PLYMOUTH CONTRIBUTORY RETIREMENT SYSTEM

FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2017

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YEAR ENDED DECEMBER 31, 2017

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Financial Section

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'owers & Sullivan, LLC

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Independent Auditor's Report

To the Plymouth Retirement Board Plymouth Contributory Retirement System Plymouth, Massachusetts

Report on the Financial Statements

We have audited the accompanying financial statements of the Plymouth Contributory Retirement System, which comprise the statement of assets, liabilities, and fund balances as of December 31, 2017, and the related statement of changes in fund balance, statement of income, statement of disbursements, and statement of investment income for the year then ended, and the related notes to the 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 the financial reporting provisions of the Commonwealth of Massachusetts' Public Employee Retirement Administration Commission (PERAC). Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

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 Commonwealth of Massachusetts' Division of Public Employee Retirement Administration Rules and Regulations 840 CMR 25.00: "The Conduct of Field Examinations of Contributory Retirement Systems," in existence as of August 27, 2004. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of 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 Contributory Retirement System as of December 31, 2017, and the results of its operations and changes in its fund balances for the year then ended, on the basis of the financial reporting provisions of PERAC as described in Note 2.

Basis of Accounting

We draw attention to Note 2 of the financial statements, which describes the basis of accounting. As described in Note 2 to the financial statements, the financial statements are prepared by the Plymouth Contributory Retirement System on the basis of the financial reporting provisions of the Commonwealth of Massachusetts' Public Employee Retirement Administration Commission, which is a basis of accounting other than accounting principles generally accepted in the United States of America, to comply with the requirements of PERAC. Our opinion is not modified with respect to this matter.

Other Matters

Additional Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Plymouth Contributory Retirement System's financial statements. The schedule of funding progress, as listed in the table of contents, which is the responsibility of management, is presented for the purpose of additional information and is not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

Our report is intended solely for the information and use of management of the member units, the Plymouth Contributory Retirement Board, others within the Town of Plymouth, Massachusetts, and PERAC and is not intended to be and should not be used by anyone other than these specified parties.

August 17, 2018

Powers & Sullivan, LLC

Financial Statements

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STATEMENT OF ASSETS, LIABILITIES AND FUND BALANCE

DECEMBER 31, 2017

Cash and cash equivalents. Investments. Receivables: Departmental and other. Prepaid expenses.	\$ 1,405,509 176,424,748 11,753 9,331
Total assets	177,851,341
Liabilities	
Accounts payable	(194,510)
Net assets available for pension benefits	\$ 177,656,831
Fund Balance	
Annuity savings fund	42,487,464 16,677,594 63,344 7,107,369 111,321,060
Total fund balance	\$ 177,656,831

STATEMENT OF CHANGES IN FUND BALANCE

YEAR ENDED DECEMBER 31, 2017

	Annuity Savings Fund	_	Annuity Reserve Fund	Special Military Service Credit Fund	Pension Fund
Income: Receipts\$ Investment income (loss)	4,741,583 61,118	\$ -	- 485,661	\$ _ 63	\$ 13,039,061
Total income	4,802,701		485,661	63	13,039,061
Disbursements	(865,359)	-	(2,831,746)		 (15,685,159)
Net increase (decrease) in fund balance before interfund transfers in (out)	3,937,342		(2,346,085)	63	(2,646,098)
Interfund transfers in (out)	(2,709,582)		2,588,213		2,036,809
Net increase (decrease) in fund balance	1,227,760		242,128	63	(609,289)
Fund balance, beginning of year	41,259,704		16,435,466	63,281	7,716,658
Fund balance, end of year\$	42,487,464	\$	16,677,594	\$ 63,344	\$ 7,107,369

Pension Reserve Fund	Expense Fund	Total All Funds
\$ 9,823 23,685,864	\$ - 1,749,247	\$ 17,790,467 25,981,953
23,695,687	1,749,247	43,772,420
	(1,749,247)	(21,131,511)
22 605 697		22,640,909
23,695,687	_	22,040,300
(1,915,440)		
21,780,247	-	22,640,909
89,540,813		155,015,922
\$ 111,321,060	\$ 	\$ 177,656,831

STATEMENT OF INCOME

YEAR ENDED DECEMBER 31, 2017

Members' deductions	\$	4,319,084
Transfers of members' accounts from other systems		345,677
Members' makeup payments and redeposits		23,405
Members' payments from rollovers		53,417
Reimbursements from other systems for Pension Fund		359,806
Pension fund appropriation		12,536,906
State Retirement Board, cost of living adjustment		69,104
Workers compensation lump sum payments		15,000
Interest not refunded		1,338
Federal grant reimbursement		1,000
Recovery of 91A overearnings		58,245
Miscellaneous income		7,485
Investment income	_	25,981,953
Total income,	\$_	43,772,420

STATEMENT OF DISBURSEMENTS

YEAR ENDED DECEMBER 31, 2017

Refunds of members' accounts from Annuity Savings Fund	\$ 418,411
Option B refunds from Annuity Reserve Fund	16,928
Option B refunds from Annulty Reserve Fund	10,020
Annuity portion of retirement allowance payments from Annuity Reserve Fund	2,814,818
Superannuation and termination retirement allowance payments from Pension Fund	10,942,065
Survivor allowance payments from Pension Fund	459,171
Ordinary disability payments from Pension Fund	164,971
Accidental disability payments from Pension Fund	2,738,483
Accidental death benefits from Pension Fund	572,685
Section 101 benefits from Pension Fund	37,317
Reimbursements to other systems from Pension Fund	633,704
Investment management and custodial fees from Expense Fund	1,226,780
COLA's paid from Pension Fund	99,676
Chapter 389 benefit increase paid from Pension Fund	37,087
Staff salaries from Expense Fund	284,589
Legal expenses from Expense Fund	68,319
Travel expenses from Expense Fund	7,053
Administrative expenses from Expense Fund	160,590
Furniture and Equipment from Expense Fund	1,916
Transfer of members' accounts to other systems from Annuity Savings Fund	446,948
Total disbursements	\$ 21,131,511

STATEMENT OF INVESTMENT INCOME

YEAR ENDED DECEMBER 31, 2017

Gross investment income	\$ 3,397,938
Add: Profit on the sale of investments Increase in market value of equity securities	3,903,181 21,501,425
Less: Loss on the sale of investments Decrease in market value of equity securities	(1,194,075) (1,626,516)
Net investment income (loss)	25,981,953
Investment income required: Annuity savings fund	61,118 485,661 1,749,247 63
Total investment income required	2,296,089
Excess (deficiency) investment income transferred to pension reserve fund	\$ 23,685,864

NOTE 1 - PLAN DESCRIPTION

The Plan is a contributory multiple-employer defined benefit plan covering all employees of governmental member units deemed eligible by the Plymouth 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. The Plan is administered by the Plymouth Contributory Retirement System (the System).

Instituted in 1937, the System is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of the Massachusetts General Laws. Membership in the Plan is mandatory immediately upon the commencement of employment for all permanent, full-time employees.

Massachusetts Contributory Retirement System benefits are, with certain exceptions, uniform from system to system. The System 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 members who began service prior to April 2, 2012. The retirement allowance is calculated on the highest five-year average for members who began service on or after April 2, 2012. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

Members become vested after ten years of creditable service. A superannuation retirement allowance may be received upon the completion of 20 years of service or upon reaching the age of 55 with 10 years of service for members who began service prior to April 2, 2012. The age is 60 with 10 years of service for members who began service on or after April 2, 2012. Normal retirement for most employees occurs at age 65 (except for certain hazardous duty and public safety positions, whose normal retirement is at 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. The average retirement benefit is approximately 80-85% pension and 15-20% annuity. Active members contribute between 5 and 11% of their gross regular compensation. The percentage rate is keyed to the date upon which an employee's membership commences. These deductions are deposited in the Annuity Savings Fund and earn interest at a rate determined by the Public Employee Retirement Administration Commission's (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 Board and all costs are borne by the System.

The pension portion of any retirement benefit is paid from the Pension Fund of the System. The governmental unit employing the member must annually appropriate and contribute the amount of current-year pension payments as determined by PERAC's actuary. In past years, retirement systems were paying only the actual retirement benefits that were due each year. Systems had no statutory authorization to put aside money for the future benefits of employees who are currently employed. Large unfunded liabilities resulted from operating under this pay-as-you-go basis. In 1977, legislation authorized local governments to appropriate funds to meet future pension obligations. In 1983, additional legislation was passed requiring the transfer of investment earnings (in excess of the amount credited to member accounts) into the Pension Reserve Fund. These initiatives have significantly reduced the rate of growth of the Retirement System's unfunded liabilities, and in some Systems have actually reduced such liability.

Administrative expenses, which were previously appropriated from the governmental entities whose employees are members of the system, 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 and who are not eligible to receive a retirement allowance or are under the age of 55 are entitled to request a refund of their accumulated total deductions. In addition, a member who voluntarily withdraws with less than 10 years of creditable service is entitled to receive 3% interest on his or her contributions. Members who involuntarily withdraw or those with more than 10 years of creditable service are entitled to interest on his or her contributions at the regular interest rate.

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 are presented on the basis of accounting and reporting practices prescribed by the Commonwealth of Massachusetts' Commissioner of PERAC. Financial accounting and reporting standards required by generally accepted accounting principles (GAAP) differ in some respects from the requirements of PERAC. The valuation of assets, liabilities and net position are substantially the same. The main difference between GAAP and PERAC is that the financial statements for the changes in net position/fund balances are presented in different formats.

The accounting records of the System are maintained on a calendar year basis in accordance with the standards and procedures established by the Commissioner of PERAC.

The *Annuity Savings Fund* is the fund in which members' contributions are deposited. Voluntary contributions, redeposits, and transfers to and from other systems are also accounted for in this fund. Members' contributions to the fund earn interest at a rate determined by PERAC. Interest for some members who withdraw from the System with less than 10 years of service is transferred to the Pension Reserve Fund. Upon retirement, a member's contributions and interest are transferred to the Annuity Reserve Fund. Dormant account balances must be transferred to the Pension Reserve Fund after a period of 10 years of inactivity.

The Annuity Reserve Fund is the fund to which a Member's account is transferred upon retirement from the Annuity Savings Fund. The annuity portion of the retirement allowance is paid from this fund. Interest is credited monthly to this fund at the rate of 3% annually on the previous month's balance.

The Special Military Service Credit Fund contains contributions and interest for members while on military leave for service in the Armed Forces who will receive creditable service for the period of that leave. Creditable service is granted provided the member returns to the same governmental unit within two years of the date of discharge from the military.

The *Pension Fund* contains the amounts appropriated by the governmental units as established by PERAC to pay the pension portion of each retirement allowance.

The *Pension Reserve Fund* contains the amounts set aside by the system for the purpose of establishing a reserve to meet future pension liabilities. Any investment income in excess of the amount required to credit interest to the Annuity Savings Fund, Annuity Reserve Fund and Military Service Credit Fund is credited to the Pension Reserve Fund. Any profit or loss realized on the sale or maturity of any investment or on the unrealized gain or loss of market valued investments as of the valuation date is credited to the Pension Reserve Fund.

The Expense Fund contains amounts transferred from investment income for the purpose of administering the System.

The *Investment Income Account* is credited with all interest and dividends derived from invested funds. At the end of the year, the interest credited to the Annuity Savings Fund, Annuity Reserve Fund, Expense Fund, and Special Military Service Credit Fund is distributed from this account and the remaining balance is transferred to the Pension Reserve Fund.

NOTE 3 - PLAN ADMINISTRATION

The System is administered by a five-member retirement board consisting of the Town Finance Director, who shall be a member ex officio, two elected members and two members appointed by a majority of the System's elected advisory council.

Ex-officio Member:	Lynne Barrett	Term Expires:	Indefinite
Elected Member:	Thomas M. Kelley	Term Expires:	June 30, 2019
Elected Member:	Dale Webber	Term Expires:	June 30, 2019
Appointed Member:	Shawn H. Duhamel	Term Expires:	June 30, 2020
Appointed Member:	Gerald Coughlin	Term Expires:	June 30, 2020

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

The investment of the System's funds is the responsibility of the Board. All retirement allowances must be approved by the Board and are then submitted to the PERAC actuary for verification prior to payment. All expenses incurred by the System must be approved by at least three members of the Board.

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

\$10,000,000	Fiduciary Liability
1.000.000	Dishonesty Coverage

NOTE 4 - CASH AND INVESTMENTS

Custodial Credit Risk - Deposits

At December 31, 2017, the carrying amount of the System's deposits totaled \$219,031 and the bank balance totaled \$262,820 which was covered by Federal Depository Insurance.

Investments

As of December 31, 2017, the System had the following investments:

_		Maturity	
_	Fair Value	6-10 Years	Quality Rating
Investment Type			
Debt Securities Bond Mutual Funds\$	22,916,082	\$_22,916,082	Aaa
Other Investments Equity Securities	32,968,012 67,257,609 17,606,452 1,186,478 18,927,242 13,897,932 2,851,419	_	
Total Investments\$	177,611,226	=	

The System has an investment policy that states that assets of the plan shall be invested to ensure that principal is preserved and enhanced, both in real and nominal terms. The policy states that up to 79% of the System's assets can be invested in equities, up to 31.5% in fixed income, up to 12.5% in real estate funds, and up to 10% in hedge/private equity return funds.

Custodial Credit Risk - Investments

For an investment, this is the risk that, in the event of a failure by the counterparty, the System will not be able to recover the value of its investments or collateral security that are in possession of an outside party. Of the System's total investment in equity securities of \$32,968,012, the share ownership is held in the custodial "street name" of State Street, however, the value representing those stocks is credited to the System and is held in Trust for the Town of Plymouth Retirement System. These investments are evidenced by statements which include individual CUSIP numbers for each security. This recording of ownership is consistent with the normal and usual practice of entities that use a custodial bank. In the U.S., customer securities are held in fiduciary, custodial or other agency capacity and ownership of the securities remain with the customer. Furthermore, should any liens or claims be made against State Street (counterparty), no creditors would have any access to the funds of the customer.

Interest Rate Risk

In order to provide an appropriate level of diversification for the Fund, investment manager(s) with complementary or diverse investment styles will be retained. Each manager will be required to sign and acknowledge these objectives and policies as well as guidelines specific to their investment style.

The duration of the fixed income portfolio shall be maintained within a range of +/- 15% of the duration of the fixed income benchmark designated in the "Manager Specific Guidelines".

Credit Risk

The fixed income portion of the Fund's assets shall be invested in marketable, fixed income securities of the first four quality grades, as established by one or more of the nationally recognized bond rating services. The average quality of all Bond holdings should be maintained at A or better unless otherwise stated in the "Manager Specific Guidelines".

Concentration of Credit Risk

For the System, no purchase of fixed income securities shall be made in any one issue or in any issuer, except U.S. Government obligations, if after the purchase more than 5% of that issue or of the fixed income obligations of that issuer would be owned by the Fund. Fixed Income investments shall be made only in issues with an outstanding value of at least \$50 million, valued at par, at the time of purchase.

NOTE 5 - ACTUARIAL VALUATION

The most recent actuarial valuation of the System was prepared as of January 1, 2017, and contained the following information:

The total covered employee payroll was \$43,541,368.

The actuarial accrued liability for active members was \$129,151,827.

The actuarial accrued liability for retired and inactive members was \$186,915,387.

The total actuarial accrued liability was \$316,067,214.

The actuarial value of assets was \$158,477,637.

The unfunded liability was \$157,589,577.

The normal cost for employees was \$3,925,018.

The normal cost for the employer was \$3,407,638.

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

Mortality:

The RP-2000 mortality table projected generationally with Scale BB

and a base year of 2009.

Investment return:

7,25%

Individual salary increase:

4.25%, 4.50%, and 4.75% for groups 1, 2, and 4 respectively.

Cost of living adjustments:

3.0% (of the first \$14,000)

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).

Actuarial cost method:

Individual entry age normal actuarial cost method.

NOTE 6 - MEMBERSHIP

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

Active members	884
Inactive members	139
Disabled members	89
Retirees and beneficiaries currently receiving benefits	644
Total	1,756

Additional Information

SCHEDULE OF FUNDING PROGRESS (Dollar amounts in thousands)

December 31, 2017

Actuarial Valuation Date	(1) Actuarial Value Of Assets	(2) Actuarial Accrued Liability (AAL) Entry Age	(3) Unfunded AAL (UAAL) (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll	((6) UAAL as a Percentage of Covered Payroll (3) / (5)
01/01/17	\$ 158,478	\$ 316,067	\$ 157,590	50.1%	\$ 43,541		361.9%
01/01/15	137,888	280,192	142,304	49.2%	39,498		360.3%
01/01/13	119,488	247,186	127,698	48.3%	35,741		357.3%
01/01/10	111,589	205,870	94,281	54.2%	35,665		264.4%
01/01/08	120,332	175,119	54,787	68.7%	34,232		160.0%
01/01/07	112,790	165,044	52,254	68.3%	32,532		160.6%
01/01/05	94,010	154,190	60,180	61.0%	30,061		200.2%
01/01/03	77,285	124,140	46,855	62.3%	28,957		161.8%
01/01/01	85,389	114,181	28,792	74.8%	27,445		104.9%
01/01/99	71,201	98,269	27,068	72.5%	25,721		105.2%