

NEEDHAM
RETIREMENT SYSTEM
AUDIT REPORT
JAN. 1, 2016 - DEC. 31, 2018



PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION
COMMONWEALTH OF MASSACHUSETTS

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PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chairman*

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

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | ROBERT B. McCARTHY | JENNIFER F. SULLIVAN

August 21, 2020

The Public Employee Retirement Administration Commission (PERAC) has completed a review of the audits of the Needham Retirement System conducted by the firm of Melanson Heath, Certified Public Accountants. Melanson Heath conducted these audits in accordance with auditing standards generally accepted in the United States of America. The audits covered the period from January 1, 2016 to December 31, 2018.

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

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

Accordingly, we supplemented the field work conducted in the audits by Melanson Heath with certain limited procedures designed to provide additional assurance that the accounting and management standards established by PERAC were adhered to and complied with. The specific objectives of our review were to determine: 1) that the Board is exercising appropriate fiduciary oversight, 2) that cash balances are accurately stated, 3) that travel expenses were properly documented and accounted for, 4) that retirement contributions are accurately deducted, 5) that retirement allowances were correctly calculated, and 6) that required member documentation is maintained.

To achieve these objectives, we inspected certain records of the Needham Retirement Board in the above areas. Specifically, we reviewed the minutes of the Board meetings for compliance with fiduciary oversight, verified cash balances, and tested a sample of travel expenses for Board approvals, supporting documentation and proper accounting. We tested the payroll records of a sample of active members to confirm that the correct percentage of regular compensation is being deducted, including the additional two percent over \$30,000. We tested a sample of members who retired during our audit period to verify that their retirement allowance was calculated in accordance with the statute. We, also, reviewed a sample of member files for accuracy and completeness.



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

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

The financial statements and footnotes presented in this report were limited to the express results as of and for the years ended December 31, 2018, December 31, 2017, and December 31, 2016.

In closing, I wish to acknowledge the work of Melanson Heath, who conducted these examinations, and PERAC examiners, Elaine Pursley and Richard Wrona, who conducted limited procedures to supplement the field work, and express my appreciation to the Needham Retirement Board and staff for their courtesy and cooperation.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Parsons". The signature is stylized and cursive.

John W. Parsons, Esq.
Executive Director

EXPLANATION OF FINDINGS AND RECOMMENDATIONS

I. Cash Reconciliations:

We found the following issues regarding the reconciliations of the Board's bank accounts.

a. Timeliness and Accuracy of Reconciliations

Bank reconciliations for the expense and payroll accounts were not being performed timely. As a result, there were numerous adjustments that needed to be made to the accounting records. For example, the most recent reconciliation as of the start of our field work (November 2019) had an expense account balance that was \$26,653 lower than the general ledger balance and a payroll account balance that was \$8,082 higher than the general ledger balance. To correct these, adjustments with an absolute value of \$77,060 needed to be made to the expense account, and another \$25,901 in adjustments to the payroll account. Additionally, there are several old reconciling items. The November 2019 payroll account reconciliation had an adjustment that went back to July 2018 that had not been entered in the accounting records. Lastly, the reconciliations were neither signed nor dated by the preparer.

b. Board Monitoring of Cash Reconciliations

The Board was presented with incomplete monthly bank reconciliations which were tabled and accumulated for several consecutive months before they were completed and accepted by the Board. For example, we noted the February through December 2016 reconciliations were presented at the February 8, 2017 meeting, and the February through June 2018 reconciliations were presented at the August 9, 2018 meeting.

Recommendations:

The Needham Retirement Board should ensure that cash reconciliations are completed timely, presented to the Board for monthly review, and are signed and dated by the preparer. They should also monitor the reconciliations to ensure that adjustments needed are well-documented and entered into the accounting records timely.

Board Response:

Since mid-2019, bank reconciliations were completed by the Retirement Office and made available to the Board, public and discussed at every board meeting and in every board meeting packet.

2. PRIT Cash:

Most PRIT statements for the audit period were not available. Current board staff were only able to provide the December statements for each year audited (i.e. December 2016, 2017 and 2018).

In addition, the Board did not have PRIT Cash reconciliations for the following eleven months:

- March through September and November 2016
- May and November 2017
- November 2018

Since all cash deposits, such as members' deductions from payroll and transfers in, are made to the PRIT Cash account, the reconciliations should include descriptions for each item listed under Deposits

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (CONTINUED)

In Transit. There should not be one lump sum of Deposits In Transit on the reconciliations as found on the December 2019 PRIT Cash reconciliation.

The reconciliations should include signatures for the preparer and reviewer, along with dates of completion for better documentation.

Recommendation: PRIT Cash should be reviewed each month and the manager statements retained.

Board Response:

Since mid-2019, every PRIT statement is included in every monthly board meeting packet and presented to the Board. Since mid-2019, every PRIT Reconciliation does include the itemized breakdown of each in-transit item, however, it's on the right margin of the spreadsheet and not part of the main printable fields that ultimately are included in the Board PRIT Reconciliation Summary Page. However, in every Board Packet, we have a disclaimer, that the Board or the Public, can always request any and all backup—whether it be an invoice, adjustment, in-transit item or anything that is transacted.

3. Regular Compensation:

We found a variety of issues with how employee deductions for retirement were calculated, as follows:

- On call pay was erroneously included in regular compensation for retirement deductions when the on-call work was voluntary. 840 CMR 15.03 3(b) requires payments to be for services that are “non-discretionary”. This affected both the Town DPW and the Housing Authority payrolls.
- Opt Out Incentive pay, which is paid to employees who work over two years and opt out of the town provided health insurance, was erroneously included in regular compensation for three school employees. 840 CMR 15.03 3(a) requires regular compensation to be paid to “an employee for services performed in the course of employment for his employer”.
- One active member was paid as both a social worker and program specialist, but only the social worker pay was included in regular compensation for retirement deduction purposes. Since the program specialist pay was for hours that were “pre-determined, non-discretionary, [and] guaranteed” (840 CMR 15.03 3(b)), this pay should have been included in regular compensation for retirement deductions.
- Two members erroneously had a portion of their Longevity pay listed as overtime and excluded from regular compensation. Longevity pay is regular compensation pursuant to 840 CMR 15.03 3(b).

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (CONTINUED)

Recommendations:

Board staff and the respective payroll departments should review the payroll deduction issues identified. Deductions erroneously withheld from employee pay should be returned to the employees and additional deductions should be collected where necessary.

Board Response:

We concede that the previous administration had challenges but after PERAC's extensive audit, we thank PERAC for bringing these issues to our attention. In turn, we've asked for, and received action lists of the people and their situations so we can proactively fix these individual's and their accounts where warranted.

4. New Retirees

We sampled 13 files of members that retired during the audit period and found a variety of issues.

- Three of the retirees' files did not contain the member's retirement application.
- Four files did not have the PERAC approval letter.
- Only two of the 13 retirements tested could be found as approved in the Board minutes. Although the other 11 retirees may have been voted as approved, the Board did not retain information to show the specific individuals approved for retirement.
- Two retirees' files did not contain the final calculation of the retirement allowance. We had to piece together information from various documents in the file, some being a few years old, to calculate an estimate of the allowance.
- We found four of the retirees sampled were overpaid from \$419 to \$1,145 per year. Some of the reasons for the overpayments include incorrect calculation of creditable service and using an incorrect average compensation to compute retirement benefits. We also found one retiree was receiving a higher current retirement benefit compared to the approved original benefit amount plus subsequent cost of living increases.
- We found four of the retirees sampled were underpaid from \$349 to \$2,955 per year. Some of the reasons for the underpayments were not including holiday pay when calculating average compensations, computing average compensation using the member's lower weekly workers' compensation rather than the larger regular wage rate, and not including a retroactive salary increase in computing average compensation.

Recommendations:

Board staff should review retirees' files for completeness, including retaining a member's retirement application, submit and retain PERAC approval letters, retain documentation approving actions taken in board meetings, and prepare and retain final calculation sheets. Additionally, the files we identified with computation errors should be reviewed and, if necessary, corrected.

Board Response:

Since mid-2019, the Office, reviews each new member's file for completeness and correction. The Office retains all new member files as well as all calculations, estimates, and correspondence from the

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (CONTINUED)

member or other towns. We save all files—military, marriage certificates, death certificates, divorce agreements, transfer files, buybacks, as well as all PERAC forms and applications. We save everything.

5. Travel Expenses:

We were not provided with any reimbursement forms or supporting documentation for travel expenses reimbursed to the Board members and retirement office staff during 2016-2017. Therefore, we were not able to test the accuracy or validity of the 2016-2017 travel expenses totaling \$7,184.

We did receive supporting documents for the 2018 travel expense reimbursements tested. We noted that the reimbursements included per diem meal charges without any receipts. The Needham Retirement Board's Travel Policy states there must be receipts for expenses over \$10.00.

Recommendations:

The Retirement Board must maintain supporting documentation for travel reimbursements. The Board must comply with their Travel Policy and require receipts for expenses over \$10.00. The Board may wish to review their Travel Policy, which was last updated in 2010.

Board Response:

Since mid-2019, the Office, prepares extensive and thorough expense reports including all receipts and maps that calculate mileage. We are in the process of reviewing and updating our travel policy which is getting dated and dates back to 2010 for the last revision. For per diem rates, we refer to the GSA federally-mandated guidelines stipulated for each territory, region and locality.

FINAL DETERMINATION:

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

SUPPLEMENTARY INFORMATION

SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

AS OF DECEMBER 31, 2018		
	MARKET VALUE	PERCENTAGE OF TOTAL ASSETS
Cash	\$3,611,665	2.3%
PRIT Cash Fund	385,378	0.2%
PRIT Core Fund	<u>154,662,006</u>	<u>97.5%</u>
Grand Total	<u>\$158,659,049</u>	<u>100.0%</u>

For the year ending December 31, 2018, the rate of return for the investments of the Needham Retirement System was -1.72%. For the five-year period ending December 31, 2018, the rate of return for the investments of the Needham Retirement System averaged 6.44%. For the 33-year period ending December 31, 2018, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Needham Retirement System was 9.43%.

The composite rate of return for all retirement systems for the year ending December 31, 2018 was -2.25%. For the five-year period ending December 31, 2018, the composite rate of return for the investments of all retirement systems averaged 6.22%. For the 33-year period ending December 31, 2018, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.00%.

SUPPLEMENTARY INFORMATION (Continued)

ADMINISTRATION OF THE SYSTEM

The System is administered by a five-person Board of Retirement consisting of the Town Treasurer who shall be a member ex-officio, a second member appointed by the governing authority, a third and fourth member who shall be elected by the members in or retired from the service of such system, and a fifth member appointed by the other four board members.

Ex-officio Member:	Evelyn M. Pones, Chairperson		
Appointed Member:	Sandra Cincotta	Term Expires:	1/27/2022
Elected Member:	John Krawiecki	Term Expires:	7/22/2022
Elected Member:	Vacant	Term Expires:	
Appointed Member:	Robert P. Mearls	Term Expires:	4/15/2021

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

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

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

BOARD REGULATIONS

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

SUPPLEMENTARY INFORMATION (Continued)

ACTUARIAL VALUATION AND ASSUMPTIONS

The most recent actuarial valuation of the System was prepared by Segal Consulting as of January 1, 2018.

The actuarial liability for active members was	\$110,974,798
The actuarial liability for inactive members was	3,394,516
The actuarial liability for retired members was	<u>115,286,861</u>
The total actuarial liability was	\$229,656,175
System assets as of that date were (actuarial value)	<u>157,994,334</u>
The unfunded actuarial liability was	<u>\$71,661,841</u>
The ratio of system's assets to total actuarial liability was	68.8%
As of that date the total covered employee payroll was	\$37,654,836*

The normal cost for employees on that date was 10.1% of payroll
 The normal cost for the employer including administrative expenses was 6.2% of payroll

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

Investment Return: 7.25% per annum
 Rate of Salary Increase: Varies by group and service

SCHEDULE OF FUNDING PROGRESS AS OF JANUARY 1, 2018

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll* (c)	UAAL as a % of Cov. Payroll ((b-a)/c)
1/1/2018	\$157,994,334	\$229,656,175	\$71,661,841	68.8%	\$37,654,836	190.3%
1/1/2017	\$147,126,019	\$212,111,989	\$64,985,970	69.4%	\$36,432,203	178.4%
1/1/2015	\$131,541,187	\$191,665,860	\$60,124,673	68.6%	\$33,686,645	178.5%
1/1/2014	\$122,084,535	\$179,834,295	\$57,749,760	67.9%	\$32,605,497	177.1%
1/1/2013	\$112,131,508	\$168,935,280	\$56,803,772	66.4%	\$31,597,470	179.8%
1/1/2012	\$114,445,376	\$156,914,866	\$42,469,490	72.9%	\$28,963,004	146.6%

*1/1/18 – Payroll reflects annualized salaries for the prior year.
 1/1/17 and prior – Payroll reflects projected payroll for the current year.

SUPPLEMENTARY INFORMATION (Continued)

MEMBERSHIP EXHIBIT

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Retirement in Past Years										
Superannuation	11	15	12	15	26	24	14	20	18	20
Ordinary Disability	0	0	0	0	0	0	0	0	0	0
Accidental Disability	1	4	1	0	0	0	3	0	0	1
Total Retirements	12	19	13	15	26	24	17	20	18	21
Total Retirees, Beneficiaries and Survivors	489	475	475	471	464	462	463	451	455	449
Total Active Members	674	680	644	646	631	647	650	634	649	692
Pension Payments										
Superannuation	\$5,954,325	\$6,188,678	\$6,409,252	\$6,681,870	\$6,795,072	\$7,161,286	\$7,490,206	\$7,864,526	\$7,973,099	\$8,124,078
Survivor/Beneficiary Payments	319,257	325,139	354,773	354,817	372,199	388,920	379,191	400,164	479,694	519,141
Ordinary Disability	19,226	19,586	19,946	20,306	20,666	21,026	21,416	21,836	22,256	22,676
Accidental Disability	1,073,394	1,057,937	1,066,547	1,003,327	970,920	1,000,368	1,129,072	1,257,231	1,288,350	1,324,735
Other	<u>638,302</u>	<u>600,448</u>	<u>699,298</u>	<u>796,194</u>	<u>786,814</u>	<u>675,440</u>	<u>701,275</u>	<u>788,315</u>	<u>861,708</u>	<u>1,124,316</u>
Total Payments for Year	<u>\$8,004,504</u>	<u>\$8,191,788</u>	<u>\$8,549,816</u>	<u>\$8,856,514</u>	<u>\$8,945,671</u>	<u>\$9,247,040</u>	<u>\$9,721,160</u>	<u>\$10,332,071</u>	<u>\$10,625,107</u>	<u>\$11,114,946</u>



NEEDHAM RETIREMENT SYSTEM

(A Component Unit of the Town of Needham, Massachusetts)
**Financial Statements, Required Supplementary Information
and Other Information
For the Year Ended December 31, 2018**

(With Independent Auditors' Report Thereon)

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INDEPENDENT AUDITORS' REPORT

To the Retirement System Board
Town of Needham, Massachusetts

Additional Offices:

Nashua, NH
Manchester, NH
Greenfield, MA
Ellsworth, ME

We have audited the accompanying financial statements of the Needham Retirement System (the System), a component unit of the Town of Needham, Massachusetts as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The System's 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.

Auditors' Responsibility

Our responsibility is to express opinions 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. 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 fiduciary net position of the System as of December 31, 2018, and the respective changes in fiduciary net 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 State of America require that the Management’s Discussion and Analysis and the Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns, listed in the foregoing table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic 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 basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

Melanson Heath

November 12, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Needham Retirement System (the System), we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2018.

A. OVERVIEW OF THE FINANCIAL STATEMENTS

The System's financial statements are comprised of a statement of plan fiduciary position, statement of changes in plan fiduciary position, and notes to the financial statements. This report also contains supplementary information in addition to the basic financial statements themselves.

The Statement of Plan Fiduciary Position presents information on the System's assets and liabilities and the resulting net position held in trust for pension benefits. This statement reflects the System's investments at fair value, as well as cash and liabilities.

The Statement of Changes in Plan Fiduciary Position presents information showing how the System's net position available for benefits changed during the year ended December 31, 2018. It reflects contributions by members and participating employers along with deductions for retirement benefits, refunds and transfers, and administrative expenses. Investment income during the period is also presented showing income from investing.

The Notes to Financial Statements provide additional information that is essential for the reader to gain a full understanding of the data provided in the financial statements.

The Required Supplemental Information includes this management's discussion and analysis and Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns.

B. FINANCIAL HIGHLIGHTS

- The System's total net position available for benefits was \$158,729,118 at December 31, 2018.
- The System's net position decreased by \$5,654,022.
- Employer and employee contributions to the plan were \$11,991,582 which represents a \$1,046,990 increase over the preceding year. The employer share of contributions represents 66% of the total contributions. Employer's contributions are made in accordance with a funding schedule approved by the Massachusetts Public Employee Retirement Administration Commission.

- Benefits paid to plan participants were \$13,350,840. At December 31, 2018, there were 463 retirees and beneficiaries in receipt of pension benefits.
- The System was 66.48% funded based on its accounting valuation report of December 31, 2018.

C. FINANCIAL STATEMENT ANALYSIS

The following is a summary of financial statement data for the current and prior fiscal years.

<u>FIDUCIARY NET POSITION (000s)</u>		
	<u>2018</u>	<u>2017</u>
Assets		
Cash and receivables	\$ 4,081	\$ 3,257
Investments	<u>154,662</u>	<u>161,143</u>
Total assets	158,743	164,400
Liabilities		
Accounts payable	<u>14</u>	<u>17</u>
Net Position	<u>\$ 158,729</u>	<u>\$ 164,383</u>

<u>CHANGES IN FIDUCIARY NET POSITION (000s)</u>		
	<u>2018</u>	<u>2017</u>
Additions		
Contributions	\$ 12,229	\$ 11,924
Investment Income, net	<u>(3,706)</u>	<u>23,857</u>
Total Additions	8,523	35,781
Deductions		
Benefit payments	13,351	12,645
Other	<u>826</u>	<u>1,079</u>
Total Deductions	<u>14,177</u>	<u>13,724</u>
Changes in net position	(5,654)	22,057
Net position - beginning of year	<u>164,383</u>	<u>142,326</u>
Net position - end of year	<u>\$ 158,729</u>	<u>\$ 164,383</u>

The amount needed to finance benefits is accumulated through the collection of employers' and employee's contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA and through earnings on investments. Contributions and net investment loss for calendar year 2018 resulted in total additions to the plan of \$8,522,345. Employer's

contributions increased by \$620,247 or 8.5% over the prior year. The System had net investment loss of \$3,706,483, a decrease of \$27,563,508 or 115.5% from the previous year due to market performance.

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the System. Total deductions for 2018 were \$14,176,367, which represents an increase of \$452,396 or 3.3% from the previous year. The payment of pension benefits increased by \$705,969 or 5.6% over the previous year. The increase in these expenses resulted from new retirees and cost-of-living expenses.

D. RETURN ON INVESTMENT AND FUNDING

The Needham Retirement Board continually monitors investment performance at its monthly meetings and meetings with PRIT representatives on an as-needed basis. PRIT representatives satisfactorily responded to the Board's many questions and concerns including asset allocation, new investment strategies, fee structure, and other related issues. For the one-year ended December 31, 2018, the PRIT Fund was down 1.8%, (-2.3% net), outperforming the total core benchmark of -2.3% by 43 basis points (0 bps net). For PRIT Fund's Asset Allocations and rate of returns, see Notes to the Financial Statements.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Needham, Massachusetts Contributory Retirement System's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to:

Town of Needham, Massachusetts
Contributory Retirement System
1471 Highland Avenue
Needham, Massachusetts 02492

NEEDHAM RETIREMENT SYSTEM

(A Component Unit of the Town of Needham, Massachusetts)

Statement of Plan Fiduciary Position

December 31, 2018

ASSETS

Cash and short-term investments	\$ 3,997,043
Investments - PRIT external investment pool	154,662,006
Accounts receivable	<u>83,584</u>
Total Assets	<u>\$ 158,742,633</u>

LIABILITIES AND NET POSITION

Accounts payable	\$ <u>13,515</u>
Total Liabilities	13,515
Net position restricted for pensions	<u>158,729,118</u>
Total Liabilities and Net Position	<u>\$ 158,742,633</u>

The accompanying notes are an integral part of these financial statements.

NEEDHAM RETIREMENT SYSTEM

(A Component Unit of the Town of Needham, Massachusetts)

Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2018

Additions

Contributions:

Employers	\$ 7,934,482
Plan members	4,057,100
Other systems and Commonwealth of Massachusetts	<u>237,246</u>
Total contributions	12,228,828

Investment income:

Investment earnings	11,861,594
Change in fair value of investments	(14,721,291)
Less: management fees	<u>(846,786)</u>
Net investment loss	<u>(3,706,483)</u>

Total additions 8,522,345

Deductions

Benefit payments to plan members and beneficiaries	13,350,840
Refunds to plan members	288,248
Transfers to other systems	209,137
Administrative expenses	<u>328,142</u>
Total deductions	<u>14,176,367</u>
Net decrease	(5,654,022)

Net position restricted for pensions

Beginning of year	<u>164,383,140</u>
End of year	<u>\$ 158,729,118</u>

The accompanying notes are an integral part of these financial statements.

NEEDHAM RETIREMENT SYSTEM

Notes to Financial Statements

1. Description of Plan

Substantially all employees of the Town of Needham, Massachusetts (except teachers and administrators under contract employed by the School Department) and Needham Housing Authority are members of the Needham Retirement System (the System), a cost sharing, multiple employer, public employee retirement system (PERS). Eligible employees must participate in the System. The pension plan provides pension benefits, deferred allowances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, contribution percentages and benefits paid. The System Retirement Board does not have the authority to amend benefit provisions.

Membership of each plan consisted of the following at December 31, 2018:

Number of retired participants and beneficiaries	463
Number of inactive participants entitled to a return of their employee contributions	191
Number of inactive participants with a vested right to a deferred or immediate benefit	18
Number of active participants	<u>650</u>
Total	<u>1,322</u>
Number of participating employers	2

Participants contribute a set percentage of their gross regular compensation annually. Employee contribution percentages are specified in Chapter 32 of the Massachusetts General Laws. The employee's individual contribution percentage is determined by their date of entry into the system. In addition, all employees hired after January 1, 1979 contribute an additional 2% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5%
January 1, 1975 - December 31, 1983	7%
January 1, 1984 - June 30, 1996	8%
Beginning July 1, 1996	9%

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 those

hired prior to April 2, 2012 and the highest five-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100 percent, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation and group classification.

A retirement allowance may be received at any age, upon attaining 20 years of service. The plan also provides for retirement at age 55 if the participant was a member prior to January 1, 1978, with no minimum vesting requirements. If the participant was a member on or after January 1, 1978 and a member of Groups 1 or 2, then a retirement allowance may be received if the participant (1) has at least 10 years of creditable service, (2) is age 55, (3) voluntarily left Town employment on or after that date, and (4) left accumulated annuity deductions in the fund. Members of Group 4, have no minimum vesting requirements, however, must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A participant who became a member on or after April 2, 2012 is eligible for a retirement allowance upon 10 years creditable service and reaching ages 60 or 55 for Groups 1 and 2, respectively. Participants in Group 4 must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and a portion of the interest they generate constitute the annuity. The difference between the total retirement allowance and the annuity is the pension. The average retirement benefit is approximately 80-85% pension and 15-20% annuity.

Employees who resign from service and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total deductions. Members voluntarily withdrawing with at least 10 years of service or involuntarily withdrawing, receive 100% of the regular interest that has accrued on those accumulated total deductions. Members voluntarily withdrawing with less than 10 years of service get credited interest each year at a rate of 3%.

2. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

Instituted in 1937, the System is a member of the Massachusetts Contributory Retirement Systems and is governed by Chapter 32 of the Massachusetts General Laws. Because of the significance of its operational and financial relationship with the Town, the System is included as a pension trust fund in the Town's basic financial systems. The system is governed by a five-member board. The five members include two appointed by the Town, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of the Public Employee Retirement Administration Commission.

Summary of Significant Accounting Policies

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2018 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of the System are summarized below:

Basis of Accounting

The System follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the System's employees are recognized as revenue in the period in which employees provide services to the System. Investment income is recognized as earned by the pension plan. The net appreciation (depreciation) in the fair value of investments held by the pension plan is recorded as an increase (decrease) to investment income based on the valuation of investments as of the date of the balance sheet.

Investments

Investment Policy

Investments are reported at fair value. System assets are managed by PRIT on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan.

Rate of Return

For the year ended December 31, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was -2.36%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

3. Cash and Short-Term Investments

Custodial Credit Risk - Deposits. Custodial credit risk is the risk that in the event of a bank failure, the System deposits may not be returned. Massachusetts General Law Chapter 32, Section 23, limits the System's deposits "in a bank or trust company to an amount not exceeding ten percent of the capital and surplus of such bank or trust company." The System does not have a deposit policy for custodial credit risk.

As of December 31, 2018, the System's bank balance of \$3,929,858 represents deposits of \$5,584 insured by FDIC, and \$1,978,160 invested in Massachusetts Municipal Depository Trust (MMDT), and \$230,579 invested in PRIT. The Massachusetts Municipal Depository Trust (MMDT) Cash Portfolio is an external state investment pool and is not SEC-registered. The fund is State-regulated and is valued at amortized cost. PRIT Cash Fund III is measured at fair value and maintains a stable net position value of \$1.00 per unit (NAV) with daily redemption frequency. Amounts invested in the state pools are not subject to custodial credit risk disclosure.

4. Investments

A. Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Massachusetts General Law, Chapter 32, Section 23, limits the investment of System funds, to the extent not required for current disbursements, in the PRIT Fund or in securities, other than mortgages or collateral loans, which are legal for the investment of funds in savings banks under the laws of the Commonwealth, provided that no more than the established percentage of assets, is invested in any one security.

At December 31, 2018, the System maintained its investments in the State Investment Pool (PRIT)* with a fair value of \$154,662,006. The PRIT fund is an external investment pool that is not registered with the Securities Exchange Commission. This investment type is not rated. The PRIT Fund issues separately available financial statements with a year end of June 30.

**Fair value is the same as the value of the pool share. The Pension Reserves Investment Trust was created under Massachusetts general law, Chapter 32, Section 22, in December 1983. The Pension Reserves Investment Trust is operated under contract with a private investment advisor, approved by the Pension Reserves Investment Management Board. The Pension Reserves Investment Management Board shall choose an investment advisor by requesting proposals from advisors and reviewing such proposals based on criteria adopted under Massachusetts general law, Chapter 30B.*

B. Custodial Credit Risk

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The System does not have policies for custodial credit risk.

The System's investments of \$154,662,006 are invested in the State investment pool (PRIT) and are not subject to custodial credit risk disclosure.

C. Concentration of Credit Risk

The System's invests in PRIT fund, consistent with Massachusetts General Law Chapter 32, Section 23.

D. Fair Value

The System has the following investments measured at the net asset value (NAV) as of December 31, 2018:

<u>Description</u>	<u>Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If currently eligible)</u>	<u>Redemption Notice Period</u>
External investment pool	\$ 154,662,006	\$ -	Monthly	30 days

5. Contingencies

There are various pending claims arising in the ordinary course of operations; however, management believes that the probable liability resulting from such claims and litigation would not materially affect the System's financial position.

6. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at December 31, 2018 were as follows:

A. Net Pension Liability of Employers

Total pension liability	\$ 238,753,605
Plan fiduciary net position	<u>158,729,118</u>
Employers' net pension liability	<u>\$ 80,024,487</u>
Plan fiduciary net position as a percentage of total pension liability	66.48%

B. Actuarial Assumptions

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation Date	1/1/2018
Actuarial cost method	Entry Age
Actuarial assumptions:	
Investment rate of return	7.25%
Projected salary decreases	4.25% for Group 1 4.50% for Group 2 4.75% for Group 4
Inflation rate	3.50%
Post-retirement cost-of-living adjustment	3% of the first \$14,000

Actuarial valuation of the ongoing Systems involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Mortality rates were based on:

- Pre-Retirement: RP-2014 Blue Collar Employee Mortality Table projected generationally using Scale MP-2016 (previously, set forward one year for females)
- Healthy: RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2016 (previously, set forward one year for females)
- Disabled: RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D

Changes of assumptions

Effective January 1, 2018:

- Investment rate of return, previously, 7.50% decreased to 7.25%.
- The administrative expense assumption was increased from \$285,000 for calendar 2017 to \$325,000 for calendar 2018.

C. Target Allocations

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates 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 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 System's targeted asset allocation as of December 31, 2018, are summarized in the following table.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic equity	21.00%	6.16%
International developed markets equity	13.00%	6.69%
International emerging markets equity	5.00%	9.47%
Core fixed income	15.00%	1.89%
High-yield fixed income	8.00%	4.00%
Real estate	10.00%	4.58%
Commodities	4.00%	4.77%
Hedge fund, GTAA, risk parity	11.00%	3.68%
Private equity	<u>13.00%</u>	10.00%
Total	<u>100.00%</u>	

D. Discount Rate

The discount rate used to measure the total pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the 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.

E. Sensitivity of Discount Rate

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

	1% Decrease <u>(6.25%)</u>	Current Discount Rate <u>(7.25%)</u>	1% Increase <u>(8.25%)</u>
Net pension liability of participating employers as of December 31, 2018	\$ 107,072,683	\$ 80,024,487	\$ 57,212,519

F. Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the System for the year ended December 31, 2018:

	Deferred Outflows of <u>Resources</u>	Deferred (Inflows) of <u>Resources</u>
Differences between expected and actual experience	\$ 514,200	\$ (364,785)
Changes of assumptions	6,894,452	-
Net difference between projected and actual earnings on pension plan investments	6,508,337	-
Changes in proportion and differences between contributions and proportionate share of contributions	<u>104,199</u>	<u>(104,199)</u>
Total	<u>\$ 14,021,188</u>	<u>\$ (468,984)</u>

The following summarizes changes in deferred outflows/inflows:

	Measurement Year	Amortization Period	Beginning Balance on Prior Measurement Period Deferrals	Current Measurement Period Additions	Amortization of Amounts Recognized in Current Period Pension Expense	End of Year Balance
Deferred Outflows of Resources:						
Difference between expected and actual experience	2017	5	\$ 685,600	\$ -	\$ (171,400)	\$ 514,200
Net Differences between projected and actual earnings on pension plan investments	2015	5	3,856,478	-	(1,928,241)	1,928,237
Net Differences between projected and actual earnings on pension plan investments	2016	5	113,886	-	(37,962)	75,924
Net Differences between projected and actual earnings on pension plan investments	2017	5	(10,604,272)	-	2,651,068	(7,953,204)
Net Differences between projected and actual earnings on pension plan investments	2018	5	-	15,571,724	(3,114,344)	12,457,380
Change of assumption	2016	5	3,011,089	-	(1,003,697)	2,007,392
Change of assumption	2017	5	6,516,080	-	(1,629,020)	4,887,060
Change in proportionate share	2015	5	14,982	-	(7,491)	7,491
Change in proportionate share	2016	5	70,445	-	(23,482)	46,963
Change in proportionate share	2017	5	33,384	-	(8,346)	25,038
Change in proportionate share	2018	5	-	30,884	(6,177)	24,707
Total Deferred Outflows of Resources			3,697,672	15,602,608	(5,279,092)	14,021,188
Deferred (Inflows) of Resources:						
Difference between expected and actual experience	2014	5	(6,468)	-	6,468	-
Difference between expected and actual experience	2016	5	(547,177)	-	182,392	(364,785)
Change in proportionate share	2015	5	(14,982)	-	7,491	(7,491)
Change in proportionate share	2016	5	(70,445)	-	23,482	(46,963)
Change in proportionate share	2017	5	(33,384)	-	8,346	(25,038)
Change in proportionate share	2018	5	-	(30,884)	6,177	(24,707)
Total Deferred (Inflows) of Resources			(672,456)	(30,884)	234,356	(468,984)
Total Collective Deferred (Inflows) Outflows of Resources			\$ 3,025,216	\$ 15,571,724	\$ (5,044,736)	\$ 13,552,204

The following schedule reflects the amortization of the balance of deferred outflows/inflows of resources:

Year ended June 30:	Deferred Outflows (Inflows) of Resources	Deferred Outflows (Inflows) of Resources
	<u>Town</u>	<u>Housing</u>
2020	\$ 4,990,055	\$ 61,144
2021	3,099,586	23,377
2022	2,230,328	33,369
2023	<u>3,059,272</u>	<u>55,073</u>
Total	<u>\$ 13,379,241</u>	<u>\$ 172,963</u>

NEEDHAM RETIREMENT SYSTEM
Schedule of Changes in the Net Pension Liability
Required Supplementary Information
(Unaudited)

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability					
Service cost	\$ 5,820,915	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest on unfunded liability - time value of \$	16,589,494	15,828,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	-	857,000	(911,964)	-	(32,335)
Changes of assumptions	-	8,145,100	5,018,477	-	2,153,215
Changes of benefit terms	-	-	-	-	1,861,711
Benefit payments, including refunds of member contributions	<u>(13,312,979)</u>	<u>(12,430,464)</u>	<u>(12,076,857)</u>	<u>(11,477,777)</u>	<u>(10,562,871)</u>
Net change in total pension liability	9,097,430	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	<u>229,656,175</u>	<u>212,111,989</u>	<u>199,739,958</u>	<u>191,665,859</u>	<u>179,834,295</u>
Total pension liability - ending (a)	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859
Plan Fiduciary Net Position					
Contributions - employer	7,934,482	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	3,776,530	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income	(3,723,913)	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	<u>(13,312,979)</u>	<u>(12,430,464)</u>	<u>(12,076,857)</u>	<u>(11,477,777)</u>	<u>(10,562,870)</u>
Administrative expense	<u>(328,142)</u>	<u>(303,310)</u>	<u>(229,753)</u>	<u>(229,912)</u>	<u>(293,797)</u>
Net change in plan fiduciary net position	(5,654,022)	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	<u>164,383,140</u>	<u>142,326,470</u>	<u>134,691,303</u>	<u>136,261,674</u>	<u>128,673,500</u>
Plan fiduciary net position - ending (b)	<u>158,729,118</u>	<u>164,383,140</u>	<u>142,326,470</u>	<u>134,691,303</u>	<u>136,261,674</u>
Net pension liability (asset) - ending (a-b)	<u>\$ 80,024,487</u>	<u>\$ 65,273,035</u>	<u>\$ 69,785,519</u>	<u>\$ 65,048,655</u>	<u>\$ 55,404,185</u>

May reflect timing and/or classification differences from page 7.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See Independent Auditors Report

NEEDHAM RETIREMENT SYSTEM
Schedules of Net Pension Liability, Contributions, and Investment Returns
Required Supplementary Information
(Unaudited)

Schedule of Net Pension Liability

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 238,753,605	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>158,729,118</u>	<u>164,383,140</u>	<u>142,326,470</u>	<u>134,691,303</u>	<u>136,261,674</u>
Net pension liability	<u>\$ 80,024,487</u>	<u>\$ 65,273,035</u>	<u>\$ 69,785,519</u>	<u>\$ 65,048,655</u>	<u>\$ 55,404,185</u>
Plan fiduciary net position as a percentage of the total pension liability	66.48%	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Participating employer net pension liability as a percentage of covered payroll	203.50%	173.35%	199.87%	193.10%	171.99%

Schedule of Contributions

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 7,934,482	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>7,934,482</u>	<u>7,314,235</u>	<u>6,706,800</u>	<u>6,149,812</u>	<u>5,621,400</u>
Contribution deficiency (excess)	<u>\$ -</u>				
Covered payroll	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	20.18%	19.42%	19.21%	18.26%	17.45%

Schedule of Investment Returns

Year Ended December 31	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money weighted rate of return, net of investment expense	-2.36%	17.11%	7.42%	0.61%	7.64%

Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.

See Independent Auditors Report

Independent Auditors' Report

To the Retirement System Board
Town of Needham, Massachusetts

Additional Offices:

Nashua, NH
Manchester, NH
Greenfield, MA
Ellsworth, ME

Report on Schedules

We have audited the accompanying schedule of employer allocations of the Needham Retirement System (the System) as of and for the year ended December 31, 2018. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2018.

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.

Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column 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 column 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 specified column 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 specified column 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 specified column 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 specified column 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.

Opinion

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the System as of and for the year ended December 31, 2018, in accordance with accounting principles generally accepted in the United States of America.

Restriction on Use

Our report is intended solely for the information and use of the System management, the Retirement Board, System employers, and their auditors as of and for the year ended December 31, 2018 and is not intended to be and should not be used by anyone other than these specified parties.

Melanson Heath

November 12, 2019

NEEDHAM RETIREMENT SYSTEM

SCHEDULE OF EMPLOYER ALLOCATIONS

<u>Employer</u>	<u>FY2019 Actual Employer Contributions</u>	<u>Employer Allocation Percentage</u>
Town of Needham	\$ 7,809,911	98.430005%
Needham Housing Authority	<u>124,571</u>	<u>1.569995%</u>
Total	<u>\$ 7,934,482</u>	<u>100.000000%</u>

See actuarial assumptions in the notes to the financial statements.

NEEDHAM RETIREMENT SYSTEM
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
As of and for the year ended December 31, 2018

Entity	Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense		
	Net Pension Liability	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Differences Between Expected and Actual Experience	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts From Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Town of Needham	\$ 78,768,106	\$ 506,127	\$ 6,406,156	\$ 6,786,209	\$ 72,003	\$ 359,058	\$ 32,196	\$ 391,254	\$ 12,443,651	\$ 18,160	\$ 12,461,811
Needham Housing Authority	1,256,381	8,073	102,181	108,243	32,196	5,727	72,003	77,730	198,481	(18,160)	180,321
Total for All Entities	\$ 80,024,487	\$ 514,200	\$ 6,508,337	\$ 6,894,452	\$ 104,199	\$ 364,785	\$ 104,199	\$ 468,984	\$ 12,642,132	\$ -	\$ 12,642,132

See actuarial assumptions in the notes to the financial statements.

**NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**
(A Component Unit of the Town of
Needham, Massachusetts)

Financial Statements,
Required Supplementary Information,
and Other Information

For the Year Ended December 31, 2017
(With Independent Auditors' Report Thereon)

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INDEPENDENT AUDITORS' REPORT

To the Retirement System Board
Town of Needham, Massachusetts

Additional Offices:

Nashua, NH
Manchester, NH
Greenfield, MA
Ellsworth, ME

We have audited the accompanying financial statements of the Needham, Massachusetts Contributory Retirement System (the System), a component unit of the Town of Needham, Massachusetts as of and for the year ended December 31, 2017, and the related notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The System's 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.

Auditors' Responsibility

Our responsibility is to express opinions 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. 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 fiduciary net position of the System as of December 31, 2017, and the respective changes in fiduciary net 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 State of America require that the Management's Discussion and Analysis and the Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns, listed in the foregoing table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic 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 basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

Melanson Heath

December 12, 2018

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Needham Contributory Retirement System (the System), we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2017.

A. OVERVIEW OF THE FINANCIAL STATEMENTS

The System's financial statements are comprised of a statement of plan fiduciary position, statement of changes in plan fiduciary position, and notes to the financial statements. This report also contains supplementary information in addition to the basic financial statements themselves.

The Statement of Plan Fiduciary Position presents information on the System's assets and liabilities and the resulting net position held in trust for pension benefits. This statement reflects the System's investments at fair value, as well as cash and liabilities.

The Statement of Changes in Plan Fiduciary Position presents information showing how the System's net position available for benefits changed during the year ended December 31, 2017. It reflects contributions by members and participating employers along with deductions for retirement benefits, refunds and transfers, and administrative expenses. Investment income during the period is also presented showing income from investing.

The Notes to Financial Statements provide additional information that is essential for the reader to gain a full understanding of the data provided in the financial statements.

The Required Supplemental Information includes this management's discussion and analysis and Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns.

B. FINANCIAL HIGHLIGHTS

- The System's total net position available for benefits was \$164,383,140 at December 31, 2017.
- The System's net position increased by \$22,056,670.
- Employer and employee contributions to the plan were \$11,559,744 which represents a \$1,622,452 increase over the preceding year. The employer share of contributions represents 61% of the total contributions. Employer's contributions are made in accordance with a funding schedule approved by the Massachusetts Public Employee Retirement Administration Commission.

- Benefits paid to plan participants were \$12,644,871. At December 31, 2017, there were 462 retirees and beneficiaries in receipt of pension benefits.
- The System was 71.58% funded based on its accounting valuation report of December 31, 2017.

C. FINANCIAL STATEMENT ANALYSIS

The following is a summary of financial statement data for the current and prior fiscal years.

<u>FIDUCIARY NET POSITION (000s)</u>		
	<u>2017</u>	<u>2016</u>
Assets		
Cash and receivables	\$ 3,257	\$ 1,881
Investments	<u>161,143</u>	<u>140,459</u>
Total assets	164,400	142,340
Liabilities		
Accrued payroll and other	<u>17</u>	<u>14</u>
Net Position	<u>\$ 164,383</u>	<u>\$ 142,326</u>

<u>CHANGES IN FIDUCIARY NET POSITION (000s)</u>		
	<u>2017</u>	<u>2016</u>
Additions		
Contributions	\$ 11,919	\$ 10,949
Investment Income, net	<u>23,862</u>	<u>9,830</u>
Total Additions	35,781	20,779
Deductions		
Benefit payments	12,645	12,340
Other	<u>1,079</u>	<u>804</u>
Total Deductions	<u>13,724</u>	<u>13,144</u>
Changes in net position	22,057	7,635
Net position - beginning of year	<u>142,326</u>	<u>134,691</u>
Net position - end of year	<u>\$ 164,383</u>	<u>\$ 142,326</u>

The amount needed to finance benefits is accumulated through the collection of employers' and employee's contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA and through earnings on investments. Contributions and net investment gain for calendar year 2017 resulted in total additions to the plan of \$35,780,641. Employer's contributions increased by \$607,435 or 9.1% over the prior year. The System had net investment gain of

\$23,862,120, an increase of \$14,032,743 or 143% from the previous year due to market performance.

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the System. Total deductions for 2017 were \$13,723,971, which represents an increase of \$580,159 or 4.4% from the previous year. The payment of pension benefits increased by \$304,685 or 2.5% over the previous year. The increase in these expenses resulted from new retirees and cost-of-living expenses.

D. RETURN ON INVESTMENT AND FUNDING

The Needham Retirement Board continually monitors investment performance at its monthly meetings and meetings with PRIT representatives on an as-needed basis. PRIT representatives satisfactorily responded to the Board's many questions and concerns including asset allocation, new investment strategies, fee structure, and other related issues. Total PRIT fund performance (IRR) represented 17.1% increase in the total fund for the year ended December 31, 2017 outperforming the total core benchmark of 14.9% by about 220 basis points, net. For PRIT Fund's Asset Allocations and rate of returns, see Notes to the Financial Statements.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Needham, Massachusetts Contributory Retirement System's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to:

Town of Needham, Massachusetts
Contributory Retirement System
1471 Highland Avenue
Needham, Massachusetts 02492

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

(A Component Unit of the Town of Needham, Massachusetts)

Statement of Plan Fiduciary Position

December 31, 2017

ASSETS

Cash and short-term investments	\$ 3,182,744
Investments - PRIT external investment pool	161,143,397
Accounts receivable	<u>74,346</u>
Total Assets	<u>\$ 164,400,487</u>

LIABILITIES AND NET POSITION

Accounts payable	\$ <u>17,347</u>
Total Liabilities	17,347
Net position restricted for pensions	<u>164,383,140</u>
Total Liabilities and Net Position	<u>\$ 164,400,487</u>

The accompanying notes are an integral part of these financial statements.

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

(A Component Unit of the Town of Needham, Massachusetts)

Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2017

Additions:	
Contributions:	
Employers	\$ 7,314,235
Plan members	4,245,509
Other systems and Commonwealth of Massachusetts	<u>358,777</u>
Total contributions	11,918,521
Investment income:	
Appreciation in fair value of investments	24,654,905
Less: management fees	<u>(792,785)</u>
Net investment gain	<u>23,862,120</u>
Total additions	35,780,641
Deductions:	
Benefit payments to plan members and beneficiaries	12,644,871
Refunds to plan members	280,207
Transfers to other systems	495,583
Administrative expenses	<u>303,310</u>
Total deductions	<u>13,723,971</u>
Net increase	22,056,670
Net position restricted for pensions:	
Beginning of year	<u>142,326,470</u>
End of year	<u>\$ 164,383,140</u>

The accompanying notes are an integral part of these financial statements.

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM

Notes to Financial Statements

1. Description of Plan

Substantially all employees of the Town of Needham, Massachusetts (except teachers and administrators under contract employed by the School Department) and Needham Housing Authority are members of the Needham Contributory Retirement System (the System), a cost sharing, multiple employer public employee retirement system (PERS). Eligible employees must participate in the System. The pension plan provides pension benefits, deferred allowances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, contribution percentages and benefits paid. The System Retirement Board does not have the authority to amend benefit provisions.

Membership of each plan consisted of the following at December 31, 2017:

Number of retired participants and beneficiaries	462
Number of inactive participants entitled to a return of their employee contributions	161
Number of active participants	<u>647</u>
Total	<u>1,270</u>
Number of participating employers	2

Participants contribute a set percentage of their gross regular compensation annually. Employee contribution percentages are specified in Chapter 32 of the Massachusetts General Laws. The employee's individual contribution percentage is determined by their date of entry into the system. In addition, all employees hired after January 1, 1979 contribute an additional 2% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5%
January 1, 1975 - December 31, 1983	7%
January 1, 1984 - June 30, 1996	8%
Beginning July 1, 1996	9%

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 those hired prior to April 2, 2012 and the highest five-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the

Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100 percent, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation and group classification.

A retirement allowance may be received at any age, upon attaining 20 years of service. The plan also provides for retirement at age 55 if the participant was a member prior to January 1, 1978, with no minimum vesting requirements. If the participant was a member on or after January 1, 1978 and a member of Groups 1 or 2, then a retirement allowance may be received if the participant (1) has at least 10 years of creditable service, (2) is age 55, (3) voluntarily left Town employment on or after that date, and (4) left accumulated annuity deductions in the fund. Members of Group 4, have no minimum vesting requirements, however, must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A participant who became a member on or after April 2, 2012 is eligible for a retirement allowance upon 10 years creditable service and reaching ages 60 or 55 for Groups 1 and 2, respectively. Participants in Group 4 must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and a portion of the interest they generate constitute the annuity. The difference between the total retirement allowance and the annuity is the pension. The average retirement benefit is approximately 80-85% pension and 15-20% annuity.

Employees who resign from service and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total deductions. Members voluntarily withdrawing with at least 10 years of service or involuntarily withdrawing, receive 100% of the regular interest that has accrued on those accumulated total deductions. Members voluntarily withdrawing with less than 10 years of service get credited interest each year at a rate of 3%.

2. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

Instituted in 1937, the System is a member of the Massachusetts Contributory Retirement Systems and is governed by Chapter 32 of the Massachusetts

General Laws. Because of the significance of its operational and financial relationship with the Town, the System is included as a pension trust fund in the Town's basic financial systems. The system is governed by a five-member board. The five members include two appointed by the Town, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of the Public Employee Retirement Administration Commission.

Summary of Significant Accounting Policies

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2017 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of the System are summarized below:

Basis of Accounting

The System follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the System's employees are recognized as revenue in the period in which employees provide services to the System. Investment income is recognized as earned by the pension plan. The net appreciation (depreciation) in the fair value of investments held by the pension plan is recorded as an increase (decrease) to investment income based on the valuation of investments as of the date of the balance sheet.

Investments

Investment Policy

Investments are reported at fair value. System assets are managed by PRIT on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan.

Rate of Return

For the year ended December 31, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 17.11%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

3. Cash and Short-Term Investments

Custodial Credit Risk - Deposits. Custodial credit risk is the risk that in the event of a bank failure, the System deposits may not be returned. Massachusetts General

Law Chapter 32, Section 23, limits the System's deposits "in a bank or trust company to an amount not exceeding ten percent of the capital and surplus of such bank or trust company." The System does not have a deposit policy for custodial credit risk.

As of December 31, 2017, the System's bank balance of \$3,226,472 represents deposits of \$178,683 insured by FDIC, and \$2,749,987 invested in Massachusetts Municipal Depository Trust (MMDT), and \$297,802 invested in PRIT. The Massachusetts Municipal Depository Trust (MMDT) Cash Portfolio is an external state investment pool and is not SEC-registered. The fund is State-regulated and is valued at amortized cost. PRIT Cash Fund III is measured at fair value and maintains a stable net position value of \$1.00 per unit (NAV) with daily redemption frequency. Amounts invested in the state pools are not subject to custodial credit risk disclosure.

4. Investments

A. Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Massachusetts General Law, Chapter 32, Section 23, limits the investment of System funds, to the extent not required for current disbursements, in the PRIT Fund or in securities, other than mortgages or collateral loans, which are legal for the investment of funds in savings banks under the laws of the Commonwealth, provided that no more than the established percentage of assets, is invested in any one security.

At December 31, 2017, the System maintained its investments in the State Investment Pool (PRIT)* with a fair value of \$161,143,397. The PRIT fund is an external investment pool that is not registered with the Securities Exchange Commission. This investment type is not rated. The PRIT Fund issues separately available financial statements with a year end of June 30.

**Fair value is the same as the value of the pool share. The Pension Reserves Investment Trust was created under Massachusetts general law, chapter 32, section 22, in December 1983. The Pension Reserves Investment Trust is operated under contract with a private investment advisor, approved by the Pension Reserves Investment Management Board. The Pension Reserves Investment Management Board shall choose an investment advisor by requesting proposals from advisors and reviewing such proposals based on criteria adopted under Massachusetts general law, chapter 30B.*

B. Custodial Credit Risk

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral

securities that are in the possession of another party. The System does not have policies for custodial credit risk.

The System's investments of \$161,143,397 are invested in the State investment pool (PRIT) and are not subject to custodial credit risk disclosure.

C. Concentration of Credit Risk

The System's invests in PRIT fund, consistent with Massachusetts General Law Chapter 32, Section 23.

D. Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

E. Fair Value

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 *Fair Value Measurement and Application (GASB 72)*. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The System has the following investments measured at the net asset value (NAV) as of December 31, 2017:

<u>Description</u>	<u>Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If currently eligible)</u>	<u>Redemption Notice Period</u>
External investment pool	\$ 161,143,397	\$ -	Monthly	30 days

5. Accounts Payable

Accounts payable represent additional 2017 expenditures paid after December 31, 2017.

6. Contingencies

There are various pending claims arising in the ordinary course of operations; however, management believes that the probable liability resulting from such claims and litigation would not materially affect the System's financial position.

7. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at December 31, 2017 were as follows:

A. Net Pension Liability of Employers

Total pension liability	\$ 229,656,175
Plan fiduciary net position	<u>164,383,140</u>
Employers' net pension liability	<u>\$ 65,273,035</u>
Plan fiduciary net position as a percentage of total pension liability	71.58%

B. Actuarial Assumptions

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation Date	1/1/2018
Actuarial cost method	Entry Age
Actuarial assumptions:	
Investment rate of return	7.25%
Projected salary decreases	4.75% for Group 1
	4.75% for Group 2
	5.25% for Group 4
Inflation rate	3.50%
Post-retirement cost-of-living adjustment	3% of the first \$14,000

Actuarial valuation of the ongoing Systems involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Mortality rates were based on:

- Pre-Retirement: RP-2014 Blue Collar Employee Mortality Table projected generationally using Scale MP-2016 (previously, set forward one year for females)
- Healthy: RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2016 (previously, set forward one year for females)
- Disabled: RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D

Changes of assumptions

Effective January 1, 2018:

- Investment rate of return, previously, 7.50% decreased to 7.25%.
- The administrative expense assumption was increased from \$285,000 for calendar 2017 to \$325,000 for calendar 2018.

C. Target Allocations

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates 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 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 System’s targeted asset allocation as of December 31, 2017, are summarized in the following table.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Domestic equity	17.50%	6.15%
International developed markets equity	15.50%	7.11%
International emerging markets equity	6.00%	9.41%
Core fixed income	12.00%	1.68%
High-yield fixed income	10.00%	4.13%
Real estate	10.00%	1.50%
Commodities	4.00%	3.00%
Hedge fund, GTAA, risk parity	13.00%	3.94%
Private equity	12.00%	10.28%
Total	<u>100.00%</u>	

D. Discount Rate

The discount rate used to measure the total pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the 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.

E. Sensitivity of Discount Rate

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

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Town of Needham Contributory Retirement System's net pension liability	\$ 91,479,383	\$ 65,273,035	\$ 43,158,276

F. Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the System for the year ended December 31, 2017:

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Differences between expected and actual experience	\$ 685,600	\$ (553,645)
Changes of assumptions	9,957,810	-
Net difference between projected and actual earnings on pension plan investments	-	(6,581,363)
Changes in proportion and differences between contributions and proportionate share of contributions	118,811	(118,811)
Total	<u>\$ 10,762,221</u>	<u>\$ (7,253,819)</u>

The following summarizes changes in deferred outflows/inflows:

	Measurement Year	Amortization Period	Beginning Balance on Prior Measurement Period	Current Measurement Period Additions	Amortization of Amounts Recognized in Current Period Pension Expense	End of Year Balance
Deferred Outflows of Resources:						
Difference between expected and actual experience	2017	5	\$ -	\$ 857,000	\$ (171,400)	\$ 685,600
Change of assumption	2014	5	861,286	-	(430,645)	430,641
Change of assumption	2016	5	4,014,782	-	(1,003,693)	3,011,089
Change of assumption	2017	5	-	8,145,100	(1,629,020)	6,516,080
Change in proportionate share	2015	5	22,472	-	(7,490)	14,982
Change in proportionate share	2016	5	93,926	-	(23,481)	70,445
Change in proportionate share	2017	5	-	41,729	(8,345)	33,384
Total Deferred Outflows of Resources			4,992,466	9,043,829	(3,274,074)	10,762,221
Deferred (Inflows) of Resources:						
Net Differences between projected and actual earnings on pension plan investments	2014	5	105,093	-	(52,550)	52,543
Net Differences between projected and actual earnings on pension plan investments	2015	5	5,784,719	-	(1,928,240)	3,856,479
Net Differences between projected and actual earnings on pension plan investments	2016	5	151,846	-	(37,959)	113,887
Net Differences between projected and actual earnings on pension plan investments	2017	5	-	(13,255,340)	2,851,088	(10,604,272)
Difference between expected and actual experience	2014	5	(12,934)	-	6,466	(6,468)
Difference between expected and actual experience	2018	5	(729,571)	-	182,394	(547,177)
Change in proportionate share	2015	5	(22,472)	-	7,490	(14,982)
Change in proportionate share	2016	5	(93,926)	-	23,481	(70,445)
Change in proportionate share	2015	5	-	(41,729)	8,345	(33,384)
Total Deferred (Inflows) of Resources			5,182,755	(13,297,069)	860,495	(7,253,819)
Total Collective Deferred (Inflows) Outflows of Resources			\$ 10,175,221	\$ (4,253,240)	\$ (2,413,579)	\$ 3,508,402

The following schedule reflects the amortization of the balance of deferred outflows/inflows of resources:

Year ended June 30:	Deferred Outflows (Inflows) of Resources Town	Deferred Outflows (Inflows) of Resources Housing
2019	\$ 2,401,228	\$ 12,350
2020	1,931,751	5,103
2021	40,316	(31,698)
2022	(829,372)	(21,276)
Total	\$ 3,543,923	\$ (35,521)

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**
Schedule of Changes in the Net Pension Liability
Required Supplementary Information
(Unaudited)

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability				
Service cost	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest on unfunded liability - time value of \$	15,828,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	857,000	(911,964)	-	(32,335)
Changes of assumptions	8,145,100	5,018,477	-	2,153,215
Changes of benefit terms	-	-	-	1,861,711
Benefit payments, including refunds of member contributions	<u>(12,430,464)</u>	<u>(12,076,857)</u>	<u>(11,477,777)</u>	<u>(10,562,871)</u>
Net change in total pension liability	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	<u>212,111,989</u>	<u>199,739,958</u>	<u>191,665,859</u>	<u>179,834,295</u>
Total pension liability - ending (a)	229,656,175	212,111,989	199,739,958	191,665,859
Plan fiduciary net position				
Contributions - employer	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	<u>(12,430,464)</u>	<u>(12,076,857)</u>	<u>(11,477,777)</u>	<u>(10,562,870)</u>
Administrative expense	<u>(303,310)</u>	<u>(229,753)</u>	<u>(229,912)</u>	<u>(293,797)</u>
Net change in plan fiduciary net position	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	<u>142,326,470</u>	<u>134,691,303</u>	<u>136,261,674</u>	<u>128,673,500</u>
Plan fiduciary net position - ending (b)	164,383,140	142,326,470	134,691,303	136,261,674
Net pension liability (asset) - ending (a-b)	\$ <u>65,273,035</u>	\$ <u>69,785,519</u>	\$ <u>65,048,655</u>	\$ <u>55,404,185</u>

May reflect timing and/or classification differences from page 7.

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See Independent Auditors Report

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**
Schedules of Net Pension Liability, Contributions, and Investment Returns
Required Supplementary Information
(Unaudited)

Schedule of Net Pension Liability

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>164,383,140</u>	<u>142,326,470</u>	<u>134,691,303</u>	<u>136,261,674</u>
Net pension liability	<u>\$ 65,273,035</u>	<u>\$ 69,785,519</u>	<u>\$ 65,048,655</u>	<u>\$ 55,404,185</u>
Plan fiduciary net position as a percentage of the total pension liability	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Participating employer net pension liability as a percentage of covered payroll	173.35%	199.87%	193.10%	171.99%

Schedule of Contributions

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>7,314,235</u>	<u>6,706,800</u>	<u>6,149,812</u>	<u>5,621,400</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	19.42%	19.21%	18.26%	17.45%

Schedule of Investment Returns

Year Ended December 31

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money weighted rate of return, net of investment expense	17.11%	7.42%	0.61%	7.64%

*Schedules are intended to show information for 10 years.
Additional years will be displayed as they become available.*

See Independent Auditors Report

Independent Auditors' Report

To the Retirement System Board
Town of Needham, Massachusetts

Additional Offices:

Nashua, NH
Manchester, NH
Greenfield, MA
Ellsworth, ME

Report on Schedules

We have audited the accompanying schedule of employer allocations of the Needham Contributory Retirement System (the System) as of and for the year ended December 31, 2017. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2017.

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.

Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column 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 column 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 specified column 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 specified column 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 specified column 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 specified column 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 net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the System as of and for the year ended December 31, 2017, in accordance with accounting principles generally accepted in the United States of America.

Restriction on Use

Our report is intended solely for the information and use of the System management, the Retirement Board, System employers and their auditors as of and for the year ended December 31, 2017 and is not intended to be and should not be used by anyone other than these specified parties.

Melanson Heath

December 12, 2018

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

SCHEDULE OF EMPLOYER ALLOCATIONS

<u>Employer</u>	FY2018 Actual Employer Contributions	Employer Allocation Percentage
Town of Needham	\$ 7,203,059	98.480005%
Needham Housing Authority	<u>111,176</u>	<u>1.519995%</u>
Total	<u>\$ 7,314,235</u>	<u>100.000000%</u>

See actuarial assumptions in the notes to the financial statements.

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

As of and for the year ended December 31, 2017

Entity	Deferred Outflows of Resources			Deferred Inflows of Resources					Pension Expense			
	Net Pension Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Pension Expense	Net Amortization of Deferred Amounts From Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	
Town of Needham	\$ 64,280,888	\$ 675,179	\$ 9,806,452	\$ 103,830	\$ 10,585,461	\$ 545,230	\$ 6,481,327	\$ 14,981	\$ 7,041,537	\$ 9,324,648	\$ 24,336	\$ 9,348,984
Needham Housing Authority	992,147	10,421	151,358	14,981	176,760	8,415	100,036	103,830	212,282	143,922	(24,336)	119,586
Total for All Entities	\$ 65,273,035	\$ 685,600	\$ 9,957,810	\$ 118,811	\$ 10,762,221	\$ 553,645	\$ 6,581,363	\$ 118,811	\$ 7,253,819	\$ 9,468,570	\$ -	\$ 9,468,570

See actuarial assumptions in the notes to the financial statements.

**NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**
(A Component Unit of the Town of
Needham, Massachusetts)

Financial Statements,
Required Supplementary Information,
and Other Information

For the Year Ended December 31, 2016
(With Independent Auditors' Report Thereon)

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INDEPENDENT AUDITORS' REPORT

To the Retirement System Board
Town of Needham, Massachusetts

Additional Offices:

Nashua, NH
Manchester, NH
Greenfield, MA
Ellsworth, ME

We have audited the accompanying financial statements of the Needham, Massachusetts Contributory Retirement System (the System), a component unit of the Town of Needham, Massachusetts as of and for the year ended December 31, 2016, and the related notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The System's 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.

Auditors' Responsibility

Our responsibility is to express opinions 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. 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 fiduciary net position of the System as of December 31, 2016, and the respective changes in fiduciary net 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 State of America require that the Management's Discussion and Analysis and the Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns, listed in the foregoing table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the *Governmental Accounting Standards Board*, who considers it to be an essential part of financial reporting for placing the basic 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 basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

Melanson Heath

November 11, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Needham Contributory Retirement System (the System), we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2016.

A. OVERVIEW OF THE FINANCIAL STATEMENTS

The System's financial statements are comprised of a statement of plan fiduciary position, statement of changes in plan fiduciary position, and notes to the financial statements. This report also contains supplementary information in addition to the basic financial statements themselves.

The Statement of Plan Fiduciary Position presents information on the System's assets and liabilities and the resulting net position held in trust for pension benefits. This statement reflects the System's investments at fair value, as well as cash and liabilities.

The Statement of Changes in Plan Fiduciary Position presents information showing how the System's net position available for benefits changed during the year ended December 31, 2016. It reflects contributions by members and participating employers along with deductions for retirement benefits, refunds and transfers, and administrative expenses. Investment income during the period is also presented showing income from investing.

The Notes to Financial Statements provide additional information that is essential for the reader to gain a full understanding of the data provided in the financial statements.

The Required Supplemental Information includes this management's discussion and analysis and Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns.

B. FINANCIAL HIGHLIGHTS

- The System's total net position available for benefits was \$142,326,470 at December 31, 2016.
- The System's net position increased by \$7,635,167.
- Employer and employee contributions to the plan were \$10,544,727 which represents a \$1,535,881 increase over the preceding year. The employer share of contributions represents 61% of the total contributions. Employer's contributions are made in accordance with a funding schedule approved by the Massachusetts Public Employee Retirement Administration Commission.

- Benefits paid to plan participants were \$12,340,186. At December 31, 2016, there were 463 retirees and beneficiaries in receipt of pension benefits.
- The System was 67.10% funded based on its accounting valuation report of December 31, 2016.

C. FINANCIAL STATEMENT ANALYSIS

The following is a summary of financial statement data for the current and prior fiscal years.

<u>FIDUCIARY NET POSITION (000s)</u>		
	<u>2016</u>	<u>2015</u>
Assets		
Cash and receivables	\$ 1,881	\$ 858
Investments	<u>140,459</u>	<u>133,862</u>
Total assets	142,340	134,720
Liabilities		
Accrued payroll and other	<u>14</u>	<u>29</u>
Net Position	<u>\$ 142,326</u>	<u>\$ 134,691</u>

<u>CHANGES IN FIDUCIARY NET POSITION (000s)</u>		
	<u>2016</u>	<u>2015</u>
Additions		
Contributions	\$ 10,949	\$ 9,934
Investment Income, net	<u>9,830</u>	<u>826</u>
Total Additions	20,779	10,760
Deductions		
Benefit payments	12,340	11,485
Other	<u>804</u>	<u>846</u>
Total Deductions	<u>13,144</u>	<u>12,331</u>
Changes in net position	7,635	(1,571)
Net position - beginning of year	<u>134,691</u>	<u>136,262</u>
Net position - end of year	<u>\$ 142,326</u>	<u>\$ 134,691</u>

The System's total assets as of December 31, 2016 were \$142,340,071 and comprised cash and investments. Total assets increased \$7,619,750 or 6% from the prior year primarily due to an increased overall investment portfolio in the PRIT external investment pool.

Total liabilities as of December 31, 2016 were \$13,601, which comprise accounts payable incurred by the Town of Needham on behalf of the System that were reimbursed by the System after year end.

The amount needed to finance benefits is accumulated through the collection of employers' and employee's contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA and through earnings on investments. Contributions and net investment gain for calendar year 2016 resulted in total additions to the plan of \$20,778,979. Employer's contributions increased by \$556,988 or 9% over the prior year. The System had net investment gain of \$9,829,743, an increase of \$9,003,529 or 1,090% from the previous year due to market performance. In calendar year 2015, the rate of return on investments was 0.61% comparing to 7.42% in 2016. In 2016, the System reduced its discount rate to 7.50%, which was consistent with the investment performance. Gross of fees, PRIT performance was at 7.99% for 2016. The highest performance funds in PRIT for 2016 represented private equity with return of 13.81% for the year and value-added fixed income of 10.01%. These funds represented 10% each of target allocation and 11.1% and 8.3% of actual allocation for private equity and value-added fixed income, respectively.

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the System. Total deductions for 2016 were \$13,143,812, which represents an increase of \$813,347 or 7% from the previous year. The payment of pension benefits increased by \$855,473 or 7% over the previous year. The increase in these expenses resulted from new retirees and cost-of-living expenses. Other deductions decreased by \$(42,126) or (5)% over the previous year representing a decrease in refunds to plan members.

D. RETURN ON INVESTMENT AND FUNDING

The Needham Retirement Board continually monitors investment performance at its monthly meetings and meetings with PRIT representatives on an as-needed basis. PRIT representatives satisfactorily respond to the Board's many questions and concerns including asset allocation, new investment strategies, fee structure, and other related issues. Total PRIT fund performance included 4.0% increase in the total fund for the year ended December 31, 2016 compared to Bloomberg Barclays Aggregate bond market decrease of (2.5)% and MSCI ACWI stock market increase of 6.6%. For PRIT Fund's Asset Allocations and rate of returns, see Notes to the Financial Statements.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the Needham, Massachusetts Contributory Retirement System's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to:

Town of Needham, Massachusetts
Contributory Retirement System
1471 Highland Avenue
Needham, Massachusetts 02492

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

(A Component Unit of the Town of Needham, Massachusetts)

Statement of Plan Fiduciary Position

December 31, 2016

ASSETS

Cash and short-term investments	\$ 1,880,833
Investments - PRIT external investment pool	<u>140,459,238</u>
Total Assets	<u>\$ 142,340,071</u>

LIABILITIES AND NET POSITION

Accounts payable	\$ <u>13,601</u>
Total Liabilities	13,601
Net position restricted for pensions	<u>142,326,470</u>
Total Liabilities and Net Position	<u>\$ 142,340,071</u>

The accompanying notes are an integral part of these financial statements.

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

(A Component Unit of the Town of Needham, Massachusetts)

Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2016

Additions:	
Contributions:	
Employers	\$ 6,706,800
Plan members	3,837,927
Other systems and Commonwealth of Massachusetts	<u>404,509</u>
Total contributions	10,949,236
Investment income:	
Appreciation in fair value of investments	10,562,194
Less: management fees	<u>(732,451)</u>
Net investment gain	<u>9,829,743</u>
Total additions	20,778,979
Deductions:	
Benefit payments to plan members and beneficiaries	12,340,186
Refunds to plan members	231,572
Transfers to other systems	342,301
Administrative expenses	<u>229,753</u>
Total deductions	<u>13,143,812</u>
Net increase	7,635,167
Net position restricted for pensions:	
Beginning of year	<u>134,691,303</u>
End of year	<u>\$ 142,326,470</u>

The accompanying notes are an integral part of these financial statements.

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM

Notes to Financial Statements

1. Description of Plan

Substantially all employees of the Town of Needham, Massachusetts (except teachers and administrators under contract employed by the School Department) and Needham Housing Authority are members of the Needham Contributory Retirement System (the System), a cost sharing, multiple employer public employee retirement system (PERS). Eligible employees must participate in the System. The pension plan provides pension benefits, deferred allowances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, contribution percentages and benefits paid. The System Retirement Board does not have the authority to amend benefit provisions.

Membership of each plan consisted of the following at December 31, 2016:

Number of retired participants and beneficiaries	463
Number of inactive participants entitled to a return of their employee contributions	191
Number of inactive participants with a vested right to a deferred or immediate benefit	18
Number of active participants	<u>650</u>
Total	<u>1,322</u>
Number of participating employers	2

Participants contribute a set percentage of their gross regular compensation annually. Employee contribution percentages are specified in Chapter 32 of the Massachusetts General Laws. The employee's individual contribution percentage is determined by their date of entry into the system. In addition, all employees hired after January 1, 1979 contribute an additional 2% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5%
January 1, 1975 - December 31, 1983	7%
January 1, 1984 - June 30, 1996	8%
Beginning July 1, 1996	9%

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 those hired prior to April 2, 2012 and the highest five-year average annual rate of regular compensation for those first becoming members of the

Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100 percent, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation and group classification.

A retirement allowance may be received at any age, upon attaining 20 years of service. The plan also provides for retirement at age 55 if the participant was a member prior to January 1, 1978, with no minimum vesting requirements. If the participant was a member on or after January 1, 1978 and a member of Groups 1 or 2, then a retirement allowance may be received if the participant (1) has at least 10 years of creditable service, (2) is age 55, (3) voluntarily left Town employment on or after that date, and (4) left accumulated annuity deductions in the fund. Members of Group 4, have no minimum vesting requirements, however, must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A participant who became a member on or after April 2, 2012 is eligible for a retirement allowance upon 10 years creditable service and reaching ages 60 or 55 for Groups 1 and 2, respectively. Participants in Group 4 must be at least age 55. Groups 2 and 4 require that participants perform the duties of the Group position for at least 12 months immediately prior to retirement.

A retirement allowance consists of two parts: an annuity and a pension. A member's accumulated total deductions and a portion of the interest they generate constitute the annuity. The difference between the total retirement allowance and the annuity is the pension. The average retirement benefit is approximately 80-85% pension and 15-20% annuity.

Employees who resign from service and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total deductions. Members voluntarily withdrawing with at least 10 years of service or involuntarily withdrawing, receive 100% of the regular interest that has accrued on those accumulated total deductions. Members voluntarily withdrawing with less than 10 years of service get credited interest each year at a rate of 3%.

2. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

Instituted in 1937, the System is a member of the Massachusetts Contributory Retirement Systems and is governed by Chapter 32 of the Massachusetts

General Laws. Because of the significance of its operational and financial relationship with the Town, the System is included as a pension trust fund in the Town's basic financial systems. The system is governed by a five-member board. The five members include two appointed by the Town, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of the Public Employee Retirement Administration Commission.

Summary of Significant Accounting Policies

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2016 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of the System are summarized below:

Basis of Accounting

The System follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the System's employees are recognized as revenue in the period in which employees provide services to the System. Investment income is recognized as earned by the pension plan. The net appreciation (depreciation) in the fair value of investments held by the pension plan is recorded as an increase (decrease) to investment income based on the valuation of investments as of the date of the balance sheet.

Investments

Investment Policy

Investments are reported at fair value. System assets are managed by PRIT on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension plan.

Rate of Return

For the year ended December 31, 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 7.42%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

3. Cash and Short-Term Investments

Custodial Credit Risk - Deposits. Custodial credit risk is the risk that in the event of a bank failure, the System deposits may not be returned. Massachusetts General

Law Chapter 32, Section 23, limits the System's deposits "in a bank or trust company to an amount not exceeding ten percent of the capital and surplus of such bank or trust company." The System does not have a deposit policy for custodial credit risk.

As of December 31, 2016, \$1,663,457 of the System's bank balance of \$1,779,550 was exposed to custodial credit risk as uninsured or uncollateralized. Of the System's exposed risk, \$1,395,960 was invested in Massachusetts Municipal Depository Trust (MMDT), and \$267,497 was invested in PRIT.

The System invests in the Massachusetts Municipal Depository Trust (MMDT) Cash Portfolio, which is an external investment pool and is not SEC-registered. The fund is State-regulated and is valued at amortized cost.

4. Investments

A. Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Massachusetts General Law, Chapter 32, Section 23, limits the investment of System funds, to the extent not required for current disbursements, in the PRIT Fund or in securities, other than mortgages or collateral loans, which are legal for the investment of funds in savings banks under the laws of the Commonwealth, provided that no more than the established percentage of assets, is invested in any one security.

At December 31, 2016, the System maintained its investments in the State Investment Pool (PRIT)* with a fair value of \$140,459,238. The PRIT fund is an external investment pool that is not registered with the Securities Exchange Commission. This investment type is not rated. The PRIT Fund issues separately available financial statements with a year end of June 30.

**Fair value is the same as the value of the pool share. The Pension Reserves Investment Trust was created under Massachusetts general law, chapter 32, section 22, in December 1983. The Pension Reserves Investment Trust is operated under contract with a private investment advisor, approved by the Pension Reserves Investment Management Board. The Pension Reserves Investment Management Board shall choose an investment advisor by requesting proposals from advisors and reviewing such proposals based on criteria adopted under Massachusetts general law, chapter 30B.*

B. Custodial Credit Risk

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral

securities that are in the possession of another party. The System does not have policies for custodial credit risk.

The System's investments of \$140,459,238 were exposed to custodial credit risk as uninsured and uncollateralized. However, the System's investments were held in the State investment pool (PRIT).

C. Concentration of Credit Risk

Massachusetts General Law Chapter 32, Section 23 limits the amount the System may invest in any one issuer or security type, with the exception of the PRIT Fund. All of the System's investments are in the PRIT fund.

D. Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

E. Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. The System does not have policies for foreign currency risk.

F. Fair Value

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 *Fair Value Measurement and Application* (GASB 72). The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The System has the following investments measured at the net asset value (NAV) as of December 31, 2016:

<u>Description</u>	<u>Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If currently eligible)</u>	<u>Redemption Notice Period</u>
External investment pool	\$ 140,459,238	\$ -	Monthly	30 days

5. Accounts Payable

Accounts payable represent additional 2016 expenditures paid after December 31, 2016.

6. Contingencies

There are various pending claims arising in the ordinary course of operations; however, management believes that the probable liability resulting from such claims and litigation would not materially affect the System's financial position.

7. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at December 31, 2016 were as follows:

A. Net Pension Liability of Employers

Total pension liability	\$ 212,111,989
Plan fiduciary net position	<u>142,326,470</u>
Employers' net pension liability	<u>\$ 69,785,519</u>
Plan fiduciary net position as a percentage of total pension liability	67.10%

B. Actuarial Assumptions

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below:

Valuation Date	1/1/2017
Actuarial cost method	Entry Age
Actuarial assumptions:	
Investment rate of return	7.50%
Projected salary decreases	4.25% for Group 1 4.50% for Group 2 4.75% for Group 4
Inflation rate	3.50%
Post-retirement cost-of-living adjustment	3% of the first \$14,000

Actuarial valuation of the ongoing Systems involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

Mortality rates were based on:

- Healthy: RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2016, set forward 1 year for females.
- Disabled: RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D

Changes of assumptions

Effective January 1, 2017:

- Investment rate of return, previously, 7.75% decreased to 7.50%.
- The administrative expense assumption was increased from \$237,000 for calendar 2015 to \$285,000 for calendar 2017.
- The mortality assumption for healthy participants was changed from the RP-2000 Combined Healthy Mortality Table projected 22 years using Scale AA to the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2016, set forward 1 year for females.
- The mortality assumption for disabled participants was changed from the RP-2000 Combined Healthy Mortality Table set forward 2 years to the RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D.

C. Target Allocations

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates 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 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 System's targeted asset allocation as of December 31, 2016, are summarized in the following table.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Large cap equities	14.5%	5.75%
Small/mid cap equities	3.5%	6.00%
International equities	16.0%	7.30%
Emerging international equities	<u>6.0%</u>	9.59%
Total global equities	40.0%	
Core bonds	5.0%	2.65%
20+ year treasury strips	5.0%	1.50%
TIPS	<u>3.0%</u>	3.00%
Total core fixed income	13.0%	
High-yield bonds	1.5%	4.75%
Bank loans	1.5%	5.25%
EMD (external)	1.0%	4.75%
EMD (local currency)	2.0%	6.75%
Private debt	<u>4.0%</u>	8.02%
Total value-added fixed income	10.0%	
Private equity	10.0%	8.25%
Real estate	10.0%	6.00%
Timberland	4.0%	6.00%
Hedge funds & portfolio completion	<u>13.0%</u>	5.92%
Total alternative investments	<u>37.0%</u>	
Total	<u>100.0%</u>	

D. Discount Rate

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the 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.

E. Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 7.50%, as well as what the participating employers' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
Town of Needham Contributory Retirement System's net pension liability	\$ 93,261,595	\$ 69,785,519	\$ 49,909,246

F. Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the System for the year ended December 31, 2016:

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Differences between expected and actual experience	\$ -	\$ (742,505)
Changes of assumptions	4,876,068	-
Net difference between projected and actual earnings on pension plan investments	6,041,658	-
Changes in proportion and differences between contributions and proportionate share of contributions	116,398	(116,398)
Total	\$ 11,034,124	\$ (858,903)

The following summarizes changes in deferred outflows/inflows:

	Measurement Year	Amortization Period	Beginning Balance on Prior Measurement Period Deferrals	Current Measurement Period Additions	Amortization of Amounts Recognized In Current Period Pension Expense	End of Year Balance
Deferred (Inflows) of Resources:						
Difference between expected and actual experience	2014	5	\$ (19,401)	\$ -	\$ 6,467	\$ (12,934)
Difference between expected and actual experience	2016	5	-	(911,965)	182,394	(729,571)
Change in proportionate share	2015	5	(29,963)	-	7,491	(22,472)
Change in proportionate share	2016	5	-	(117,408)	23,482	(93,926)
Total Deferred (Inflows) of Resources			(49,364)	(1,029,373)	219,834	(858,903)
Deferred Outflows of Resources:						
Net Differences between projected and actual earnings on pension plan investments	2014	5	157,840	-	(52,547)	105,093
Net Differences between projected and actual earnings on pension plan investments	2015	5	7,712,959	-	(1,928,240)	5,784,719
Net Differences between projected and actual earnings on pension plan investments	2016	5	-	189,805	(37,959)	151,846
Change of assumption	2014	5	1,291,929	-	(430,643)	861,286
Change of assumption	2016	5	-	5,018,475	(1,003,693)	4,014,782
Change in proportionate share	2015	5	29,963	-	(7,491)	22,472
Change in proportionate share	2016	5	-	117,408	(23,482)	93,926
Total Deferred Outflows of Resources			9,192,491	5,325,688	(3,484,055)	11,034,124
Total Collective Deferred (Inflows) Outflows of Resources			\$ 9,143,127	\$ 4,296,315	\$ (3,264,221)	\$ 10,175,221

The following schedule reflects the amortization of the balance of deferred outflows/inflows of resources:

Year ended June 30:	Deferred Outflows (Inflows) of Resources
2018	\$ 3,264,227
2019	3,264,226
2020	2,787,502
2021	859,266
Total	<u>\$ 10,175,221</u>

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**
Schedule of Changes in the Net Pension Liability
Required Supplementary Information
(Unaudited)

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability			
Service cost	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest on unfunded liability - time value of \$	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	(911,964)	-	(32,335)
Changes of assumptions	5,018,477	-	2,153,215
Changes of benefit terms	-	-	1,861,711
Benefit payments, including refunds of member contributions	<u>(12,076,857)</u>	<u>(11,477,777)</u>	<u>(10,562,871)</u>
Net change in total pension liability	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	<u>199,739,958</u>	<u>191,665,859</u>	<u>179,834,295</u>
Total pension liability - ending (a)	<u>\$ 212,111,989</u>	<u>\$ 199,739,958</u>	<u>\$ 191,665,859</u>
Plan fiduciary net position			
Contributions - employer	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions - member	3,405,234	3,161,293	3,193,112
Net investment income	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	(12,076,857)	(11,477,777)	(10,562,870)
Administrative expense	<u>(229,753)</u>	<u>(229,912)</u>	<u>(293,797)</u>
Net change in plan fiduciary net position	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	<u>134,691,303</u>	<u>136,261,674</u>	<u>128,673,500</u>
Plan fiduciary net position - ending (b)	<u>\$ 142,326,470</u>	<u>\$ 134,691,303</u>	<u>\$ 136,261,674</u>
Net pension liability (asset) - ending (a-b)	<u>\$ 69,785,519</u>	<u>\$ 65,048,655</u>	<u>\$ 55,404,185</u>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See Independent Auditors Report

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

Schedules of Net Pension Liability, Contributions, and Investment Returns

**Required Supplementary Information
(Unaudited)**

Schedule of Net Pension Liability

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>142,326,470</u>	<u>134,691,303</u>	<u>136,261,674</u>
Net pension liability	<u>\$ 69,785,519</u>	<u>\$ 65,048,655</u>	<u>\$ 55,404,185</u>
Plan fiduciary net position as a percentage of the total pension liability	67.10%	67.43%	71.09%
Covered payroll	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Participating employer net pension liability as a percentage of covered payroll	199.87%	193.10%	171.99%

Schedule of Contributions

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>6,706,800</u>	<u>6,149,812</u>	<u>5,621,400</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	19.21%	18.26%	17.45%

Schedule of Investment Returns

Year Ended December 31

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Annual money weighted rate of return, net of investment expense	7.42%	0.61%	7.64%

*Schedules are intended to show information for 10 years.
Additional years will be displayed as they become available.*

See Independent Auditors Report

Independent Auditors' Report

To the Retirement System Board
Town of Needham, Massachusetts

Additional Offices:
Nashua, NH
Manchester, NH
Greenfield, MA
Ellsworth, ME

Report on Schedules

We have audited the accompanying schedule of employer allocations of the Needham Contributory Retirement System (the System) as of and for the year ended December 31, 2016. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2016.

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.

Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column 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 column 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 specified column 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 specified column 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 specified column 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 specified column 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 net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the System as of and for the year ended December 31, 2016, in accordance with accounting principles generally accepted in the United States of America.

Restriction on Use

Our report is intended solely for the information and use of the System management, the Retirement Board, System employers and their auditors as of and for the year ended December 31, 2016 and is not intended to be and should not be used by anyone other than these specified parties.

Melanson Heath

November 11, 2017

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

SCHEDULE OF EMPLOYER ALLOCATIONS

<u>Employer</u>	FY 2016 Actual Employer <u>Contributions</u>	Employer Allocation <u>Percentage</u>
Town of Needham	\$ 6,600,162	98.410002%
Needham Housing Authority	<u>106,638</u>	<u>1.589998%</u>
Total	\$ <u>6,706,800</u>	<u>100.000000%</u>

See actuarial assumptions in the notes to the financial statements.

**TOWN OF NEEDHAM, MASSACHUSETTS
CONTRIBUTORY RETIREMENT SYSTEM**

**SCHEDULE OF PENSION AMOUNTS BY EMPLOYER
As of and for the year ended December 31, 2016**

Entity	Deferred Outflows of Resources				Deferred Inflows of Resources				Pension Expense		
	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Changes of Assumptions	Differences Between Expected and Actual Experience	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Pension Expense	Net Amortization of Deferred Amounts From Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Pension Expense	Total Employer Pension Expense	
Town of Needham	\$ 68,875,930	\$ 5,945,596	\$ 4,798,539	\$ 83,926	\$ 10,838,061	\$ 730,699	\$ 22,472	\$ 753,171	\$ 10,246,025	\$ 15,980	\$ 10,262,015
Needham Housing Authority	1,109,569	96,062	77,529	22,472	186,063	11,806	93,926	105,732	165,544	(15,980)	149,554
Total for All Entities	\$ 69,785,519	\$ 6,041,658	\$ 4,876,068	\$ 116,398	\$ 11,034,124	\$ 742,505	\$ 116,398	\$ 858,903	\$ 10,411,569	\$ -	\$ 10,411,569

See actuarial assumptions in the notes to the financial statements.



COMMONWEALTH OF MASSACHUSETTS

Public Employee Retirement Administration Commission

Five Middlesex Avenue, Suite 304 | Somerville, MA 02145

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TTY: 617-591-8917 | Web: www.mass.gov/perac

PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chairman*

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

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | RICHARD MACKINNON, JR. | JENNIFER F. SULLIVAN

January 6, 2022

Evelyn M Poness, Chairperson
Needham Retirement Board
Needham Town Hall
1471 Highland Avenue
Needham, MA 02492

REFERENCE: Report of the Examination of the Needham Retirement Board for the three-year period from January 1, 2016 through December 31, 2018.

Dear Chairperson Poness:

The Public Employee Retirement Administration Commission has completed a follow-up review of the findings and recommendations contained in its audit report of the Needham Retirement Board for the period referenced above. We conduct these visits as a regular part of the oversight process to ensure the timely implementation of the recommendations contained in that report. The examination also addressed the other matters discussed at the completion of the audit. The results are as follows:

1. The Audit Report cited a finding that reconciliations of the Board's bank accounts were not performed timely and incomplete bank reconciliations were presented to the Board. There had also been a large number of accounting adjustments that had not been made which would have cleared out older reconciling items.

Follow-up Result: A review of the bank reconciliations for the expense account found that the reconciliations were still not signed or dated by the preparer and reviewer. We did see that the reconciliations for the payroll account were prepared by the staff accountant and the Administrator. However, for internal control purposes bank reconciliations should be prepared by the Treasurer and not by Board staff. A review of recent Board meeting minutes found that the Board was presented with complete monthly bank reconciliations on a timely basis. All the necessary accounting adjustments have been made. This issue is partially resolved.

2. The Audit Report cited a finding that PRIT statements for the audit period were generally not available and that PRIT cash was not always reconciled on a monthly basis. PRIT cash reconciliations that were available had a lump sum amount for all deposits in transit rather than a separate listing.



January 11, 2022

Page Two

Follow-up Result: PRIT statements were provided to the auditors. PRIT cash reconciliations were prepared but still did not show descriptions of the deposits in transit or show the signatures of the preparer and reviewer nor the date of completion. This issue is partially resolved.

3. The Audit Report cited a variety of issues with how employee deductions for retirement were calculated.

Follow-up Result: No documentation was provided to support the correction of the errors listed in the finding. This issue is not resolved.

4. The Audit Report cited a number of issues related to new retirees including missing required documents and incorrect calculations of retirement allowances.

Follow-up Result: Only two of the nine missing documents cited in the finding were provided to us. Record keeping for Board approval of retirements within the minutes has improved. Corrections of allowance calculations for retirees who were overpaid and underpaid were not completed. This issue is partially resolved.

5. The Audit Report cited a finding that reimbursement forms or supporting documentation for travel expenses during 2016-2017 were not provided to the auditors and the Board did not follow its travel policy regarding receipts during 2018.

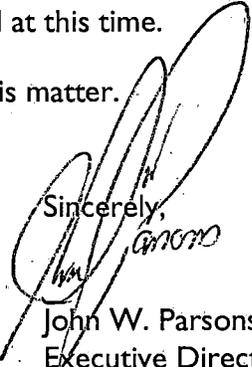
Follow-up Result: We were not able to test this as the Board members and staff did not have any travel expenses in 2020 and 2021.

The additional matters discussed have been reviewed and have been resolved in part at this time.

The Commission wishes to acknowledge the effort demonstrated by the staff of the Needham Retirement Board to address some of the issues from the most recent examination of the system. PERAC auditors will conduct further follow-up as warranted to ensure corrections have been made in those areas that have not been resolved at this time.

Thank you for your continued cooperation in this matter.

Sincerely,


John W. Parsons, Esq.
Executive Director

JWP/cms

cc: Needham Retirement Board Members