additional disclosures on fair market value.
- The GASB issued Statement #73, *Accounting and Financial Reporting for Pensions and Related Assets that are not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. This pronouncement did not impact the basic financial statements.
- The GASB issued Statement #76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. This pronouncement did not impact the basic financial statements.
- The GASB issued Statement #79, *Certain External Investment Pools and Pool Participants*. This pronouncement did not impact the basic financial statements.

The following GASB pronouncements will be implemented in the future:

- The GASB issued Statement #78, *Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans*, which is required to be implemented in 2017.
- The GASB issued Statement #82, *Pension Issues – an amendment of GASB Statements #67, #68, and #73*, which is required to be implemented in 2018.

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

NOTE 10 – SUBSEQUENT EVENTS

Management has evaluated subsequent events through October 26, 2017, 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**

	2014	2015	2016
Total pension liability:			
Service cost.....	\$ 30,880,169	\$ 32,038,175	\$ 33,239,607
Interest.....	111,727,069	115,962,263	116,054,394
Changes in benefit terms.....	-	-	6,700,296
Differences between expected and actual experience.....	-	-	21,421,023
Changes in assumptions.....	-	-	(23,402,726)
Benefit payments, including refunds of employee contributions.....	(90,825,319)	(98,626,669)	(100,786,029)
Net change in total pension liability.....	51,781,919	49,373,769	53,226,565
Total pension liability, beginning.....	1,365,708,192	1,417,490,111	1,466,863,880
Total pension liability, ending (a).....	<u>\$ 1,417,490,111</u>	<u>\$ 1,466,863,880</u>	<u>\$ 1,520,090,445</u>
Plan fiduciary net position:			
Member contributions.....	\$ 27,197,112	\$ 29,000,584	27,127,550
Employer contributions.....	56,266,944	67,162,327	71,954,554
Net investment income (loss).....	33,802,846	(1,298,679)	57,636,370
Retirement benefits and refunds.....	(91,939,450)	(94,903,555)	(100,786,030)
Administration.....	(1,759,330)	(1,905,154)	(1,985,199)
Net increase (decrease) in fiduciary net position.....	23,568,122	(1,944,477)	53,947,245
Fiduciary net position at beginning of year.....	811,013,847	834,581,969	832,637,492
Fiduciary net position at end of year (b).....	<u>\$ 834,581,969</u>	<u>\$ 832,637,492</u>	<u>\$ 886,584,737</u>
Net pension liability - ending (a) - (b).....	<u>\$ 582,908,142</u>	<u>\$ 634,226,388</u>	<u>\$ 633,505,708</u>
Plan fiduciary net position as a percentage of the total pension liability.....	58.88%	56.76%	58.32%
Covered-employee payroll.....	\$ 246,703,686	255,955,074	265,029,190
Net pension liability as a percentage of covered-employee payroll.....	236.28%	247.79%	239.03%

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

	<u>2014</u>		<u>2015</u>		<u>2016</u>
Actuarially determined contribution.....	\$ 58,130,647	\$	62,772,260	\$	66,255,664
Contributions in relation to the actuarially determined contribution.....	<u>(58,130,647)</u>		<u>(62,772,260)</u>		<u>(66,393,381)</u>
Contribution deficiency (excess).....	<u>\$ -</u>	\$	<u>-</u>	\$	<u>(137,717)</u>
Covered-employee payroll.....	\$ 246,703,686	\$	255,955,074	\$	265,029,190
Contributions as a percentage of covered- employee payroll.....	23.56%		24.52%		25.05%

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 RETURN

<u>Year</u>	<u>Annual money-weighted rate of return, net of investment expense</u>
2016.....	7.40%
2015.....	0.25%
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.

The annual money-weighted rate of return has been calculated by the Association's investment advisors.

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 Associations total pension liability, changes in the Associations 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. In addition, an employer may contribute more than the amount required.

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-2016, 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 (PCRA) as of and for the year ended December 31, 2016, 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 PCRA Pension Plan as of and for the year ended December 31, 2016, 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, 2016, 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, 2016, and our report thereon, dated October 26, 2017, 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.

Powers & Sullivan, LLC

October 26, 2017

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2016

Employer	Employer Allocation Percentage	Share of Net Pension Liability
Plymouth County.....	4.0723%	\$ 25,797,995
Plymouth County Hospital.....	0.4603%	2,915,722
Town of Abington.....	3.6480%	23,110,375
Town of Bridgewater.....	4.9433%	31,316,202
Bridgewater Housing Authority.....	0.1002%	634,737
Bridgewater/Raynham Regional School.....	2.3849%	15,108,505
Town of Carver.....	2.9353%	18,595,425
Carver/Marion/Wareham Regional Refuse.....	0.0702%	444,760
Town of Duxbury.....	5.1624%	32,703,852
Duxbury Housing Authority.....	0.0319%	202,049
Town of East Bridgewater.....	3.5239%	22,324,421
East Bridgewater Housing Authority.....	0.0584%	369,786
Town of Halifax.....	1.5949%	10,103,681
Town of Hanover.....	4.5848%	29,044,748
Town of Hanson.....	2.0999%	13,302,778
Town of Kingston.....	3.0904%	19,577,709
Kingston Housing Authority.....	0.0025%	15,884
Town of Lakeville.....	1.4023%	8,883,767
Town of Marion.....	1.4193%	8,991,145
Town of Marshfield.....	8.0811%	51,194,441
Marshfield Housing Authority.....	0.0425%	269,397
Town of Mattapoisett.....	1.5571%	9,864,146
Town of Middleborough.....	9.0582%	57,384,233
Middleborough Housing Authority.....	0.1487%	942,256
Town of Norwell.....	3.5130%	22,255,166
Norwell Housing Authority.....	0.0454%	287,824
Old Rochester Regional School.....	0.9442%	5,981,388
Onset Fire District.....	0.3265%	2,068,134
Town of Pembroke.....	4.5277%	28,683,221
Plymouth County Mosquito Control.....	0.3037%	1,923,905
Town of Plympton.....	0.6540%	4,143,259
Town of Rochester.....	1.0555%	6,686,652
Town of Rockland.....	5.4204%	34,338,665
Town of Scituate.....	6.5586%	41,548,935
Scituate Housing Authority.....	0.1504%	953,057
Silver Lake Regional School.....	1.0059%	6,372,144
South Shore Regional School.....	0.5119%	3,242,937
Town of Wareham.....	5.5364%	35,073,155
Wareham Fire District.....	1.0651%	6,747,647
Wareham Housing Authority.....	0.0397%	251,608
Town of West Bridgewater.....	2.7956%	17,710,352
Town of Whitman.....	2.6915%	17,050,836
Whitman/Hanson Regional School.....	1.6360%	10,364,184
Whitman Housing Authority.....	0.1119%	709,074
Abington Housing Authority.....	0.0540%	341,830
Pembroke Housing Authority.....	0.1299%	822,808
Hanson Housing Authority.....	0.0401%	254,149
Rockland Housing Authority.....	0.0834%	528,630
Halifax Housing Authority.....	0.0704%	446,030
Mattapoisett Housing Authority.....	0.0262%	165,832
Acushnet/Rochester/Marion Health District.....	0.0202%	127,710
West Bridgewater Housing Authority.....	0.0181%	114,367
South Shore Tri Town Development.....	0.1645%	1,042,010
Carver Housing Authority.....	0.0272%	172,185
Total.....	100.00%	\$ 633,505,708

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, 2016

	Plymouth County	Plymouth County Hospital	Town of Abington	Town of Bridgewater
Net Pension Liability				
Beginning net pension liability.....	\$ 31,098,947	\$ 3,944,248	\$ 23,236,595	\$ 31,006,920
Ending net pension liability.....	\$ 25,797,995	\$ 2,915,722	\$ 23,110,375	\$ 31,316,202
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 672,980	\$ 76,061	\$ 602,869	\$ 816,931
Net difference between projected and actual investment earnings on pension plan investments.....	2,490,471	281,476	2,231,012	3,023,182
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	2,611,984	-	-	99,719
Total Deferred Outflows of Resources.....	\$ 5,775,435	\$ 357,537	\$ 2,833,881	\$ 3,939,832
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	735,239	83,098	658,642	892,507
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	3,204,308	919,007	208,864	101,393
Total Deferred Inflows of Resources.....	\$ 3,939,547	\$ 1,002,105	\$ 867,506	\$ 993,900
Pension Expense				
Proportionate share of plan pension expense.....	\$ 3,084,174	\$ 379,079	\$ 3,004,615	\$ 4,071,467
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(74,893)	(278,184)	(63,801)	(4,306)
Total Employer Pension Expense.....	\$ 3,009,281	\$ 100,895	\$ 2,940,814	\$ 4,067,161
Contributions				
Statutory required contribution.....	\$ 2,872,070	\$ 355,010	\$ 2,393,438	\$ 3,187,198
Contribution in relation to statutory required contribution.....	(3,009,787)	(355,010)	(2,393,438)	(3,187,198)
Contribution deficiency/(excess).....	\$ (137,717)	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	82.45%	N/A	25.67%	25.81%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 804,644	\$ (178,779)	\$ 724,105	\$ 1,063,362
June 30, 2019.....	804,644	(178,779)	724,105	1,063,362
June 30, 2020.....	556,891	(212,194)	478,279	730,218
June 30, 2021.....	(330,291)	(74,816)	39,886	88,990
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 1,835,888	\$ (644,568)	\$ 1,966,375	\$ 2,945,932
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 32,248,289	\$ 3,644,742	\$ 28,888,681	\$ 39,146,218
Current discount rate (8.00%).....	\$ 25,797,995	\$ 2,915,722	\$ 23,110,375	\$ 31,316,202
1% increase (9.00%).....	\$ 20,299,372	\$ 2,294,261	\$ 18,184,595	\$ 24,641,420
Covered Payroll.....	\$ 3,483,617	\$ -	\$ 9,323,971	\$ 12,349,097
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, 2016

	Bridgewater Housing Authority	Bridgewater/ Raynham Regional School	Town of Carver	Carver/Marion Wareham Regional Refuse
Net Pension Liability				
Beginning net pension liability.....	\$ 567,261	\$ 14,513,718	\$ 17,316,474	\$ 476,337
Ending net pension liability.....	\$ 634,737	\$ 15,108,505	\$ 18,595,425	\$ 444,760
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 16,558	\$ 394,128	\$ 485,090	\$ 11,602
Net difference between projected and actual investment earnings on pension plan investments.....	61,276	1,458,535	1,795,153	42,936
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	63,740	379,560	831,879	-
Total Deferred Outflows of Resources.....	\$ 141,574	\$ 2,232,223	\$ 3,112,122	\$ 54,538
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	18,090	430,590	529,967	12,676
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	38,712	17,697	25,466
Total Deferred Inflows of Resources.....	\$ 18,090	\$ 469,302	\$ 547,664	\$ 38,142
Pension Expense				
Proportionate share of plan pension expense.....	\$ 82,489	\$ 1,964,280	\$ 2,417,620	\$ 63,567
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	18,994	98,206	237,399	(7,644)
Total Employer Pension Expense.....	\$ 101,483	\$ 2,062,486	\$ 2,655,019	\$ 55,923
Contributions				
Statutory required contribution.....	\$ 78,073	\$ 1,572,928	\$ 1,924,823	\$ 54,792
Contribution in relation to statutory required contribution.....	(78,073)	(1,572,928)	(1,924,823)	(54,792)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	36.04%	25.36%	28.25%	31.45%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 40,635	\$ 613,303	\$ 871,375	\$ 7,520
June 30, 2019.....	40,635	613,303	871,375	7,520
June 30, 2020.....	33,998	452,678	673,977	2,751
June 30, 2021.....	8,216	83,637	147,731	(1,395)
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 123,484	\$ 1,762,921	\$ 2,564,458	\$ 16,396
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 793,441	\$ 18,886,097	\$ 23,244,854	\$ 555,964
Current discount rate (8.00%).....	\$ 634,737	\$ 15,108,505	\$ 18,595,425	\$ 444,760
1% increase (9.00%).....	\$ 499,448	\$ 11,888,255	\$ 14,631,968	\$ 349,963
Covered Payroll.....	\$ 216,656	\$ 6,202,333	\$ 6,814,591	\$ 174,216
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, 2016

	Town of Duxbury	Duxbury Housing Authority	Town of East Bridgewater	East Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 31,402,963	\$ 230,868	\$ 22,109,349	\$ 279,950
Ending net pension liability.....	\$ 32,703,852	\$ 202,049	\$ 22,324,421	\$ 369,786
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 853,130	\$ 5,271	\$ 582,366	\$ 9,646
Net difference between projected and actual investment earnings on pension plan investments.....	3,157,142	19,506	2,155,140	35,698
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	739,413	-	122,793	65,742
Total Deferred Outflows of Resources.....	\$ 4,749,685	\$ 24,777	\$ 2,860,299	\$ 111,086
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	932,055	5,758	636,242	10,539
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	87,247	24,141	159,022	-
Total Deferred Inflows of Resources.....	\$ 1,019,302	\$ 29,899	\$ 795,264	\$ 10,539
Pension Expense				
Proportionate share of plan pension expense.....	\$ 4,251,876	\$ 26,267	\$ 2,902,432	\$ 48,078
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	187,408	(7,330)	(16,577)	19,377
Total Employer Pension Expense.....	\$ 4,439,284	\$ 18,937	\$ 2,885,855	\$ 67,455
Contributions				
Statutory required contribution.....	\$ 3,286,712	\$ 25,013	\$ 2,343,657	\$ 39,758
Contribution in relation to statutory required contribution.....	(3,286,712)	(25,013)	(2,343,657)	(39,758)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	20.39%	58.24%	22.28%	19.87%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 1,302,385	\$ (442)	\$ 744,532	\$ 31,984
June 30, 2019.....	1,302,385	(442)	744,532	31,984
June 30, 2020.....	954,665	(2,656)	506,185	28,101
June 30, 2021.....	170,948	(1,582)	69,786	8,478
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 3,730,383	\$ (5,122)	\$ 2,065,035	\$ 100,547
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 40,880,824	\$ 252,568	\$ 27,906,215	\$ 462,244
Current discount rate (8.00%).....	\$ 32,703,852	\$ 202,049	\$ 22,324,421	\$ 369,786
1% increase (9.00%).....	\$ 25,733,304	\$ 158,984	\$ 17,566,161	\$ 290,969
Covered Payroll.....	\$ 16,118,261	\$ 42,945	\$ 10,519,927	\$ 200,117
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, 2016

	Town of Halifax	Town of Hanover	Town of Hanson	Town of Kingston
Net Pension Liability				
Beginning net pension liability.....	\$ 10,356,892	\$ 28,530,444	\$ 13,619,585	\$ 19,473,824
Ending net pension liability.....	\$ 10,103,681	\$ 29,044,748	\$ 13,302,778	\$ 19,577,709
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 263,570	\$ 757,676	\$ 347,023	\$ 510,714
Net difference between projected and actual investment earnings on pension plan investments.....	975,381	2,803,901	1,284,215	1,889,979
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	252,264	-	43,709
Total Deferred Outflows of Resources.....	\$ 1,238,951	\$ 3,813,841	\$ 1,631,238	\$ 2,444,402
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	287,953	827,771	379,127	557,962
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	213,662	103,754	322,997	93,949
Total Deferred Inflows of Resources.....	\$ 501,615	\$ 931,525	\$ 702,124	\$ 651,911
Pension Expense				
Proportionate share of plan pension expense.....	\$ 1,313,594	\$ 3,776,152	\$ 1,729,514	\$ 2,545,328
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(64,467)	39,518	(98,518)	(18,226)
Total Employer Pension Expense.....	\$ 1,249,127	\$ 3,815,670	\$ 1,630,996	\$ 2,527,102
Contributions				
Statutory required contribution.....	\$ 1,090,406	\$ 2,961,848	\$ 1,417,027	\$ 2,047,367
Contribution in relation to statutory required contribution.....	(1,090,406)	(2,961,848)	(1,417,027)	(2,047,367)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	21.76%	20.44%	27.35%	21.07%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 279,999	\$ 1,029,745	\$ 355,015	\$ 649,239
June 30, 2019.....	279,999	1,029,745	355,015	649,239
June 30, 2020.....	172,316	720,670	212,853	440,667
June 30, 2021.....	5,022	102,156	6,231	53,346
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 737,336	\$ 2,882,316	\$ 929,114	\$ 1,792,491
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 12,629,912	\$ 36,306,831	\$ 16,628,883	\$ 24,472,740
Current discount rate (8.00%).....	\$ 10,103,681	\$ 29,044,748	\$ 13,302,778	\$ 19,577,709
1% increase (9.00%).....	\$ 7,950,167	\$ 22,854,107	\$ 10,467,404	\$ 15,404,886
Covered Payroll.....	\$ 5,010,003	\$ 14,492,915	\$ 5,181,778	\$ 9,717,354
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, 2016

	Kingston Housing Authority	Town of Lakeville	Town of Marion	Town of Marshfield
Net Pension Liability				
Beginning net pension liability.....	\$ 41,247	\$ 9,057,112	\$ 8,987,700	\$ 50,159,092
Ending net pension liability.....	\$ 15,884	\$ 8,883,767	\$ 8,991,145	\$ 51,194,441
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 414	\$ 231,747	\$ 234,548	\$ 1,335,485
Net difference between projected and actual investment earnings on pension plan investments.....	1,534	857,615	867,981	4,942,173
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	-	-	630,931
Total Deferred Outflows of Resources.....	\$ 1,948	\$ 1,089,362	\$ 1,102,529	\$ 6,908,589
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	453	253,186	256,246	1,459,033
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	13,682	140,151	54,443	106,743
Total Deferred Inflows of Resources.....	\$ 14,135	\$ 393,337	\$ 310,689	\$ 1,565,776
Pension Expense				
Proportionate share of plan pension expense.....	\$ (780)	\$ 1,154,991	\$ 1,168,952	\$ 6,655,865
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(4,035)	(41,964)	(17,556)	149,255
Total Employer Pension Expense.....	\$ (4,815)	\$ 1,113,027	\$ 1,151,396	\$ 6,805,120
Contributions				
Statutory required contribution.....	\$ 4,724	\$ 950,594	\$ 939,265	\$ 5,347,669
Contribution in relation to statutory required contribution.....	(4,724)	(950,594)	(939,265)	(5,347,669)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	N/A	24.48%	20.04%	24.46%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ (3,493)	\$ 260,911	\$ 288,980	\$ 1,894,634
June 30, 2019.....	(3,493)	260,911	288,980	1,894,634
June 30, 2020.....	(3,671)	166,431	193,188	1,350,608
June 30, 2021.....	(1,530)	7,772	20,692	202,937
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ (12,187)	\$ 696,025	\$ 791,840	\$ 5,342,813
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 19,855	\$ 11,104,983	\$ 11,239,208	\$ 63,994,630
Current discount rate (8.00%).....	\$ 15,884	\$ 8,883,767	\$ 8,991,145	\$ 51,194,441
1% increase (9.00%).....	\$ 12,498	\$ 6,990,268	\$ 7,074,759	\$ 40,282,781
Covered Payroll.....	\$ -	\$ 3,883,066	\$ 4,686,427	\$ 21,859,954
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, 2016

	Marshfield Housing Authority	Town of Mattapoissett	Town of Middleborough	Middleborough Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 302,538	\$ 10,456,469	\$ 57,918,847	\$ 993,391
Ending net pension liability.....	\$ 269,397	\$ 9,864,146	\$ 57,384,233	\$ 942,256
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 7,028	\$ 257,321	\$ 1,496,955	\$ 24,580
Net difference between projected and actual investment earnings on pension plan investments.....	26,007	952,258	5,539,718	90,963
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,157	-	-	-
Total Deferred Outflows of Resources.....	\$ 34,192	\$ 1,209,579	\$ 7,036,673	\$ 115,543
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	7,678	281,127	1,635,441	26,854
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	19,332	467,972	748,156	49,367
Total Deferred Inflows of Resources.....	\$ 27,010	\$ 749,099	\$ 2,383,597	\$ 76,221
Pension Expense				
Proportionate share of plan pension expense.....	\$ 35,024	\$ 1,282,453	\$ 7,460,610	\$ 130,237
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(5,270)	(139,657)	(229,473)	(14,880)
Total Employer Pension Expense.....	\$ 29,754	\$ 1,142,796	\$ 7,231,137	\$ 115,357
Contributions				
Statutory required contribution.....	\$ 32,910	\$ 1,063,989	\$ 5,976,786	\$ 104,557
Contribution in relation to statutory required contribution.....	(32,910)	(1,063,989)	(5,976,786)	(104,557)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	16.04%	20.92%	26.57%	27.95%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 3,915	\$ 196,642	\$ 1,726,936	\$ 17,244
June 30, 2019.....	3,915	196,642	1,726,936	17,244
June 30, 2020.....	1,069	91,280	1,115,499	7,134
June 30, 2021.....	(1,717)	(24,084)	83,705	(2,300)
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 7,182	\$ 460,480	\$ 4,653,076	\$ 39,322
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 336,755	\$ 12,330,486	\$ 71,732,061	\$ 1,177,849
Current discount rate (8.00%).....	\$ 269,397	\$ 9,864,146	\$ 57,384,233	\$ 942,256
1% increase (9.00%).....	\$ 211,978	\$ 7,761,687	\$ 45,153,271	\$ 741,422
Covered Payroll.....	\$ 205,134	\$ 5,086,347	\$ 22,492,657	\$ 374,152
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, 2016

	Town of Norwell	Norwell Housing Authority	Old Rochester Regional School	Onset Fire District
Net Pension Liability				
Beginning net pension liability.....	\$ 21,808,558	\$ 253,949	\$ 5,619,732	\$ 2,307,161
Ending net pension liability.....	\$ 22,255,166	\$ 287,824	\$ 5,981,388	\$ 2,068,134
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 580,560	\$ 7,508	\$ 156,034	\$ 53,950
Net difference between projected and actual investment earnings on pension plan investments.....	2,148,454	27,786	577,427	199,652
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	280,648	19,319	210,389	-
Total Deferred Outflows of Resources.....	\$ 3,009,662	\$ 54,613	\$ 943,850	\$ 253,602
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	634,269	8,203	170,469	58,942
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	90,878	1,177	20,178	163,051
Total Deferred Inflows of Resources.....	\$ 725,147	\$ 9,380	\$ 190,647	\$ 221,993
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,893,428	\$ 37,421	\$ 777,649	\$ 268,882
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	52,069	5,261	54,858	(48,245)
Total Employer Pension Expense.....	\$ 2,945,497	\$ 42,682	\$ 832,507	\$ 220,637
Contributions				
Statutory required contribution.....	\$ 2,336,032	\$ 25,699	\$ 589,094	\$ 239,686
Contribution in relation to statutory required contribution.....	(2,336,032)	(25,699)	(589,094)	(239,686)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	23.57%	18.26%	20.80%	32.96%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 810,817	\$ 15,073	\$ 258,782	\$ 22,265
June 30, 2019.....	810,817	15,073	258,782	22,265
June 30, 2020.....	573,878	12,008	195,144	180
June 30, 2021.....	89,003	3,079	40,495	(13,101)
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 2,284,515	\$ 45,233	\$ 753,203	\$ 31,609
Discount Rate Sensitivity				
1% decrease (7.00%).....	27,819,644	\$ 359,789	\$ 7,476,920	\$ 2,585,232
Current discount rate (8.00%).....	22,255,166	\$ 287,824	\$ 5,981,388	\$ 2,068,134
1% increase (9.00%).....	17,511,666	\$ 226,477	\$ 4,706,506	\$ 1,627,329
Covered Payroll.....	\$ 9,911,164	\$ 140,751	\$ 2,831,526	\$ 727,122
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, 2016

	Town of Pembroke	Plymouth County Mosquito Control	Town of Plympton	Town of Rochester
Net Pension Liability				
Beginning net pension liability.....	\$ 27,512,206	\$ 1,855,988	\$ 3,642,916	\$ 5,930,939
Ending net pension liability.....	\$ 28,683,221	\$ 1,923,905	\$ 4,143,259	\$ 6,686,652
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 748,245	\$ 50,188	\$ 108,083	\$ 174,431
Net difference between projected and actual investment earnings on pension plan investments.....	2,769,000	185,729	399,978	645,510
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	780,660	40,534	393,485	486,522
Total Deferred Outflows of Resources.....	\$ 4,297,905	\$ 276,451	\$ 901,546	\$ 1,306,463
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	817,467	54,831	118,082	190,569
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	82,331	6,987	-	-
Total Deferred Inflows of Resources.....	\$ 899,798	\$ 61,818	\$ 118,082	\$ 190,569
Pension Expense				
Proportionate share of plan pension expense.....	\$ 3,729,149	\$ 250,129	\$ 538,671	\$ 869,343
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	201,091	9,546	115,829	142,383
Total Employer Pension Expense.....	\$ 3,930,240	\$ 259,675	\$ 654,500	\$ 1,011,726
Contributions				
Statutory required contribution.....	\$ 3,026,915	\$ 197,117	\$ 481,229	\$ 669,036
Contribution in relation to statutory required contribution.....	(3,026,915)	(197,117)	(481,229)	(669,036)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.25%	30.47%	24.90%	20.47%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 1,178,992	\$ 75,138	\$ 257,085	\$ 370,352
June 30, 2019.....	1,178,992	75,138	257,085	370,352
June 30, 2020.....	873,963	54,665	213,346	299,468
June 30, 2021.....	166,160	9,692	55,948	75,722
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 3,398,107	\$ 214,633	\$ 783,464	\$ 1,115,894
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 35,854,911	\$ 2,404,941	\$ 5,179,201	\$ 8,358,521
Current discount rate (8.00%).....	\$ 28,683,221	\$ 1,923,905	\$ 4,143,259	\$ 6,686,652
1% increase (9.00%).....	\$ 22,569,636	\$ 1,513,841	\$ 3,260,158	\$ 5,261,449
Covered Payroll.....	\$ 11,989,992	\$ 646,866	\$ 1,932,777	\$ 3,268,990
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, 2016

	Town of Rockland	Town of Scituate	Scituate Housing Authority	Silver Lake Regional School
Net Pension Liability				
Beginning net pension liability.....	\$ 35,165,926	\$ 41,160,818	\$ 743,061	\$ 7,296,788
Ending net pension liability.....	\$ 34,338,665	\$ 41,548,935	\$ 953,057	\$ 6,372,144
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 895,776	\$ 1,088,307	\$ 24,862	\$ 166,227
Net difference between projected and actual investment earnings on pension plan investments.....	3,314,962	4,027,453	92,007	615,150
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	331,522	170,634	-
Total Deferred Outflows of Resources.....	\$ <u>4,210,738</u>	\$ <u>5,447,282</u>	\$ <u>287,503</u>	\$ <u>781,377</u>
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	978,646	1,188,989	27,162	181,605
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	780,411	130,728	-	734,067
Total Deferred Inflows of Resources.....	\$ <u>1,759,057</u>	\$ <u>1,319,717</u>	\$ <u>27,162</u>	\$ <u>915,672</u>
Pension Expense				
Proportionate share of plan pension expense.....	\$ 4,464,421	\$ 5,253,761	\$ 120,650	\$ 828,452
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	(235,330)	53,791	50,631	(217,732)
Total Employer Pension Expense.....	\$ <u>4,229,091</u>	\$ <u>5,307,552</u>	\$ <u>171,281</u>	\$ <u>610,720</u>
Contributions				
Statutory required contribution.....	\$ 3,619,099	\$ 4,373,651	\$ 108,060	\$ 651,056
Contribution in relation to statutory required contribution.....	(3,619,099)	(4,373,651)	(108,060)	(651,056)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	25.37%	25.10%	38.49%	18.61%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 935,383	\$ 1,476,127	\$ 83,124	\$ (485)
June 30, 2019.....	935,383	1,476,127	83,124	(485)
June 30, 2020.....	569,310	1,032,360	73,209	(68,880)
June 30, 2021.....	11,605	142,951	20,884	(64,445)
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ <u>2,451,681</u>	\$ <u>4,127,565</u>	\$ <u>260,341</u>	\$ <u>(134,295)</u>
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 42,924,391	\$ 52,150,216	\$ 1,191,351	\$ 7,965,377
Current discount rate (8.00%).....	\$ 34,338,665	\$ 41,548,935	\$ 953,057	\$ 6,372,144
1% increase (9.00%).....	\$ 27,019,671	\$ 32,827,063	\$ 749,921	\$ 5,013,976
Covered Payroll.....	\$ 14,264,455	\$ 17,428,266	\$ 280,736	\$ 3,498,407
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, 2016

	South Shore Regional School	Town of Wareham	Wareham Fire District	Wareham Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 3,140,324	\$ 33,957,508	\$ 6,167,869	\$ 239,427
Ending net pension liability.....	\$ 3,242,937	\$ 35,073,155	\$ 6,747,647	\$ 251,608
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 84,597	\$ 914,937	\$ 176,023	\$ 6,564
Net difference between projected and actual investment earnings on pension plan investments.....	313,065	3,385,867	651,399	24,290
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	58,469	660,605	375,668	3,555
Total Deferred Outflows of Resources.....	\$ 456,131	\$ 4,961,409	\$ 1,203,090	\$ 34,409
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	92,423	999,579	192,307	7,171
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	9,136	85,918	35,539	5,126
Total Deferred Inflows of Resources.....	\$ 101,559	\$ 1,085,497	\$ 227,846	\$ 12,297
Pension Expense				
Proportionate share of plan pension expense.....	\$ 421,619	\$ 4,559,913	\$ 877,271	\$ 35,829
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	14,080	164,804	98,115	(652)
Total Employer Pension Expense.....	\$ 435,699	\$ 4,724,717	\$ 975,386	\$ 35,177
Contributions				
Statutory required contribution.....	\$ 329,995	\$ 3,600,317	\$ 691,774	\$ 23,730
Contribution in relation to statutory required contribution.....	(329,995)	(3,600,317)	(691,774)	(23,730)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	18.82%	25.67%	25.25%	29.19%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 124,642	\$ 1,360,558	\$ 328,164	\$ 7,926
June 30, 2019.....	124,642	1,360,558	328,164	7,926
June 30, 2020.....	90,158	987,720	256,598	5,257
June 30, 2021.....	15,130	167,076	62,318	1,003
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 354,572	\$ 3,875,912	\$ 975,244	\$ 22,112
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 4,053,772	\$ 43,842,525	\$ 8,434,767	\$ 314,518
Current discount rate (8.00%).....	\$ 3,242,937	\$ 35,073,155	\$ 6,747,647	\$ 251,608
1% increase (9.00%).....	\$ 2,551,733	\$ 27,597,610	\$ 5,309,443	\$ 197,980
Covered Payroll.....	\$ 1,753,004	\$ 14,023,370	\$ 2,739,513	\$ 81,291
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, 2016

	Town of West Bridgewater	Town of Whitman	Whitman/ Hanson Regional School	Whitman Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 17,354,422	\$ 17,539,078	\$ 10,978,762	\$ 690,308
Ending net pension liability.....	\$ 17,710,352	\$ 17,050,836	\$ 10,364,184	\$ 709,074
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 462,001	\$ 444,797	\$ 270,365	\$ 18,497
Net difference between projected and actual investment earnings on pension plan investments.....	1,709,710	1,646,042	1,000,530	68,453
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	168,739	-	-	4,274
Total Deferred Outflows of Resources.....	\$ 2,340,450	\$ 2,090,839	\$ 1,270,895	\$ 91,224
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	504,742	485,946	295,378	20,209
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	100,094	410,116	503,584	20,269
Total Deferred Inflows of Resources.....	\$ 604,836	\$ 896,062	\$ 798,962	\$ 40,478
Pension Expense				
Proportionate share of plan pension expense.....	\$ 2,302,549	\$ 2,216,805	\$ 1,347,464	\$ 124,861
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	16,304	(122,782)	(149,627)	(4,515)
Total Employer Pension Expense.....	\$ 2,318,853	\$ 2,094,023	\$ 1,197,837	\$ 120,346
Contributions				
Statutory required contribution.....	\$ 1,787,957	\$ 1,812,841	\$ 1,075,550	\$ 65,348
Contribution in relation to statutory required contribution.....	(1,787,957)	(1,812,841)	(1,075,550)	(65,348)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	24.22%	27.22%	22.61%	21.45%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 620,106	\$ 458,535	\$ 203,720	\$ 19,660
June 30, 2019.....	620,106	458,535	203,720	19,660
June 30, 2020.....	432,270	277,694	93,798	12,139
June 30, 2021.....	63,132	13	(29,305)	(713)
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 1,735,614	\$ 1,194,777	\$ 471,933	\$ 50,746
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 22,138,486	\$ 21,314,071	\$ 12,955,550	\$ 886,365
Current discount rate (8.00%).....	\$ 17,710,352	\$ 17,050,836	\$ 10,364,184	\$ 709,074
1% increase (9.00%).....	\$ 13,935,541	\$ 13,416,595	\$ 8,155,146	\$ 557,941
Covered Payroll.....	\$ 7,382,825	\$ 6,659,296	\$ 4,756,618	\$ 304,623
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, 2016

	Abington Housing Authority	Pembroke Housing Authority	Hanson Housing Authority	Rockland Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 327,404	\$ 783,742	\$ 228,012	\$ 467,100
Ending net pension liability.....	\$ 341,830	\$ 822,808	\$ 254,149	\$ 528,630
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 8,917	\$ 21,464	\$ 6,630	\$ 13,790
Net difference between projected and actual investment earnings on pension plan investments.....	32,999	79,433	24,534	51,032
Changes of assumptions.....	-	-		
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	8,035	-	10,724	39,448
Total Deferred Outflows of Resources.....	\$ 49,951	\$ 100,897	\$ 41,888	\$ 104,270
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	9,742	23,450	7,243	15,066
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,651	13,604	-	-
Total Deferred Inflows of Resources.....	\$ 11,393	\$ 37,054	\$ 7,243	\$ 15,066
Pension Expense				
Proportionate share of plan pension expense.....	\$ 44,442	\$ 144,352	\$ 47,365	\$ 66,005
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	1,805	(4,032)	3,237	11,590
Total Employer Pension Expense.....	\$ 46,247	\$ 140,320	\$ 50,602	\$ 77,595
Contributions				
Statutory required contribution.....	\$ 34,019	\$ 74,753	\$ 28,646	\$ 48,297
Contribution in relation to statutory required contribution.....	(34,019)	(74,753)	(28,646)	(48,297)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	22.91%	25.43%	15.63%	29.04%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 13,458	\$ 24,020	\$ 11,901	\$ 29,613
June 30, 2019.....	13,458	24,020	11,901	29,613
June 30, 2020.....	9,833	15,293	9,206	24,006
June 30, 2021.....	1,809	510	1,637	5,972
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 38,558	\$ 63,843	\$ 34,645	\$ 89,204
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 427,298	\$ 1,028,535	\$ 317,694	\$ 660,804
Current discount rate (8.00%).....	\$ 341,830	\$ 822,808	\$ 254,149	\$ 528,630
1% increase (9.00%).....	\$ 268,972	\$ 647,433	\$ 199,979	\$ 415,957
Covered Payroll.....	\$ 148,461	\$ 293,960	\$ 183,305	\$ 166,308
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, 2016

	Halifax Housing Authority	Mattapoisett Housing Authority	Acushnet/ Rochester/ Marion Health District	West Bridgewater Housing Authority
Net Pension Liability				
Beginning net pension liability.....	\$ 279,296	\$ 185,478	\$ 150,407	\$ 103,011
Ending net pension liability.....	\$ 446,030	\$ 165,832	\$ 127,710	\$ 114,367
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 11,635	\$ 4,326	\$ 3,332	\$ 2,983
Net difference between projected and actual investment earnings on pension plan investments.....	43,058	16,009	12,328	11,041
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	93,635	-	-	7,202
Total Deferred Outflows of Resources.....	\$ 148,328	\$ 20,335	\$ 15,660	\$ 21,226
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	12,712	4,726	3,640	3,259
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	12,261	13,059	23,084	-
Total Deferred Inflows of Resources.....	\$ 24,973	\$ 17,785	\$ 26,724	\$ 3,259
Pension Expense				
Proportionate share of plan pension expense.....	\$ 60,903	\$ 13,319	\$ 17,480	\$ 14,869
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	23,333	(4,077)	(6,986)	2,135
Total Employer Pension Expense.....	\$ 84,236	\$ 9,242	\$ 10,494	\$ 17,004
Contributions				
Statutory required contribution.....	\$ 24,274	\$ 18,730	\$ 12,765	\$ 10,490
Contribution in relation to statutory required contribution.....	(24,274)	(18,730)	(12,765)	(10,490)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll.....	107.17%	19.90%	17.95%	20.12%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 38,540	\$ 1,576	\$ (2,631)	\$ 6,034
June 30, 2019.....	38,540	1,576	(2,631)	6,034
June 30, 2020.....	33,809	(183)	(3,986)	4,821
June 30, 2021.....	12,466	(419)	(1,816)	1,078
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 123,355	\$ 2,550	\$ (11,064)	\$ 17,967
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 557,551	\$ 207,295	\$ 159,641	\$ 142,962
Current discount rate (8.00%).....	\$ 446,030	\$ 165,832	\$ 127,710	\$ 114,367
1% increase (9.00%).....	\$ 350,962	\$ 130,486	\$ 100,490	\$ 89,991
Covered Payroll.....	\$ 22,651	\$ 94,106	\$ 71,126	\$ 52,144

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, 2016

	South Shore Tri Town Development	Carver Housing Authority	Plymouth County Retirement Association	Totals
Net Pension Liability				
Beginning net pension liability.....	\$ 663,053	\$ 204,917	\$ 1,387,458	\$ 634,226,389
Ending net pension liability.....	\$ 1,042,010	\$ 172,185	\$ -	\$ 633,505,708
Deferred Outflows of Resources				
Differences between expected and actual experience.....	\$ 27,182	\$ 4,492	\$ -	\$ 16,530,396
Net difference between projected and actual investment earnings on pension plan investments.....	100,593	16,622	-	61,173,365
Changes of assumptions.....	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	255,072	-	-	10,242,030
Total Deferred Outflows of Resources.....	\$ 382,847	\$ 21,114	\$ -	\$ 87,945,791
Deferred Inflows of Resources				
Differences between expected and actual experience.....	\$ -	\$ -	\$ -	\$ -
Changes of assumptions.....	29,697	4,907	-	18,059,665
Changes in proportion and differences between employer contributions and proportionate share of contributions.....	-	25,086	-	10,388,400
Total Deferred Inflows of Resources.....	\$ 29,697	\$ 29,993	\$ -	\$ 28,448,065
Pension Expense				
Proportionate share of plan pension expense.....	\$ 135,474	\$ 22,386	\$ (1,127,564)	\$ 80,905,182
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions.....	75,361	(7,412)	-	(41,791)
Total Employer Pension Expense.....	\$ 210,835	\$ 14,974	\$ (1,127,564)	\$ 80,863,391
Contributions				
Statutory required contribution.....	\$ 79,442	\$ 17,401	\$ 132,047	\$ 66,255,664
Contribution in relation to statutory required contribution.....	(79,442)	(17,401)	(132,047)	(66,393,381)
Contribution deficiency/(excess).....	\$ -	\$ -	\$ -	\$ (137,717)
Contributions as a percentage of covered payroll.....	30.74%	N/A	19.37%	25.00%
Deferred Inflows/(Outflows) Recognized in Future Pension Expense				
June 30, 2018.....	\$ 110,886	\$ (1,542)	\$ -	\$ 21,562,210
June 30, 2019.....	110,886	(1,542)	-	21,562,210
June 30, 2020.....	99,835	(3,368)	-	14,844,488
June 30, 2021.....	31,543	(2,427)	-	1,528,818
Total Deferred Inflows/(Outflows) Recognized in Future Pension Expense.....	\$ 353,150	\$ (8,879)	\$ -	\$ 59,497,726
Discount Rate Sensitivity				
1% decrease (7.00%).....	\$ 1,302,545	\$ 215,236	\$ -	\$ 792,114,439
Current discount rate (8.00%).....	\$ 1,042,010	\$ 172,185	\$ -	\$ 633,505,708
1% increase (9.00%).....	\$ 819,914	\$ 135,485	\$ -	\$ 498,613,279
Covered Payroll.....	\$ 258,395	\$ -	\$ 681,624	\$ 265,029,190
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, the each member unit's proportionate share of the total pension liability has been calculated based on each member unit's actual current employees, retirees and inactive participants. 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 separately identified in the Association's funding schedule. 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.