

NEEDHAM
RETIREMENT SYSTEM
AUDIT REPORT
JAN. 1, 2019 - DEC. 31, 2023



PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION
COMMONWEALTH OF MASSACHUSETTS

Commission Members

Philip Y. Brown, Esq.

Principal/Founder, Brown Counsel
Chairman

The Honorable Diana DiZoglio

Auditor of the Commonwealth
Vice Chairman

Kathleen M. Fallon

Practice Area Director,
Public Consulting Group

Kate Fitzpatrick

Town Manager (Retired), Town of Needham

James J. Guido

Lieutenant, Chelsea Police Department

Richard MacKinnon, Jr.

President, Professional
Firefighters of Massachusetts

Jennifer F. Sullivan, Esq.

Governor's Appointee
Investment Professional

Bill Keefe

Executive Director

Public Employee Retirement Administration Commission

10 Cabot Road
Suite 300
Medford, MA 02155

Phone 617 666 4446
Fax 617 628 4002
Web www.mass.gov/perac



TABLE OF CONTENTS

Letter from the Executive Director	1
Explanation of Findings and Recommendations	3
Supplementary Information:	
Schedule of Allocation of Investments Owned	6
Administration of the System.....	7
Board Regulations.....	7
Membership Exhibit	8
Independent Audit Reports:	
CBIZ CPAs, PC, Year Ended December 31, 2023	9
Marcum, LLP, Year Ended December 31, 2022	43
Melanson, PC, Year Ended December 31, 2021	70
Melanson, PC, Year Ended December 31, 2020	97
Melanson, PC, Year Ended December 31, 2019	122

PERAC

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., *Chair*

WILLIAM T. KEEFE, *Executive Director*

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

June 2, 2026

The Public Employee Retirement Administration Commission (PERAC) has completed a review of the audits of the Needham Retirement System conducted by the firms of Melanson PC (Melanson), Marcum LLP (Marcum) and CBIZ CPAs PC (CBIZ). The firms conducted these audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits in Government Auditing Standards, issued by the Comptroller General of the United States. The audits covered the period from January 1, 2019 to December 31, 2023. Melanson was acquired by the firm of Marcum, LLP, which was then acquired by CBIZ.

We conducted an inspection of the work papers prepared by Melanson, Marcum and CBIZ. 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 provisions specified in PERAC Memo #18/2019.

Accordingly, we supplemented the field work conducted in the audits by Melanson, Marcum and CBIZ 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 retirement contributions are accurately deducted, 4) that retirement allowances were correctly calculated, 5) that required member documentation is maintained, 6) that appropriations certified by PERAC for the fiscal years covered by the audit have been paid to the retirement system, and 7) that refunds issued by the system were correctly calculated.



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 and verified cash balances. 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 also 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 reviewed a sample of member files for accuracy and completeness. We reviewed appropriations received and compared to PERAC appropriation letters for the fiscal years during the audit period. We also tested refunds issued during the audit period and recalculated the interest portion of the refunds tested.

In our opinion, for those areas tested, the financial records are being maintained and the management functions are being performed in conformity with the standards established by PERAC with the exceptions noted 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, Marcum and CBIZ, 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, 2023, December 31, 2022, December 31, 2021, December 31, 2020 and December 31, 2019.

In closing, I acknowledge the work of Melanson, Marcum and CBIZ who conducted this examination, and the PERAC examiners who conducted limited procedures to supplement field work and express appreciation to the Needham Retirement Board and staff for their courtesy and cooperation.

Sincerely,

A handwritten signature in black ink that reads "Bill Keefe". The signature is written in a cursive, flowing style.

William T. Keefe
Executive Director

EXPLANATION OF FINDINGS AND RECOMMENDATIONS

1. New Retirements:

We sampled twenty-two files of members that retired during the audit period and found the following issues:

- Nineteen out of 22 retirees tested were missing PERAC approval letters, including the three disability retirements tested. (The Board does not have a waiver for superannuation retirement calculations.)
- Seven out of 19 superannuation retirement allowance calculations had variances with PERAC's calculations.
 - Three allowances were underpaid because the Board did not use three full years of salary.
 - Two allowances were overpaid because salary outside the three-year period was included in the average. A third allowance incorrectly included uniform pay, laundry reimbursement and sick time buybacks as regular compensation.
 - We found one dual member working at Needham and a second board during the final five years of his career and earning over \$5,000 per year at the second board. The second board transferred the Annuity Savings Fund (ASF) account to Needham and the retirement was calculated by combining the regular compensation from both systems in error. The transfer in should not have occurred and the retiree should have been receiving separate allowances from both Needham and the second board.
- Two out of three accidental disability retirement allowances tested were overpaid. One retirement allowance was not capped at 75% even though the member had a two-month break in service in 2001. The other allowance was calculated using the full amount of a retroactive pay even though it covered time outside the 1-year salary; it should have been pro-rated with two months' worth being included.
- One of the above-mentioned accidental disability retirements had an incorrect retirement date used. The effective date of retirement is the latest of three dates: the date of injury, the date six months prior to written application or the date of last regular compensation received. The Board used a date over two years later than it should have been.
- Two retirees were missing birth certificates and three Option C retirees were missing marriage certificates and the beneficiary's birth certificates.

Eight retirement allowances in the 2016-2018 audit were found to have variances with PERAC's calculations. The follow-up to that audit revealed that the allowances were not recalculated. After the current audit was conducted, it was discovered that these eight retirement allowances have still not been recalculated.

Recommendation: The Board should submit all retirement calculations to PERAC's Actuarial Unit for the approval letters to be maintained with the retirees' files. The Board should review payroll registers to determine the regular compensation to be used in the retirement allowance calculations and also review all retirement allowances noted above and correct allowances as necessary. The Board should

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (CONTINUED)

seek return of overpayments from members. For the dual member, the ASF from the other system should be transferred back and they should calculate their own allowance based on the service and salary there. The Board staff should review retirees' files for completeness, including required documents such as birth certificates.

Board Response:

We accept the findings and helpful guidance and will fix the necessary corrections over the coming weeks and have the folders for each fix/person for the review 6 months down the road.

2. Regular Compensation:

Seven out of seven active DPW members had retirement deductions taken on a pay code Special Senior Custodian Stipend that is not regular compensation. PERAC opined in a letter to the Board dated January 25, 2023 that this pay is not for any additional services performed and that it resembles a bonus.

Opt Out Incentive pay, which is paid to employees who have worked more than two years and opt out of the town provided health insurance, was erroneously included in regular compensation for three school employees. This is a recurring issue.

A DPW member gets additional pay for Building Monitor work. This is voluntary and not regularly scheduled and, therefore, should not be included in regular compensation.

One Housing Authority member had a separate check for a retroactive payment, but it was not included in regular compensation.

Recommendation: The retirement staff should be communicating directly with the payroll department on what pay codes are to be treated as regular compensation. The Board should return all deductions collected on pay that is not regular compensation.

Board Response:

We accept the findings and helpful guidance and will fix the necessary corrections over the coming weeks.

3. Monthly Financial Reporting:

From February 2020 through July 2025 the Board did not see a full set of monthly financial reports or cash books (Cash Disbursements, Cash Receipts, Adjustments, General Ledger, Trial Balance). We also found that cash books and cash reconciliations were not consistently provided every month in 2019.

EXPLANATION OF FINDINGS AND RECOMMENDATIONS (CONTINUED)

Recommendation: The Board members must review all monthly cash books, cash reconciliations and bank statements. The names and dates of reports provided should be documented in the minutes. The Board should follow 840 CMR 4.00 related to what should be provided to Board members.

Board Response:

We accept the findings and helpful guidance and will fix the necessary corrections over the coming weeks.

4. Fifth Board Member Appointment:

In March 2021, during the audit period, the Fifth Board member was reappointed without a public posting of the opening. In April 2024, after the audit period, the same member was again reappointed without a posting of the opening. In accordance with PERAC Memo #28/2017, the Board needs to post the opening publicly, review applicants and interview finalists, as needed, before selection. These steps should be documented in the Board meeting minutes.

Recommendation: The Board must follow PERAC Memo #28/2017 regarding the proper procedures to select the Fifth Board member.

Board Response:

We accept the findings and helpful guidance and will fix the necessary corrections over the coming weeks.

Final Determination:

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

SUPPLEMENTARY INFORMATION

SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

(percentages by category)

AS OF DECEMBER 31, 2023		
	MARKET VALUE	PERCENTAGE OF TOTAL ASSETS
Cash	\$8,583,969	3.6%
PRIT Cash Fund	884,464	0.4%
PRIT Core Fund	<u>227,286,065</u>	<u>96.0%</u>
Grand Total	<u>\$236,754,498</u>	<u>100.0%</u>

For the year ending December 31, 2023, the rate of return for the investments of the Needham Retirement System was 11.21%. For the ten-year period ending December 31, 2023, the rate of return for the investments of the Needham Retirement System averaged 7.87%. For the 39-year period ending December 31, 2023, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Needham Retirement System was 9.42%.

The composite rate of return for all retirement systems for the year ending December 31, 2023, was 11.64%. For the ten-year period ending December 31, 2023, the composite rate of return for the investments of all retirement systems averaged 7.81%. For the 39-year period ending December 31, 2023, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.05%.

SUPPLEMENTARY INFORMATION (Continued)

ADMINISTRATION OF THE SYSTEM

The System is administered by a five-person Board of Retirement consisting of the Town Accountant 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:	Michelle Vaillancourt, Chairperson		
Appointed Member:	Tatiana Swanson	Term Expires:	01/01/28
Elected Member:	Jay Steeves	Term Expires:	07/23/28
Elected Member:	John P. Krawiecki	Term Expires:	12/17/26
Appointed Member:	Robert P. Mearls	Term Expires:	04/15/27

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 Regulations which are available on the PERAC website at <https://www.mass.gov/needham-retirement-board-regulations>.

SUPPLEMENTARY INFORMATION (Continued)

MEMBERSHIP EXHIBIT

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Retirement in Past Years										
Superannuation	24	14	20	18	20	18	18	29	25	20
Ordinary Disability	0	0	0	0	0	0	0	0	0	0
Accidental Disability	0	3	0	0	1	0	0	0	2	0
Total Retirements	24	17	20	18	21	18	18	29	27	20
Total Retirees, Beneficiaries and Survivors	462	463	451	455	449	463	464	476	481	483
Total Active Members	647	650	634	649	692	767	797	798	831	890
Pension Payments										
Superannuation	\$7,161,286	\$7,490,206	\$7,864,526	\$7,973,099	\$8,124,078	\$8,461,772	\$8,882,983	\$9,389,378	\$9,734,419	\$10,062,088
Survivor/Beneficiary Payments	388,920	379,191	400,164	479,694	519,141	488,420	497,039	467,428	505,746	587,501
Ordinary Disability	21,026	21,416	21,836	22,256	22,676	23,096	23,516	23,936	24,426	25,346
Accidental Disability	1,000,368	1,129,072	1,257,231	1,288,350	1,324,735	1,392,417	1,382,489	1,419,604	1,446,977	1,477,026
Other	<u>675,440</u>	<u>701,275</u>	<u>788,315</u>	<u>861,708</u>	<u>1,124,316</u>	<u>1,091,094</u>	<u>1,373,862</u>	<u>1,112,481</u>	<u>863,676</u>	<u>1,076,129</u>
Total Payments for Year	<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>	<u>\$11,456,800</u>	<u>\$12,159,889</u>	<u>\$12,412,826</u>	<u>\$12,575,243</u>	<u>\$13,228,090</u>

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM
(A Component Unit of the Town of Needham, Massachusetts)
FINANCIAL STATEMENTS, REQUIRED SUPPLEMENTARY INFORMATION,
AND AUDIT OF SPECIFIC ELEMENTS
FOR THE YEAR ENDED DECEMBER 31, 2023

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

TABLE OF CONTENTS

FINANCIAL SECTION

Independent Auditors' Report..... 1-3

Management's Discussion and Analysis..... 4-7

Financial Statements

Statement of Fiduciary Net Position 8

Statement of Changes in Fiduciary Net Position..... 9

Notes to Financial Statements 10-20

REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability 21

Schedules of the Net Pension Liability, Contributions,
and Investment Returns 22

Notes to Required Supplementary Information..... 23

**Independent Auditors' Report on Internal Control Over
Financial Reporting and on Compliance and Other Matters
Based on an Audit of Financial Statements Performed in
Accordance with *Government Auditing Standards***..... 24-25

AUDIT OF SPECIFIC ELEMENTS

Independent Auditors' Report..... 26-27

Schedule of Employer Allocations..... 28

Schedule of Pension Amounts by Employer 29

Notes to Schedule of Employer Allocations and Schedule of
Pension Amounts by Employer..... 30-32



CBIZ CPAs P.C.
53 State Street
17th Floor
Boston, MA 02109
P: 617.807.5000

Independent Auditors' Report

To the Honorable Needham Contributory Retirement Board
Needham Contributory Retirement System
Town of Needham, Massachusetts

Opinion

We have audited the financial statements of the Needham Contributory Retirement System (the "System"), a component unit of the Town of Needham, Massachusetts, as of and for the year ended December 31, 2023, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of the Needham Contributory Retirement System, as of December 31, 2023, and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America ("GAAS") and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States ("*Government Auditing Standards*"). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of the Net Pension Liability, Contributions, and Investment Returns, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 5, 2025, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards*, in considering the System's internal control over financial reporting and compliance.

CBIZ CPAs P.C.

CBIZ CPAs P.C.

Boston, MA

June 5, 2025

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

MANAGEMENT'S DISCUSSION AND ANALYSIS

DECEMBER 31, 2023

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, 2023.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the basic financial statements. The basic financial statements are comprised of two components: (1) fiduciary fund financial statements and (2) notes to financial statements. This report also contains required supplementary information in addition to the basic financial statements themselves.

Fiduciary Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Fund accounting is used to ensure and demonstrate compliance with finance-related legal requirements.

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

The Statement of Changes in Fiduciary Net Position presents information showing how the System's net position restricted for pensions changed during the year ended December 31, 2023. It reflects contributions by participating employers, active members, and external parties, investment activity, along with deductions for retirement benefits, refunds, transfers, and administrative expenses.

Notes to Financial Statements

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.

Required Supplementary Information

The Required Supplementary Information includes this Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of the Net Pension Liability, Contributions, and Investment Returns.

Financial Highlights

- The System's total net position restricted for pension benefits was \$236,725,941 at December 31, 2023, a change of \$22,874,220, or 10.70%, compared to the prior year. This increase is primarily due to favorable returns on System investments during the year.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS

DECEMBER 31, 2023

- Employer and employee contributions to the plan were \$18,373,179, which represents a \$1,839,223, change over the prior year. The employer share of contributions represents 66.17% of the total contributions made to the System.
- Benefit payments to plan members and beneficiaries increased by \$660,126, or 4.28%, totaling \$16,088,743. At December 31, 2023, there were 480 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 11.
- The System's funded ratio (based on the System's GASB 68 valuation) as of the January 1, 2024 actuarial valuation was 75.74%, with 8 years remaining in its amortization period from July 1, 2024.

Financial Statement Analysis

The following is a summary of financial statement data for the current and prior fiscal year:

Summary of Fiduciary Net Position

	2023	2022
Assets		
Cash and receivables	\$ 9,468,433	\$ 6,049,136
Investments	227,286,065	207,840,994
Total Assets	236,754,498	213,890,130
Liabilities		
Accounts payable	28,557	38,409
Total Liabilities	28,557	38,409
Net Position		
Restricted for Pensions	\$ 236,725,941	\$ 213,851,721

The System's total assets as of December 31, 2023 were \$236,754,498 and were mostly comprised of cash and investments. Total assets increased by \$22,864,368, or 10.69%, from the prior year primarily due to favorable returns on System investments in calendar year 2023.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS

DECEMBER 31, 2023

Summary of Changes in Fiduciary Net Position

	2023	2022
Additions		
Contributions	\$ 18,618,271	\$ 16,687,244
Net investment income (loss)	<u>22,852,283</u>	<u>(27,119,527)</u>
Total Additions	<u>41,470,554</u>	<u>(10,432,283)</u>
Deductions		
Benefit payments	16,088,743	15,428,617
Other	<u>2,507,591</u>	<u>2,633,492</u>
Total Deductions	<u>18,596,334</u>	<u>18,062,109</u>
Change in Net Position	22,874,220	(28,494,392)
Net Position Restricted for Pensions		
Beginning of year	<u>213,851,721</u>	<u>242,346,113</u>
End of year	<u>\$ 236,725,941</u>	<u>\$ 213,851,721</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 income for calendar year 2023 resulted in total additions of \$41,470,554. Employers' contributions increased by \$912,569, or 8.00%, in calendar year 2023. The System had net investment gains of \$22,852,283 in 2023 versus net investment losses of \$(27,119,527) in 2022, primarily due to favorable market conditions in calendar year 2023.

The primary deductions of the System include the payment of pension benefits to plan members and beneficiaries, refunds and transfers of member contributions, reimbursement payments in accordance with Massachusetts General Laws, Chapter 32, Section 3(8)c, more commonly referred to as 3(8)c reimbursements, and the costs of administering the System. Total deductions for calendar year 2023 were \$18,596,334, which represents an increase of \$534,225, or 2.96%, over deductions of \$18,062,109 in calendar year 2022. The payment of pension benefits increased by \$660,126, or 4.28%, over the previous year.

Return on Investment and Funding

The Needham Contributory Retirement System Board continuously monitors investment performance at its monthly meetings. The money-weighted rate of return for the System's investments, as of December 31, 2023, was 10.78%.

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

MANAGEMENT'S DISCUSSION AND ANALYSIS

DECEMBER 31, 2023

Requests for Information

This financial report is designed to provide a general overview of the Needham 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:

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

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

STATEMENT OF FIDUCIARY NET POSITION

DECEMBER 31, 2023

Assets	
Cash and short-term investments	\$ 9,468,433
Investments:	
Pooled investments	<u>227,286,065</u>
Total Assets	<u>236,754,498</u>
Liabilities	
Accounts payable	<u>28,557</u>
Total Liabilities	<u>28,557</u>
Net Position	
Restricted for pensions	<u>236,725,941</u>
Total Net Position	<u>\$ 236,725,941</u>

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

NEEDHAM 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, 2023

Additions

Contributions:	
Employers	\$ 12,319,665
Plan members	6,053,514
Other systems and Commonwealth of Massachusetts	215,448
Other	29,644
	<u>18,618,271</u>
Total contributions	
Investment income:	
Increase in fair value of investments	23,945,643
Less: management fees	(1,093,360)
	<u>22,852,283</u>
Net investment income	<u>22,852,283</u>
Total Additions	<u>41,470,554</u>

Deductions

Benefit payments to plan members, beneficiaries, and other systems	16,088,743
Refunds to plan members	477,763
Transfers to other systems	1,686,175
Administrative expenses	343,653
	<u>18,596,334</u>
Total Deductions	<u>18,596,334</u>
Change in Net Position	<u>22,874,220</u>
Net Position Restricted for Pensions	
Beginning of Year	<u>213,851,721</u>
End of Year	<u>\$ 236,725,941</u>

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

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 1 - NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATIONS

The Needham Contributory Retirement System (the "System"), a cost sharing multiple-employer pension plan, is a member of the Massachusetts Contributory Retirement Systems and is governed by Chapter 32 of the Massachusetts General Laws ("MGL"). Because of the significance of its operational and financial relationship with the Town of Needham, Massachusetts (the "Town"), the System is included as a pension trust fund in the Town's basic financial statements. 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 Public Employee Retirement Administration Commission ("PERAC").

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2023 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 accounting records are maintained on the accrual basis of accounting. Contributions from the Town of Needham and the Needham Housing Authority employees are recognized as revenue in the period in which employees provide services to the respective member unit.

INVESTMENTS

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. System assets are managed 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, 2023, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 10.78%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested throughout the year.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

**NOTE 1 - NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES
(CONTINUED)**

ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires the System to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

NOTE 2 - DESCRIPTION OF PLAN

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

Membership of the plan consisted of the following at December 31, 2023:

Number of retired participants and beneficiaries	480
Number of inactive participants entitled to a return of their employee contributions	377
Number of active participants	796
Total	1,653
Number of participating employers	2

There are 4 classes of membership in the retirement system, but one of these classes, Group 3, is made up exclusively of the Massachusetts State Police. The other three classes are as follows:

- Group 1 – General employees, including clerical, administrative, technical, and all other employees not otherwise classified.
- Group 2 – Certain specified hazardous duty positions.
- Group 4 – Police officers, firefighters, and other specified hazardous positions.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 2 - DESCRIPTION OF PLAN (CONTINUED)

PARTICIPANT CONTRIBUTIONS

Participants contribute a set percentage of their gross regular compensation annually. Employee contribution percentages are specified in Chapter 32 of MGL. The employee's individual contribution percentage is determined by their date of entry into the system. In addition, all employees hired on or after January 1, 1979 contribute an additional 2.00% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5.00%
January 1, 1975 – December 31, 1983	7.00%
January 1, 1984 – June 30, 1996	8.00%
July 1, 1996 – present	9.00%

For those members entering the System on or after April 2, 2012 in Group 1, the contribution rate will be reduced to 6.00% when at least 30 years of creditable service has been attained.

EMPLOYER CONTRIBUTIONS

Employers are required to contribute at actuarially determined rates as accepted by PERAC.

PARTICIPANT RETIREMENT BENEFITS

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.

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest 5-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%, 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.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 2 - DESCRIPTION OF PLAN (CONTINUED)

PARTICIPANT RETIREMENT BENEFITS (CONTINUED)

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 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.

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.

METHODS OF PAYMENT

A member may elect to receive his or her retirement allowance in one of three forms of payment as follows:

- Option A – A total annual allowance, payable in monthly installments, commencing at retirement and terminating at the member’s death.
- Option B – A reduced annual allowance, payable in monthly installments, commencing at retirement and terminating at the death of the member—provided, however, that if the total amount of the annuity portion received by the member is less than the amount of his or her accumulated deductions, including interest, the difference or balance of his accumulated deductions will be paid in a lump sum to the retiree’s beneficiary or beneficiaries of choice.
- Option C – A reduced annual allowance, payable in monthly installments, commencing at retirement. At the death of the retired employee, 2/3 of the allowance is payable to the member’s designated beneficiary (who may be the spouse, or former spouse who has not remarried, child, parent, sister, or brother of the employee) for the life of the beneficiary. For members who retired on or after January 12, 1988, if the beneficiary pre-deceases the retiree, the benefit payable increases (or “pops up” to Option A) based on the factor used to determine the Option C benefit at retirement. For members who retired prior to January 12, 1988, if the System has accepted Section 288 of Chapter 194 of the Acts of 1998 and the beneficiary pre-deceases the retiree, the benefit payable “pops up” to Option A in the same fashion. The Option C became available to accidental disability retirees on November 7, 1996.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 2 - DESCRIPTION OF PLAN (CONTINUED)

PARTICIPANT REFUNDS

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 3.00%.

NOTE 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's deposits may not be returned. MGL 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 formal deposit policies related to custodial credit risk.

As of December 31, 2023, none of the System's bank balance (including PRIT cash fund) of \$9,249,329 was exposed to custodial credit risk as uninsured or uncollateralized.

NOTE 4 - INVESTMENTS

INVESTMENT SUMMARY

The entirety of the System's investments of \$227,286,065 were invested in the PRIT fund* as of December 31, 2023. The PRIT fund issues separately available audited financial statements.

**Fair value is the same as the value of the pool share. The Pension Reserves Investment Trust (PRIT) was created under Massachusetts General Laws, 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 Laws, Chapter 30B.*

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 4 - INVESTMENTS (CONTINUED)

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. MGL 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 of Massachusetts, provided that no more than the established percentage of assets, is invested in any one security. The System does not have formal investment policies related to credit risk.

As of December 31, 2023, all of the System's investments were unrated by nationally recognized statistical rating organizations.

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, the System will not be able to recover the value of its investment or collateral securities that are in the possession of another party. All the System's investments are held in the System's name. The System does not have formal investment policies related to custodial credit risk.

As of December 31, 2023, the System did not have any investments exposed to custodial credit risk disclosure as investments in external investment pools are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form.

CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss attributable to the magnitude of the System's investment in a single issuer. MGL 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. The System does not have formal investment policies related to concentration of credit risk.

As of December 31, 2023, the System did not have any investments subject to concentration of credit risk as investments in external investment pools are excluded from concentration of credit risk disclosure.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 4 - INVESTMENTS (CONTINUED)

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 formal investment policies limiting investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

As of December 31, 2023, the System did not have investments in fixed income securities.

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 formal investment policies related to foreign currency risk.

At December 31, 2023, none of the System's investments were exposed to foreign currency risk.

RISKS AND UNCERTAINTIES

The System invests in various investment securities. Investment securities are exposed to various risks, such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amount reported in the Statement of Fiduciary Net Position. The System, through its investment advisor, monitors the System's investments and the risks associated therewith on a regular basis, which the System believes minimizes these risks.

System contributions are made and the net pension liability of the members are reported based on certain assumptions pertaining to investment returns, interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term could be material to the financial statements.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 4 - INVESTMENTS (CONTINUED)

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*.

The fair value of these investments has been determined using the net asset value (NAV). Investments measured at the NAV for fair value are not subject to level classification. The fair value of these investments has been determined using the NAV as a practical expedient and has not been categorized within the fair value hierarchy (Level 1, Level 2, or Level 3).

The System has the following investments measured at net asset value (NAV) as of December 31, 2023:

<u>Description</u>	<u>Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If currently eligible)</u>	<u>Redemption Notice Period</u>
Investments measured at NAV:				
Pooled Investments:				
PRIT fund ¹	\$ 227,286,065	\$ --	Monthly	30 Days

¹The fund investments with the objective of maximizing the return on investments by broadly diversifying its investment portfolio in accordance with the PRIM board approved asset allocation plan.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 5 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The net pension liability was based on an actuarial valuation dated January 1, 2024.

NET PENSION LIABILITY OF EMPLOYERS

The components of the net pension liability of the participating employers at December 31, 2023 were as follows:

Total pension liability	\$ 312,550,161
Less: Plan fiduciary net position	<u>(236,725,941)</u>
Employers' net pension liability	<u>\$ 75,824,220</u>
Plan fiduciary net position as a percentage of total pension liability	75.74%

ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the January 1, 2024 actuarial valuation is shown below:

Valuation Date	January 1, 2024
Actuarial cost method	Individual Entry Age Normal
Actuarial assumptions:	
Investment rate of return	6.25%
Projected salary increases:	
Group 1	6.00% decreasing to 3.75% dependent on length of service
Group 2	6.00% decreasing to 4.00% dependent on length of service
Group 4	7.00% decreasing to 4.25% dependent on length of service
Inflation rate	2.50%
Post-retirement cost-of-living adjustment	3.00% of the first \$16,000

Mortality rates were based on the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2016. For disabled lives, the mortality rates were based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2016.

Actuarial valuations of the ongoing Systems involve 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.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 5 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

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 geometric real rates of return for each major asset class included in the System's targeted asset allocation as of December 31, 2023, are summarized in the following table:

<u>Asset Class</u>	<u>Target Asset Allocation %</u>	<u>Long-Term Expected Real Rate of Return %</u>
Global equity	37.00	4.90
Private equity	16.00	7.70
Core fixed income	15.00	2.20
Real estate	10.00	4.10
Portfolio completion (PCS)	10.00	3.90
Value-added fixed income	8.00	5.30
Timberland	4.00	4.60
Total	<u>100.00</u>	

DISCOUNT RATE

The discount rate used to measure the total pension liability was 6.25%. 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.

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

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 5 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

SENSITIVITY OF DISCOUNT RATE

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

1% Decrease <u>(5.25%)</u>	Current Discount Rate <u>(6.25%)</u>	1% Increase <u>(7.25%)</u>
\$ 113,891,758	\$ 75,824,220	\$ 43,929,247

NOTE 6 - COMMITMENTS AND CONTINGENCIES

LITIGATION

On an ongoing basis, there are typically pending legal issues in which the System is involved. The System's management is of the opinion that the potential future settlement of these issues would not materially affect its financial statements taken as a whole.

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

SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

(UNAUDITED)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability										
Service cost	\$ 8,346,670	\$ 7,642,673	\$ 7,397,722	\$ 7,182,254	\$ 6,033,684	\$ 5,820,915	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest	18,894,999	18,028,876	18,064,765	17,406,916	17,240,269	16,589,494	15,828,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	(497,674)	3,669,456	(10,339,579)	—	(1,811,595)	—	857,000	(911,964)	—	(32,335)
Changes of assumptions	—	—	8,287,226	—	21,442,487	—	8,145,100	5,018,477	—	2,153,215
Changes of benefit terms	—	—	2,530,192	—	—	—	—	—	—	1,861,711
Benefit payments, including refunds of member contributions ¹	(16,334,307)	(16,039,754)	(15,245,673)	(14,122,112)	(13,980,939)	(13,312,979)	(12,430,464)	(12,076,857)	(11,477,777)	(10,562,871)
Net change in total pension liability	10,409,688	13,301,251	10,694,653	10,467,058	28,923,906	9,097,430	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	302,140,473	288,839,222	278,144,569	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859	179,834,295
Total pension liability - ending (a)	312,550,161	302,140,473	288,839,222	278,144,569	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859
Plan Fiduciary Net Position¹										
Contributions - employer	12,319,665	11,407,096	10,417,439	9,513,643	8,688,258	7,934,482	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	4,367,339	3,605,831	4,606,323	4,258,353	4,069,066	3,776,530	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income (loss)	22,865,176	(27,132,747)	39,609,060	21,764,818	25,006,514	(3,723,913)	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	(16,334,307)	(16,039,754)	(15,245,673)	(14,122,112)	(13,980,939)	(13,312,979)	(12,430,464)	(12,076,857)	(11,477,777)	(10,562,870)
Administrative expense	(343,653)	(334,818)	(346,076)	(322,126)	(299,553)	(328,142)	(303,310)	(229,753)	(229,912)	(293,797)
Change in fiduciary net position	22,874,220	(28,494,392)	39,041,073	21,092,576	23,483,346	(5,654,022)	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	213,851,721	242,346,113	203,305,040	182,212,464	158,729,118	164,383,140	142,326,470	134,691,303	136,261,674	128,673,500
Plan fiduciary net position - ending (b)	236,725,941	213,851,721	242,346,113	203,305,040	182,212,464	158,729,118	164,383,140	142,326,470	134,691,303	136,261,674
Net pension liability - ending (a-b)	\$ 75,824,220	\$ 88,288,752	\$ 46,493,109	\$ 74,839,529	\$ 85,465,047	\$ 80,024,487	\$ 65,273,035	\$ 69,785,519	\$ 65,048,655	\$ 55,404,185

¹ Amounts may differ from those presented on page 9 due to classification differences between System and actuary

See independent auditors' report.

See accompanying notes to required supplementary information.

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

SCHEDULES OF THE NET PENSION LIABILITY, CONTRIBUTIONS, AND INVESTMENT RETURNS

(UNAUDITED)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Schedule of Net Pension Liability										
Total pension liability	\$ 312,550,161	\$ 302,140,473	\$ 288,839,222	\$ 278,144,369	\$ 267,677,511	\$ 238,753,605	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>(236,725,941)</u>	<u>(213,851,721)</u>	<u>(242,346,113)</u>	<u>(203,305,040)</u>	<u>(182,212,464)</u>	<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>75,824,220</u>	\$ <u>88,288,752</u>	\$ <u>46,493,109</u>	\$ <u>74,839,329</u>	\$ <u>85,465,047</u>	\$ <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	75.74%	70.78%	83.90%	73.09%	68.07%	66.48%	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 46,345,114	\$ 43,935,214	\$ 40,549,126	\$ 43,397,457	\$ 41,727,828	\$ 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	163.61%	200.95%	114.66%	172.45%	204.82%	203.50%	173.35%	199.87%	193.10%	171.99%
Schedule of Contributions										
Actuarially determined contribution	\$ 12,319,665	\$ 11,407,096	\$ 10,417,439	\$ 9,513,643	\$ 8,688,258	\$ 7,934,482	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>(12,319,665)</u>	<u>(11,407,096)</u>	<u>(10,417,439)</u>	<u>(9,513,643)</u>	<u>(8,688,258)</u>	<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)	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --	\$ --
Covered payroll	\$ 46,345,114	\$ 43,935,214	\$ 40,549,126	\$ 43,397,457	\$ 41,727,828	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	26.58%	25.96%	25.69%	21.92%	20.82%	20.18%	19.42%	19.21%	18.26%	17.45%
Schedule of Investment Returns										
Annual money weighted rate of return, net of investment expense	10.78%	(11.16)%	19.59%	12.06%	16.09%	(2.36)%	17.11%	7.42%	0.61%	7.64%

See independent auditors' report.

See accompanying notes to required supplementary information.

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

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 1 - CHANGES IN THE NET PENSION LIABILITY

The Schedule of Changes in the Net Pension Liability and Related Ratios includes the detailed changes in the System's total pension liability, changes in the System's net position, and the ending net pension liability.

NOTE 2 - CONTRIBUTIONS

Governmental employers are required to pay an annual appropriation as established by PERAC. The total appropriation includes the amounts to pay the pension portion of each member's retirement allowance, an amount to amortize the actuarially determined unfunded liability to zero in accordance with the System's funding schedule, and additional appropriations in accordance with adopted early retirement incentive programs. The total appropriations are payable on July 1 and January 1. Employers may choose to pay the entire appropriation in July at a discounted rate. The actuarially determined contributions reflect the adjusted rates for communities that chose to pay the entire appropriation on July 1.

NOTE 3 - INVESTMENT RETURNS

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



CBIZ CPAs P.C.
53 State Street
17th Floor
Boston, MA 02109
P: 617.807.5000

Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Honorable Needham Contributory Retirement Board
Needham Contributory Retirement System
A Component Unit of the Town of Needham, Massachusetts

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States ("*Government Auditing Standards*"), the financial statements of the Needham Contributory Retirement System (the "System"), a component unit of the Town of Needham, Massachusetts, which comprise the statement of fiduciary net position as of December 31, 2023, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated June 5, 2025.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. *A material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the System's financial statements will not be prevented or detected and corrected on a timely basis. *A significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

CBIZ CPAs P.C.

CBIZ CPAs P.C.
Boston, MA
June 5, 2025



CBIZ CPAs P.C.
53 State Street
17th Floor
Boston, MA 02109
P: 617.807.5000

Independent Auditors' Report

To the Honorable Needham Contributory Retirement Board
Needham Contributory Retirement System
A Component Unit of the Town of Needham, Massachusetts

Report on the Audit of the Schedules

Opinions

We have audited the accompanying schedule of employer allocations of the Needham Contributory Retirement System (the "System"), a component unit of the Town of Needham, Massachusetts, as of and for the year ended December 31, 2023, and the related notes. 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, 2023, and the related notes (collectively the "Schedules").

In our opinion, the accompanying 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, 2023, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America ("GAAS"). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Schedules section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of the Schedules in accordance with accounting principles generally accepted in the United States of America; 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' Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the Schedules are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as a fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the Schedules.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the Schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts in the Schedules.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the Schedules.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Other Matter

We have audited, in accordance with GAAS, the financial statements of the System, as of and for the year ended December 31, 2023, and our report therein dated June 5, 2025, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of System management, the Retirement Board, System employers and their auditors as of and for the year ended December 31, 2023 and is not intended to be and should not be used by anyone other than these specified parties.

CBIZ CPAs P.C.

CBIZ CPAs P.C.
Boston, MA
June 5, 2025

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

SCHEDULE OF EMPLOYER ALLOCATIONS

FOR THE YEAR ENDED DECEMBER 31, 2023

<u>Employer</u>	<u>Actual Employer Contributions</u>	<u>Allocation Percentage</u>
Town of Needham	\$ 12,154,582	98.66%
Needham Housing Authority	<u>165,083</u>	<u>1.34%</u>
Total	<u>\$ 12,319,665</u>	<u>100.00%</u>

See accompanying notes to the Schedules.

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

SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2023

	Town of Needham	Needham Housing Authority	Total
Net Pension Liability	\$ 74,808,179	\$ 1,016,041	\$ 75,824,220
Deferred Outflows of Resources			
Differences between expected and actual experience	\$ 2,197,776	\$ 29,850	\$ 2,227,626
Changes of assumptions	3,338,204	45,339	3,383,543
Net difference between projected and actual investment earnings on pension plan investments	4,984,552	67,700	5,052,252
Changes in proportion and differences between employer contributions and proportionate share of contributions	92,314	82,500	174,814
Total Deferred Outflows of Resources	<u>\$ 10,612,846</u>	<u>\$ 225,389</u>	<u>\$ 10,838,235</u>
Deferred (Inflows) of Resources			
Differences between expected and actual experience	\$ (4,563,801)	\$ (61,985)	\$ (4,625,786)
Changes in proportion and differences between employer contributions and proportionate share of contributions	(82,500)	(92,314)	(174,814)
Total Deferred (Inflows) of Resources	<u>\$ (4,646,301)</u>	<u>\$ (154,299)</u>	<u>\$ (4,800,600)</u>
Pension Expense			
Proportionate share of pension expense	\$ 10,492,678	\$ 142,511	\$ 10,635,189
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	30,295	(30,295)	--
Total Pension Expense	<u>\$ 10,522,973</u>	<u>\$ 112,216</u>	<u>\$ 10,635,189</u>
Contributions			
Actuarially determined contribution	\$ 12,154,582	\$ 165,083	\$ 12,319,665
Contributions made	(12,154,582)	(165,083)	(12,319,665)
Contribution deficiency (excess)	<u>\$ --</u>	<u>\$ --</u>	<u>\$ --</u>
Contributions as a percentage of covered payroll	26.59%	25.79%	26.58%
Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense			
June 30, 2025	\$ (543,402)	\$ 990	\$ (542,412)
June 30, 2026	1,454,575	(8,415)	1,446,160
June 30, 2027	7,023,163	91,907	7,115,070
June 30, 2028	(1,933,851)	(16,518)	(1,950,369)
June 30, 2029	<u>(33,940)</u>	<u>3,126</u>	<u>(30,814)</u>
Total Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense	<u>\$ 5,966,545</u>	<u>\$ 71,090</u>	<u>\$ 6,037,635</u>
Discount Rate Sensitivity			
1% decrease (5.25%)	\$ 112,365,613	\$ 1,526,145	\$ 113,891,758
Current discount rate (6.25%)	\$ 74,808,179	\$ 1,016,041	\$ 75,824,220
1% increase (7.25%)	\$ 43,340,597	\$ 588,650	\$ 43,929,247
Covered Payroll	\$ 45,704,966	\$ 640,148	\$ 46,345,114

See accompanying notes to the Schedules.

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

NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS
AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 1 - SCHEDULE OF EMPLOYER ALLOCATIONS

Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions* (GASB 68), requires employers participating in a cost-sharing pension plan to recognize pension liabilities as employees provide services to the government and earn their pension benefits. Employers participating in cost-sharing plans are required to recognize their proportionate share of the plan's collective pension amounts for all benefits provided through the plan including the net pension liability, deferred outflows of resources, deferred inflows of resources, contributions and pension expense.

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

Massachusetts General Laws (MGL) Chapter 32, Section 22, Paragraph 7c dictates that Massachusetts cost sharing defined benefit pension plans allocate the annual required pension fund appropriation to employer units based on their proportionate share of the aggregate of the annual rates of regular compensation of all members in service of the system who are employees of any government unit at the close of business on the September 30th immediately preceding the fiscal year. Accordingly, the proportionate aggregate rates of regular compensation as of the close of business on September 30, 2022, were applied to allocate the System's fiscal year 2024, pension fund appropriation by member unit.

NOTE 2 - SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

The Schedule of Pension Amounts by Employer presents the total net pension liability, the various categories of deferred outflows of resources and deferred inflows of resources, contributions, and pension expense.

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

**NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS
AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER**

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 3 - COLLECTIVE DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

The following schedule reflects the deferred outflows and deferred inflows of resources for the System for the year ended December 31, 2023:

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Differences between expected and actual experience	\$ 2,227,626	\$ (4,625,786)
Changes of assumptions	3,383,543	--
Net difference between projected and actual investment earnings on pension plan investments	5,052,252	--
Changes in proportion and differences between employer contributions and proportionate share of contributions	174,814	(174,814)
Total	\$ 10,838,235	\$ (4,800,600)

The following schedule reflects the amortization of the balance of deferred outflows and inflows of resources as increases (decreases) in pension expense:

Fiscal Year*	Amount
2025	\$ (542,412)
2026	1,446,160
2027	7,115,070
2028	(1,950,369)
2029	(30,814)
Total	\$ 6,037,635

**Presented by member units' fiscal year to fairly present the fiduciary impact of related deferred outflows/inflows in the fiscal year affecting the member unit.*

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

NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS
AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

FOR THE YEAR ENDED DECEMBER 31, 2023

NOTE 4 - COLLECTIVE PENSION EXPENSE

The calculation of collective pension expense for the year ended December 31, 2023 are as follows:

Service cost	\$ 8,346,670
Interest	18,894,999
Differences between expected and actual experience	(1,774,141)
Changes of assumptions	5,923,059
Employee contributions	(4,367,339)
Projected earnings on pension investments	(13,255,789)
Differences between projected and actual earnings on investments	(3,475,923)
Administrative expenses	<u>343,653</u>
Total pension expense	<u>\$ 10,635,189</u>

Each employer's proportionate share of collective pension expense is equal to the collective pension expense multiplied by the employer's proportionate share percentage for the year ended December 31, 2023, as shown in the schedule of employer allocations.



NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM

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

Financial Statements and Other Information
For the Year Ended December 31, 2022

(With Independent Auditors' Report Thereon)

TABLE OF CONTENTS

	<u>Page</u>
INDEPENDENT AUDITORS' REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	3
BASIC FINANCIAL STATEMENTS:	
Statement of Fiduciary Net Position	7
Statement of Changes in Fiduciary Net Position	8
Notes to Financial Statements	9
REQUIRED SUPPLEMENTARY INFORMATION:	
Schedule of Changes in the Net Pension Liability	20
Schedules of the Net Pension Liability, Contributions, and Investment Returns	21
OTHER INFORMATION:	
Independent Auditors' Report	22
Schedule of Employer Allocations	24
Schedule of Pension Amounts by Employer	25



INDEPENDENT AUDITORS' REPORT

To the Honorable Needham Contributory Retirement Board
Needham Contributory Retirement System
Town of Needham, Massachusetts

Opinion

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

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System, as of December 31, 2022, 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.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve

collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of the Net Pension Liability, Contributions, and Investment Returns, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 sufficient evidence to express an opinion or provide any assurance.

Marcum LLP

Andover, Massachusetts
August 7, 2024

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, 2022.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the basic financial statements. The basic financial statements are comprised of two components (1) fund financial statements and (2) notes to financial statements. This report also contains required supplementary information in addition to the basic financial statements themselves.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Fund accounting is used to ensure and demonstrate compliance with finance related legal requirements.

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

The Statement of Changes in Plan Fiduciary Net Position presents information showing how the System's net position restricted for pensions changed during the year ended December 31, 2022. It reflects contributions by participating employers, active members, external parties, investment activity, along with deductions for retirement benefits, refunds, transfers, and administrative expenses.

Notes to Financial Statements

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.

Required Supplementary Information

In addition to the basic financial statements and accompanying notes, this report also presents certain required supplementary information which is required to be disclosed by accounting principles generally accepted in the United States of America.

Financial Highlights

- The System's total net position restricted for pensions was \$213,851,721 at December 31, 2022, a decrease of \$(28,494,392), or (11.76)%, over the prior year. This change is primarily due to unfavorable returns on System investments in calendar year 2022.

- Employer and employee contributions to the plan were \$16,533,956 which represents an increase of \$1,245,541, or 8.15%, over the prior year. The employer share of contributions represents 68.36% of the total contributions made to the System.
- Benefit payments to plan members and beneficiaries increased by \$429,524, or 2.86%, totaling \$15,428,617. At December 31, 2022, there were 481 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 11.
- The System's funded ratio (based on the System's GASB 68 valuation) as of the January 1, 2023 actuarial valuation was 70.78%, with the remaining liability reducing to zero on or before June 30, 2033.

Financial Statement Analysis

The following is a summary of financial statement data for the current and prior fiscal year:

	FIDUCIARY NET POSITION	
	<u>2022</u>	<u>2021</u>
Assets		
Cash and receivables	\$ 6,049,136	\$ 4,047,535
Investments	<u>207,840,994</u>	<u>238,610,538</u>
Total Assets	<u>213,890,130</u>	<u>242,658,073</u>
Liabilities		
Accounts payable	<u>38,409</u>	<u>311,960</u>
Total Liabilities	<u>38,409</u>	<u>311,960</u>
Net Position		
Restricted for Pensions	<u>\$ 213,851,721</u>	<u>\$ 242,346,113</u>

The System's total assets as of December 31, 2022 were \$213,890,130 and were mostly comprised of cash and investments. Total assets decreased by \$(28,767,943), or (11.86)%, from the prior year primarily due to unfavorable returns on System investments in calendar year 2022.

CHANGES IN FIDUCIARY NET POSITION

	<u>2022</u>	<u>2021</u>
Additions		
Contributions	\$ 16,687,244	\$ 15,509,004
Net investment income (loss)	<u>(27,119,527)</u>	<u>39,609,544</u>
Total Additions	<u>(10,432,283)</u>	<u>55,118,548</u>
Deductions		
Benefit payments	15,428,617	14,999,093
Other	<u>2,633,492</u>	<u>1,078,382</u>
Total Deductions	<u>18,062,109</u>	<u>16,077,475</u>
Change in Net Position	(28,494,392)	39,041,073
Net Position Restricted for Pensions		
Beginning of year	<u>242,346,113</u>	<u>203,305,040</u>
End of year	<u>\$ 213,851,721</u>	<u>\$ 242,346,113</u>

The amount needed to finance benefits is accumulated through the collection of employers' and employees' contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA, and through earnings on investments. Contributions and net investment loss for calendar year 2022 resulted in a net loss of \$(10,432,283). Employers' contributions increased by \$989,657, or 9.50%, in calendar year 2022. The System had net investment loss of \$(27,119,527), primarily due to unfavorable market conditions during the calendar year.

The primary deductions of the System include the payment of pension benefits to plan members and beneficiaries, refunds of member contributions, reimbursement payments in accordance with Massachusetts General Laws, Chapter 32, Section 3(8)c, more commonly referred to as 3(8)c reimbursements, and the costs of administering the System. Total deductions for calendar year 2022 were \$18,062,109, which represents an increase of \$1,984,634, or 12.34%, over deductions of \$16,077,475 in calendar year 2021. The payment of pension benefits increased by \$429,524, or 2.86%, over the previous year.

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. The money-weighted rate of return for the System's investments, as of December 31, 2022, was (11.16)%.

Requests for Information

This financial report is designed to provide a general overview of the Needham 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:

Needham Contributory Retirement System

Needham Town Hall

1471 Highland Avenue

Needham, Massachusetts 02492

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

Statement of Fiduciary Net Position
 December 31, 2022

Assets	
Cash and short-term investments	\$ 6,049,136
Investments - PRIT external investment pool	<u>207,840,994</u>
Total Assets	<u>213,890,130</u>
Liabilities	
Accounts payable	<u>38,409</u>
Total Liabilities	<u>38,409</u>
Net Position	
Restricted for pensions	<u>213,851,721</u>
Total Net Position	<u>\$ 213,851,721</u>

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

NEEDHAM 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, 2022

Additions	
Contributions:	
Employers	\$ 11,407,096
Plan members	5,126,860
Other systems and Commonwealth of Massachusetts	<u>153,288</u>
Total contributions	<u>16,687,244</u>
Investment (loss):	
Decrease in fair value of investments	(26,027,543)
Less: management fees	<u>(1,091,984)</u>
Net investment (loss)	<u>(27,119,527)</u>
Total Additions	<u>(10,432,283)</u>
Deductions	
Benefit payments to plan members and beneficiaries	15,428,617
Refunds to plan members	764,424
Transfers to other systems	1,534,249
Administrative expenses	<u>334,819</u>
Total Deductions	<u>18,062,109</u>
Change in Net Position	<u>(28,494,392)</u>
Net Position Restricted for Pensions, Beginning of Year	<u>242,346,113</u>
Net Position Restricted for Pensions, End of Year	\$ <u>213,851,721</u>

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

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM

Notes to Financial Statements

1. 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 of Needham, Massachusetts (the System), 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, 2022 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 Town of Needham and the Needham Housing Authority employees are recognized as revenue in the period in which employees provide services to the respective member unit. Investment income is recognized as earned by the pension plan.

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, 2022, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was (11.16)%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested throughout the year.

2. Description of Plan

Substantially all employees of the Town of Needham, Massachusetts (except teachers and administrators under contract employed by the School Department) and the 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 plan. 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 Needham Contributory Retirement Board does not have the authority to amend benefit provisions.

Membership of each plan consisted of the following at December 31, 2022:

Number of retired participants and beneficiaries	481
Number of inactive participants entitled to a return of their employee contributions	355
Number of active participants	<u>749</u>
Total	<u>1,585</u>
Number of participating employers	2

Participant Contributions

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 plan. In addition, all employees hired after January 1, 1979 contribute an additional 2.00% on all gross regular compensation over the rate of \$30,000 per year. The percentages are as follows:

Before January 1, 1975	5.00%
January 1, 1975 - December 31, 1983	7.00%
January 1, 1984 - June 30, 1996	8.00%
Beginning July 1, 1996	9.00%

For those members entering a Massachusetts System on or after April 2, 2012 in Group 1, the contribution rate will be reduced to 6.00% when at least 30 years of creditable service has been attained. Employers are required to contribute at actuarially determined rates as accepted by the Public Employee Retirement Administration Commission (PERAC).

Participant Retirement Benefits

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 five years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any two consecutive years exceeds 100%, 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 five consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

There are 4 classes of membership in the retirement system, but one of those classes, Group 3, is made up exclusively of the Massachusetts State Police. The other three classes are as follows:

- Group 1 – General employees, including clerical, administrative, technical, and all other employees not otherwise classified.
- Group 2 – Certain specified hazardous duty positions.
- Group 4 – Police officers, firefighters, and other specified hazardous positions.

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.

Method of Payment

A member may elect to receive his or her retirement allowance in one of three forms of payment as follows:

- Option A – Total annual allowance, payable in monthly installments, commencing at retirement and terminating at the member’s death.
- Option B – A reduced annual allowance, payable in monthly installments, commencing at retirement and terminating at the death of the member, provided however, that if the total amount of the annuity portion received by the member is less than the amount of his or her accumulated deductions, including interest, the difference or balance of his accumulated deductions will be paid in a lump sum to the retiree’s beneficiary or beneficiaries of choice.
- Option C – A reduced annual allowance, payable in monthly installments, commencing at retirement. At the death of the retired employee, 2/3 of the allowance is payable to the member’s designated beneficiary (who may be the spouse, or former spouse who has not remarried, child, parent, sister, or brother of the employee) for the life of the beneficiary. For members who retired on or after January 12, 1988, if the beneficiary pre-deceases the retiree, the benefit payable increases (or “pops up” to Option A) based on the factor used to determine the Option C benefit at retirement. For members who retired prior to January 12, 1988, if the System has accepted Section 288 of Chapter 194 of the Acts of 1998 and the beneficiary pre-deceases the retiree, the benefit payable “pops up” to Option A in the same fashion. The Option C became available to accidental disability retirees on November 7, 1996.

Participant Refunds

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%.

3. Deposits and Investments

Custodial Credit Risk – Deposits

Custodial credit risk is the risk that in the event of a bank failure, the System’s deposits may not be returned. Massachusetts General Laws Chapter 32, Section 23, limits the plan’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 formal deposit policies related to custodial credit risk.

As of December 31, 2022, \$5,110,781 of the System's bank balance of \$5,757,308 was collateralized by securities held by the pledging financial institution's trust department or agent.

Investment Summary

As of December 31, 2022, the entirety of the System's investments of \$207,840,994 were invested in the State Investment Pool (PRIT)* fund.

**Fair value is the same as the value of the pool share. The Pension Reserves Investment Trust (PRIT) was created under Massachusetts General Laws, Chapter 32, Section 22, in December 1993. PRIT is operated under contract with a private investment advisor, approved by the Pension Reserves Investment Management Board (PRIM). PRIM shall choose an investment advisor by requesting proposals from advisors and reviewing such proposals based on criteria adopted under Massachusetts General Laws, Chapter 30B.*

Credit Risk – Investments in Debt Securities

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 Laws, Chapter 32, Section 23, limits the investment of 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 of Massachusetts, provided that no more than the established percentage of assets, is invested in any one security. The System does not have formal investment policies related to credit risk.

As of December 31, 2022, all of the System's investments were unrated by nationally recognized statistical rating organizations.

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, the System 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 formal investment policies related to custodial credit risk.

As of December 31, 2022, the System did not have any investments exposed to custodial credit risk disclosure as investments in external investment pools are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributable to the magnitude of the System's investment in a single issuer. Massachusetts General Laws 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. The System does not have formal investment policies related to concentration of credit risk.

As of December 31, 2022, the System did not have any investments subject to concentration of credit risk exposure as investments in external investment pools are excluded from concentration of credit risk disclosure.

Interest Rate Risk – Investments in Debt Securities

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 formal investment policies limiting investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

As of December 31, 2022, all of the System's investments had maturities of less than one year.

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 formal investment policies related to foreign currency risk.

As of December 31, 2022, the System did not have any investments exposed to foreign currency risk.

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. The hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

- Level 1 – Inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities that the fund has the ability to access at the measurement date.
- Level 2 – Inputs other than quoted prices that are observable for an asset or liability either directly or indirectly, including inputs in markets that are not considered to be active. Because they must often be priced on the basis of transactions involving similar but not identical securities or do not trade with sufficient frequency, certain directly held securities are categorized as level 2.
- Level 3 – Unobservable inputs based on the best information available, using assumptions in determining the fair value of investments and derivative instruments.

The net asset value (NAV) per share is the amount of net assets attributable to each share of capital stock outstanding at the close of the period. Investments measured at the NAV for fair value are not subject to level classification.

The System's investments in PRIT are measured at the net asset value. At December 31, 2022, there are no unfunded commitments. Redemption frequency is monthly with a 30-day redemption notice period. PRIT maintains a diversified portfolio of active and passive investment strategies. A significant portion of the fund is allocated to global equity investments, which typically generate higher returns, but can also experience more volatility. To offset potential volatility and diversify the fund, investments are made in alternative asset classes that demonstrate little correlation to equities, serving to generate more consistent returns while reducing portfolio volatility.

4. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at December 31, 2022 were as follows:

Total pension liability	\$ 302,140,473
Plan fiduciary net position	<u>(213,851,721)</u>
Employers' net pension liability	\$ <u>88,288,752</u>
Plan fiduciary net position as a percentage of total pension liability	70.78%

Actuarial Assumptions

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

Valuation Date	January 1, 2023
Actuarial cost method	Individual Entry Age Normal
Actuarial assumptions:	
Investment rate of return	6.25%
Projected salary decreases	6.00%-3.75% for Group 1 6.00%-4.00% for Group 2 7.00%-4.25% for Group 4
Inflation rate	2.40%
Post-retirement cost-of-living adjustment	3.00% of the first \$14,000

Actuarial valuation of the ongoing Systems involve 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 the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2016. For disabled lives, the mortality rates were based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2016.

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, 2022, are summarized in the following table.

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return¹</u>
Global equity	38.00%	4.74%
Core fixed income	15.00%	2.10%
Private equity	15.00%	7.60%
Real estate	10.00%	3.10%
Portfolio completion (PCS)	10.00%	3.90%
Value-added fixed income	8.00%	5.20%
Timberland	4.00%	4.40%
Total	100.00%	

¹ Inflation of 2.40% is added to the long-term expected real rates of return to approximate the long-term expected rate of return.

Discount Rate

The discount rate used to measure the total pension liability was 6.25%. 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.

Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 6.25%, as well as what the participating employers' net pension liability would be if it were calculated using a discount rate that is one-percentage-point lower (5.25%) or one-percentage-point higher (7.25%) than the current rate:

1% Decrease <u>(5.25%)</u>	Current Discount Rate <u>(6.25%)</u>	1% Increase <u>(7.25%)</u>
\$ 125,228,932	\$ 88,288,752	\$ 57,333,086

Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the System for the year ended December 31, 2022:

	Deferred Outflows of <u>Resources</u>	Deferred (Inflows) of <u>Resources</u>
Differences between expected and actual experience	\$ 2,948,541	\$ (6,623,168)
Changes of assumptions	9,306,602	-
Net difference between projected and actual investment earnings on pension plan investments	11,185,716	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>241,490</u>	<u>(241,490)</u>
Total	<u>\$ 23,682,349</u>	<u>\$ (6,864,658)</u>

The following summarizes changes in deferred outflows/inflows of resources for the year ended December 31, 2022:

	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						
Differences between expected and actual experience	2022	5.09	\$ -	\$ 3,669,456	\$ (720,915)	\$ 2,948,541
Net difference between projected and actual investment earnings on pension plan investments						
	2018	5	3,114,344	-	(3,114,344)	-
	2019	5	(5,421,548)	-	2,710,775	(2,710,773)
	2020	5	(5,965,710)	-	1,988,567	(3,977,143)
	2021	5	(21,169,756)	-	5,292,439	(15,877,317)
	2022	5	-	42,188,686	(8,437,737)	33,750,949
Changes of assumptions						
	2019	5	8,576,993	-	(4,288,495)	4,288,498
	2021	5.07	6,652,665	-	(1,634,561)	5,018,104
Changes in proportion and differences between employer contributions and proportionate share of contributions						
	2018	5	6,176	-	(6,176)	-
	2019	5	77,106	-	(38,553)	38,553
	2020	5	108,154	-	(36,052)	72,102
	2021	5.07	106,598	-	(26,191)	80,407
	2022	5.09	-	62,757	(12,329)	50,428
Total Deferred Outflows of Resources			<u>(13,914,978)</u>	<u>45,920,899</u>	<u>(8,323,572)</u>	<u>23,682,349</u>
Deferred (Inflows) of Resources						
Differences between expected and actual experience	2019	5	(724,638)	-	362,319	(362,319)
	2021	5.07	(8,300,214)	-	2,039,365	(6,260,849)
Changes in proportion and differences between employer contributions and proportionate share of contributions						
	2018	5	(6,176)	-	6,176	-
	2019	5	(77,106)	-	38,553	(38,553)
	2020	5	(108,154)	-	36,052	(72,102)
	2021	5.07	(106,598)	-	26,191	(80,407)
	2022	5.09	-	(62,757)	12,329	(50,428)
Total Deferred (Inflows) of Resources			<u>(9,322,886)</u>	<u>(62,757)</u>	<u>2,520,985</u>	<u>(6,864,658)</u>
Total Collective Deferred Outflows (Inflows) of Resources			<u>\$ (23,237,864)</u>	<u>\$ 45,858,142</u>	<u>\$ (5,802,587)</u>	<u>\$ 16,817,691</u>

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

<u>Fiscal</u>		<u>Total</u>
<u>Year*</u>		
2024	\$	2,688,244
2025		1,472,837
2026		3,461,409
2027		9,130,320
2028		64,881
Total	\$	<u>16,817,691</u>

**Presented by member units' fiscal year to fairly present the fiduciary impact of related deferred outflows/inflows in the fiscal year affecting the member unit.*

5. **Commitments and Contingencies**

Outstanding Legal Issues

On an ongoing basis, there are typically pending legal issues in which the System is involved. The System's management is of the opinion that the potential future settlement of these issues would not materially affect its financial statements taken as a whole.

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

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service cost	\$ 7,642,673	\$ 7,397,722	\$ 7,182,254	\$ 6,033,684	\$ 5,820,915	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest	18,028,876	18,064,765	17,406,916	17,240,269	16,589,494	15,828,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	3,669,456	(10,339,579)	-	(1,811,595)	-	857,000	(911,964)	-	(32,335)
Changes of assumptions	-	8,287,226	-	21,442,487	-	8,145,100	5,018,477	-	2,153,215
Changes of benefit terms	-	2,530,192	-	-	-	-	-	-	1,861,711
Benefit payments, including refunds of member contributions	<u>(16,039,754)</u>	<u>(15,245,673)</u>	<u>(14,122,112)</u>	<u>(13,980,939)</u>	<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	13,301,251	10,694,653	10,467,058	28,923,906	9,097,430	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	<u>288,839,222</u>	<u>278,144,569</u>	<u>267,677,511</u>	<u>238,753,605</u>	<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)	302,140,473	288,839,222	278,144,569	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859
Plan Fiduciary Net Position¹									
Contributions - employer	11,407,096	10,417,439	9,513,643	8,688,258	7,934,482	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	3,605,831	4,606,323	4,258,353	4,069,066	3,776,530	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income (loss)	(27,132,747)	39,609,060	21,764,818	25,006,514	(3,723,913)	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	(16,039,754)	(15,245,673)	(14,122,112)	(13,980,939)	(13,312,979)	(12,430,464)	(12,076,857)	(11,477,777)	(10,562,870)
Administrative expense	<u>(334,818)</u>	<u>(346,076)</u>	<u>(322,126)</u>	<u>(299,553)</u>	<u>(328,142)</u>	<u>(303,310)</u>	<u>(229,753)</u>	<u>(229,912)</u>	<u>(293,797)</u>
Change in fiduciary net position	(28,494,392)	39,041,073	21,092,576	23,483,346	(5,654,022)	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	<u>242,346,113</u>	<u>203,305,040</u>	<u>182,212,464</u>	<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>	<u>128,673,500</u>
Plan fiduciary net position - ending (b)	<u>213,851,721</u>	<u>242,346,113</u>	<u>203,305,040</u>	<u>182,212,464</u>	<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 - ending (a-b)	<u>\$ 88,288,752</u>	<u>\$ 46,493,109</u>	<u>\$ 74,839,529</u>	<u>\$ 85,465,047</u>	<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>

¹ Amounts may differ from those presented on page 10 due to classification differences between System and actuary

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

See Independent Auditors' Report.

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM

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

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Schedule of Net Pension Liability									
Total pension liability	\$ 302,140,473	\$ 288,839,222	\$ 278,144,569	\$ 267,677,511	\$ 238,753,605	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>(213,851,721)</u>	<u>(242,346,113)</u>	<u>(203,305,040)</u>	<u>(182,212,464)</u>	<u>(158,729,118)</u>	<u>(164,383,140)</u>	<u>(142,326,470)</u>	<u>(134,691,309)</u>	<u>(136,261,674)</u>
Net pension liability	\$ <u>88,288,752</u>	\$ <u>46,493,109</u>	\$ <u>74,839,529</u>	\$ <u>85,465,047</u>	\$ <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	70.78%	83.90%	73.09%	68.07%	66.48%	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 43,935,214	\$ 40,549,126	\$ 43,397,457	\$ 41,727,828	\$ 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	200.95%	114.66%	172.45%	204.82%	203.50%	173.35%	199.87%	193.10%	171.99%
Schedule of Contributions									
Actuarially determined contribution	\$ 11,407,096	\$ 10,417,439	\$ 9,513,643	\$ 8,688,258	\$ 7,934,482	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>(11,407,096)</u>	<u>(10,417,439)</u>	<u>(9,513,643)</u>	<u>(8,688,258)</u>	<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)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 43,935,214	\$ 40,549,126	\$ 43,397,457	\$ 41,727,828	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	25.96%	25.69%	21.92%	20.82%	20.18%	19.42%	19.21%	18.26%	17.45%
Schedule of Investment Returns									
Annual money weighted rate of return, net of investment expense	(11.16)%	19.59%	12.06%	16.09%	(2.36)%	17.11%	7.42%	0.61%	7.64%

Schedule is 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 Honorable Needham Contributory Retirement Board
Needham Contributory Retirement System
Town of Needham, Massachusetts

Opinions

We have audited the schedule of employer allocations of the Needham Contributory Retirement System (the System) as of and for the year ended December 31, 2022. We have also audited the total for all entities of the net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense included in the schedule of pension amounts by employer of the Needham Contributory Retirement System as of and for the year ended December 31, 2022.

In our opinion, the accompanying 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, 2022, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Schedule section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the 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' Responsibilities for the Audit of The Schedules

Our objectives are to obtain reasonable assurance about whether the schedules as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the schedules.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts in the schedules.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the schedules.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Restriction on Use

Our report is intended solely for the information and use of Contributory Retirement System management, the Retirement Board, System employers and their auditors as of and for the year ended December 31, 2022 and is not intended to be and should not be used by anyone other than these specified parties.

Marcum LLP

Andover, Massachusetts
August 7, 2024

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM
 Schedule of Employer Allocations
 For the Year Ended December 31, 2022

<u>Employer</u>	<u>Actual Employer Contributions</u>	<u>Allocation Percentage</u>
Town of Needham	\$ 11,263,367	98.74%
Needham Housing Authority	<u>143,729</u>	<u>1.26%</u>
Total	<u>\$ 11,407,096</u>	<u>100.00%</u>

See actuarial assumptions in the notes to the financial statements.

NEEDHAM CONTRIBUTORY RETIREMENT SYSTEM

Schedule of Pension Amounts by Employer
As of and for the year ended December 31, 2022

	Town of <u>Needham</u>	Needham Housing <u>Authority</u>	<u>Total</u>
Net Pension Liability	\$ 87,176,317	\$ 1,112,435	\$ 88,288,752
Deferred Outflows of Resources			
Differences between expected and actual experience	\$ 2,911,389	\$ 37,152	\$ 2,948,541
Changes of assumptions	9,189,339	117,263	9,306,602
Net difference between projected and actual investment earnings on pension plan investments	11,044,776	140,940	11,185,716
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>169,388</u>	<u>72,102</u>	<u>241,490</u>
Total Deferred Outflows of Resources	\$ <u>23,314,892</u>	\$ <u>367,457</u>	\$ <u>23,682,349</u>
Deferred (Inflows) of Resources			
Differences between expected and actual experience	\$ (6,539,716)	\$ (83,452)	\$ (6,623,168)
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>(72,102)</u>	<u>(169,388)</u>	<u>(241,490)</u>
Total Deferred (Inflows) of Resources	\$ <u>(6,611,818)</u>	\$ <u>(252,840)</u>	\$ <u>(6,864,658)</u>
Pension Expense			
Proportionate share of pension expense	\$ 12,981,531	\$ 165,654	\$ 13,147,185
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	<u>34,845</u>	<u>(34,845)</u>	<u>-</u>
Total Pension Expense	\$ <u>13,016,376</u>	\$ <u>130,809</u>	\$ <u>13,147,185</u>
Contributions			
Actuarially determined contribution	\$ 11,263,367	\$ 143,729	\$ 11,407,096
Contributions made	<u>(11,263,367)</u>	<u>(143,729)</u>	<u>(11,407,096)</u>
Contribution deficiency (excess)	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>
Contributions as a percentage of covered payroll	26.00%	23.61%	25.96%
Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense			
June 30, 2024	\$ 2,695,394	\$ (7,150)	\$ 2,688,244
June 30, 2025	1,456,748	16,089	1,472,837
June 30, 2026	3,456,315	5,094	3,461,409
June 30, 2027	9,029,440	100,880	9,130,320
June 30, 2028	<u>65,177</u>	<u>(296)</u>	<u>64,881</u>
Total Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense	\$ <u>16,703,074</u>	\$ <u>114,617</u>	\$ <u>16,817,691</u>
Discount Rate Sensitivity			
1% decrease (5.25%)	\$ 123,651,052	\$ 1,577,880	\$ 125,228,932
Current discount rate (6.25%)	\$ 87,176,317	\$ 1,112,435	\$ 88,288,752
1% increase (7.25%)	\$ 56,610,691	\$ 722,395	\$ 57,333,086
Covered Payroll	\$ 43,326,494	\$ 608,720	\$ 43,935,214

See actuarial assumptions in the notes to the financial statements.



NEEDHAM RETIREMENT SYSTEM

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

Annual Financial Statements and Other Information
For the Year Ended December 31, 2021

(With Independent Auditor's Report Thereon)

TABLE OF CONTENTS

	<u>Page</u>
INDEPENDENT AUDITOR' REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	4
BASIC FINANCIAL STATEMENTS:	
Statement of Plan Fiduciary Net Position	7
Statement of Changes in Plan Fiduciary Net Position	8
Notes to Financial Statements	9
REQUIRED SUPPLEMENTAL INFORMATION:	
Schedule of Changes in the Net Pension Liability	19
Schedules of Net Pension Liability, Contributions, and Investment Returns	20
OTHER INFORMATION:	
Independent Auditor's Report	21
Schedule of Employer Allocations	24
Schedule of Pension Amounts by Employer	25



INDEPENDENT AUDITOR'S REPORT

To the Retirement System Board
Needham Retirement System
Town of Needham, Massachusetts

Opinion

We have audited the financial statements of the Needham Retirement System (NRS), as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the NRS's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of the NRS, as of December 31, 2021, 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.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

NRS's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance

Merrimack, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine

800.282.2440 | melansoncpas.com



with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of the Net Pension Liability, Contributions, and Investment Returns, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 sufficient evidence to express an opinion or provide any assurance.

Melanson

Merrimack, New Hampshire
May 18, 2023

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Needham Retirement System (NRS), we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2021.

Overview of the Financial Statements

NRS financial statements are comprised of a statement of plan fiduciary position, statement of changes in plan fiduciary position, and notes to the financial statements. The required supplementary information that appears after the notes to the financial statements is not part of the basic financial statements, but is supplementary information required by the Governmental Accounting Standards Board (GASB).

The Statement of Plan Fiduciary Net Position reflects the resources available to pay members, retirees and beneficiaries at the close of the calendar year. This statement also provides information about the fair value and composition of the fiduciary net position.

The Statement of Changes in Plan Fiduciary Net Position presents information showing how NRS's net position available for benefits changed during the year ended December 31, 2021. It reflects contributions by members and participating employers, net investment income, including net appreciation in fair value of the investment portfolio, along with deductions for retirement benefits, refunds and transfers, and administrative expenses.

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 Notes provide information about the Plan, policies, and performance of NRS.

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.

Financial Highlights

- NRS's total net position available for benefits was \$242,346,113 at December 31, 2021.
- The System's net position increased by \$39,041,073.
- Employer and employee contributions to the plan were \$15,288,415 which represents a \$1,988,690 increase over the preceding year. The employer share of contributions represents 67% of the 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 \$14,999,093. At December 31, 2021, there were 472 retirees and beneficiaries in receipt of pension benefits.
- The NRS was 83.90% funded based on its accounting valuation report of December 31, 2021.

Financial Statement Analysis

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

FIDUCIARY NET POSITION

	<u>2021</u>	<u>2020</u>
Assets		
Cash and receivables	\$ 4,047,535	\$ 2,080,090
Investments	<u>238,610,538</u>	<u>201,497,803</u>
Total Assets	<u>\$ 242,658,073</u>	<u>\$ 203,577,893</u>
Liabilities		
Accounts payable	<u>311,960</u>	<u>272,853</u>
Net Position	<u>242,346,113</u>	<u>203,305,040</u>
Total Liabilities and Net Position	<u>\$ 242,658,073</u>	<u>\$ 203,577,893</u>

CHANGES IN FIDUCIARY NET POSITION

	<u>2021</u>	<u>2020</u>
Additions		
Contributions	\$ 15,509,004	\$ 14,537,834
Investment income, net	<u>39,609,544</u>	<u>21,772,628</u>
Total Additions	55,118,548	36,310,462
Deductions		
Benefit payments	14,999,093	14,517,225
Other	<u>1,078,382</u>	<u>700,661</u>
Total Deductions	<u>16,077,475</u>	<u>15,217,886</u>
Changes in net position	39,041,073	21,092,576
Net position - beginning of year	<u>203,305,040</u>	<u>182,212,464</u>
Net position - end of year	<u>\$ 242,346,113</u>	<u>\$ 203,305,040</u>

The amount needed to finance benefits is accumulated through the collection of employers' and employees' contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA, Massachusetts General Laws Chapter 32 Section 3(8)c reimbursements, and earnings on

investments. Contributions and net investment gain for calendar year 2021 resulted in total additions to the plan of \$55,118,548. Employer's contributions increased by \$903,796 or 9.5% over the prior year. NRS had net investment gain of \$39,609,544, an increase of \$17,836,916 from the previous year. Calendar year 2021 resulted in strong market performance, outperforming the total core benchmark.

The primary deductions of NRS include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the NRS. Total deductions for 2021 were \$16,077,475, which represents an increase of \$859,589 or 5.6% from the previous year. The payment of pension benefits increased by \$481,868 or 3.3% over the previous year. The increase in these expenses resulted from a higher retirement rate than expected during the COVID-19 pandemic and cost-of-living expenses.

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. The PRIT Fund's investment rate of return in calendar year 2021 was 19.59%. 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 NRS's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to:

Needham Retirement System
Needham Town Hall
1471 Highland Avenue
Needham, Massachusetts 02492

NEEDHAM RETIREMENT SYSTEM

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

Statement of Plan Fiduciary Net Position
December 31, 2021

Assets	
Cash and short-term investments	\$ 4,047,535
Investments - PRIT external investment pool	<u>238,610,538</u>
Total Assets	\$ <u>242,658,073</u>
Liabilities and Net Position	
Accounts payable	\$ <u>311,960</u>
Total Liabilities	311,960
Net position restricted for pensions	<u>242,346,113</u>
Total Liabilities and Net Position	\$ <u>242,658,073</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 Plan Fiduciary Net Position
For the Year Ended December 31, 2021

Additions	
Contributions:	
Employers	\$ 10,417,439
Plan members	4,870,976
Other systems and Commonwealth of Massachusetts	<u>220,589</u>
Total contributions	15,509,004
Investment income:	
Investment earnings	22,110,731
Change in fair value of investments	18,587,465
Less: management fees	<u>(1,088,652)</u>
Net investment gain	<u>39,609,544</u>
Total additions	55,118,548
Deductions	
Benefit payments to plan members and beneficiaries	14,999,093
Refunds to plan members	467,170
Transfers to other systems	265,137
Administrative expenses	<u>346,075</u>
Total deductions	<u>16,077,475</u>
Net increase	39,041,073
Net position restricted for pensions	
Beginning of year	<u>203,305,040</u>
End of year	<u>\$ 242,346,113</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 (NRS), a cost sharing, multiple employer, public employee retirement system (PERS). Eligible employees must participate in the plan. 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 plan, contribution percentages and benefits paid. The Needham Retirement Board does not have the authority to amend benefit provisions.

Membership of each plan consisted of the following at December 31, 2021:

Number of retired participants and beneficiaries	472
Number of inactive participants entitled to a return of their employee contributions	341
Number of active participants	<u>727</u>
Total	<u>1,540</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 plan. 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 plan provides for retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation for those hired prior to April 2, 2012 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 NRS 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 NRS is included as a pension trust fund in the Town's basic financial systems. NRS 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 NRS as reflected in the accompanying financial statements for the year ended December 31, 2021 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of NRS are summarized below:

Basis of Accounting

NRS follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the Town of Needham and Needham Housing Authority employees are recognized as revenue in the period in which employees provide services to the respective member unit. 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.

Investment Policy

Investments are reported at fair value. NRS 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, 2021, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 19.59%. 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, NRS deposits may not be returned. Massachusetts General Law Chapter 32, Section 23, limits the plan'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." NRS does not have a deposit policy for custodial credit risk.

As of December 31, 2021, NRS's bank balance of \$3,918,687 represents deposits of \$250,000 insured by FDIC, \$3,091,939 collateralized by the Federal Home Loan Bank of Pittsburgh, and \$576,748 invested in PRIT. PRIT Cash Fund III is measured at amortized cost, which approximates 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

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 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, 2021, NRS maintained its investments in the State Investment Pool (PRIT)* with a fair value of \$238,610,538. 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.

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. NRS does not have policies for custodial credit risk.

NRS's investments of \$238,610,538 are invested in the State investment pool (PRIT) and are not subject to custodial credit risk disclosure.

Concentration of Credit Risk

NRS invests in PRIT fund, consistent with Massachusetts General Law Chapter 32, Section 23.

Fair Value

NRS investment in PRIT is measured at the net asset value. At December 31, 2021, there are no unfunded commitments. Redemption frequency is monthly with a 30 day redemption notice period.

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 NRS's financial position.

6. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at December 31, 2021 were as follows:

Total pension liability	\$ 288,839,222
Plan fiduciary net position	<u>(242,346,113)</u>
Employers' net pension liability	<u>\$ 46,493,109</u>
Plan fiduciary net position as a percentage of total pension liability	83.90%

Actuarial Assumptions

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

Valuation Date	1/1/2022
Actuarial cost method	Individual Entry Age Norma
Actuarial assumptions:	
Investment rate of return	6.25%, previously 6.50%
Projected salary increases	6%-3.75% for Group 1 6%-4.00% for Group 2 7%-4.25% for Group 4
Inflation rate	2.40%
Post-retirement cost-of-living adjustment	3% of the first \$14,000

Actuarial valuation of the ongoing plans 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 the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2016. For disabled lives, the mortality rates were based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2016.

Changes of Assumptions

Effective January 1, 2022:

- The investment rate of return assumption was lowered from 6.50% to 6.25%.
- The salary increase assumption was updated from a scale that varies by length of service with ultimate rates of 3% to 3.5%.
- Mortality and mortality improvement rates were updated.

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 geometric real rates of return for each major asset class included in the PRIT's targeted asset allocation as of December 31, 2021, are summarized in the following table.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Global equity	38.00%	4.22%
Core fixed income	15.00%	0.70%
Private equity	15.00%	7.70%
Real estate	10.00%	3.60%
Portfolio completion (PCS)	10.00%	3.00%
Value-added fixed income	8.00%	4.00%
Timberland	4.00%	4.20%
Total	<u>100.00%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 6.25%. 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 NRS'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.

Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 6.25%, 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 (5.25%) or 1-percentage-point higher (7.25%) than the current rate:

	1% Decrease <u>(5.25%)</u>	Current Discount Rate <u>(6.25%)</u>	1% Increase <u>(7.25%)</u>
Net pension liability of participating employers as of December 31, 2021	\$ 81,980,707	\$ 46,493,109	\$ 16,771,444

Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the NRS for the year ended December 31, 2021:

	Deferred Outflows of <u>Resources</u>	Deferred (Inflows) of <u>Resources</u>
Differences between expected and actual experience	\$ -	\$ (9,024,852)
Changes of assumptions	15,229,660	-
Net difference between projected and actual earnings on pension plan investments	-	(29,442,671)
Changes in proportion and differences between contributions and proportionate share of contributions	<u>298,034</u>	<u>(298,034)</u>
Total	<u>\$ 15,527,694</u>	<u>\$ (38,765,557)</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	\$ 171,400	\$ -	\$ (171,400)	\$ -
Changes of assumptions	2017	5	1,629,020	-	(1,629,020)	-
	2019	5	12,865,491	-	(4,288,497)	8,576,994
	2021	5.07	-	8,287,226	(1,634,560)	6,652,666
Changes in proportion and differences between employer contributions and proportionate share of contributions	2017	5	8,346	-	(8,346)	-
	2018	5	12,353	-	(6,177)	6,176
	2019	5	115,660	-	(38,554)	77,106
	2020	5	144,204	-	(36,050)	108,154
	2021	5.07	-	132,789	(26,191)	106,598
Total Deferred Outflows of Resources:			<u>14,946,474</u>	<u>8,420,015</u>	<u>(7,838,795)</u>	<u>15,527,694</u>
Deferred Inflows of Resources						
Difference between expected and actual experience	2019	5	(1,086,957)	-	362,319	(724,638)
	2021	5.07	-	(10,339,579)	2,039,365	(8,300,214)
Net difference between projected and actual investment earnings on pension plan investments	2017	5	(2,651,068)	-	2,651,068	-
	2018	5	6,228,689	-	(3,114,345)	3,114,344
	2019	5	(8,132,322)	-	2,710,774	(5,421,548)
	2020	5	(7,954,283)	-	1,988,573	(5,965,710)
	2021	5	-	(26,462,195)	5,292,438	(21,169,757)
Changes in proportion and differences between employer contributions and proportionate share of contributions	2017	5	(8,346)	-	8,346	-
	2018	5	(12,353)	-	6,177	(6,176)
	2019	5	(115,660)	-	38,554	(77,106)
	2020	5	(144,204)	-	36,050	(108,154)
	2021	5.07	-	(132,789)	26,191	(106,598)
Total Deferred Inflows of Resources:			<u>(13,876,504)</u>	<u>(36,934,563)</u>	<u>12,045,510</u>	<u>(38,765,557)</u>
Total Collective Deferred (Inflows) Outflows of Resources:			<u>\$ 1,069,970</u>	<u>\$ (28,514,548)</u>	<u>\$ 4,206,715</u>	<u>\$ (23,237,863)</u>

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>
2023	\$ (3,288,241)	\$ (67,823)
2024	(6,354,365)	(116,043)
2025	(7,591,917)	(93,898)
2026	(5,594,139)	(103,104)
2027	<u>(26,116)</u>	<u>(2,217)</u>
Total	<u>\$ (22,854,778)</u>	<u>\$ (383,085)</u>

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

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Service cost	\$ 7,897,722	\$ 7,182,254	\$ 6,033,684	\$ 5,820,915	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest	18,064,765	17,406,916	17,240,269	16,589,494	15,628,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	(10,339,579)	-	(1,811,595)	-	857,000	(911,964)	-	(32,335)
Changes of assumptions	8,287,226	-	21,442,487	-	8,145,100	5,018,477	-	2,153,215
Changes of benefit terms	2,530,192	-	-	-	-	-	-	1,861,711
Benefit payments, including refunds of member contributions	<u>(15,245,673)</u>	<u>(14,122,112)</u>	<u>(13,980,939)</u>	<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	10,694,653	10,467,058	28,923,906	9,097,430	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	<u>278,144,569</u>	<u>267,677,511</u>	<u>238,753,605</u>	<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)	288,839,222	278,144,569	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859
Plan Fiduciary Net Position								
Contributions - employer	10,417,439	9,513,643	8,688,258	7,934,482	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	4,606,323	4,258,353	4,069,066	3,776,530	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income (loss)	39,609,060	21,764,818	25,006,514	(3,723,913)	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	<u>(15,245,673)</u>	<u>(14,122,112)</u>	<u>(13,980,939)</u>	<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>(346,076)</u>	<u>(322,126)</u>	<u>(299,553)</u>	<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	39,041,073	21,092,576	23,483,346	(5,654,022)	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	<u>203,305,040</u>	<u>182,212,464</u>	<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>	<u>128,673,500</u>
Plan fiduciary net position - ending (b)	<u>242,346,113</u>	<u>203,305,040</u>	<u>182,212,464</u>	<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 - ending (a-b)	\$ <u>46,493,109</u>	\$ <u>74,839,529</u>	\$ <u>85,465,047</u>	\$ <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 9.

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>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 288,839,222	\$ 278,144,569	\$ 267,677,511	\$ 238,753,605	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>(242,346,113)</u>	<u>(203,305,040)</u>	<u>(182,212,464)</u>	<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>\$ 46,493,109</u>	<u>\$ 74,839,529</u>	<u>\$ 85,465,047</u>	<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	83.90%	73.09%	68.07%	66.48%	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 40,549,126	\$ 43,397,457	\$ 41,727,828	\$ 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	114.66%	172.45%	204.82%	203.50%	173.35%	199.87%	193.10%	171.99%
Schedule of Contributions								
Actuarially determined contribution	\$ 10,417,439	\$ 9,513,643	\$ 8,688,258	\$ 7,934,482	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>(10,417,439)</u>	<u>(9,513,643)</u>	<u>(8,688,258)</u>	<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>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 40,549,126	\$ 43,397,457	\$ 41,727,828	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	25.69%	21.92%	20.82%	20.18%	19.42%	19.21%	18.26%	17.45%
Schedule of Investment Returns								
Annual money weighted rate of return, net of investment expense	19.59%	12.06%	16.09%	-2.36%	17.11%	7.42%	0.61%	7.64%

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

See Independent Auditors' Report.



INDEPENDENT AUDITOR'S REPORT

To the Retirement System Board
Needham Retirement System
Town of Needham, Massachusetts

Opinions

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, 2021. We have also audited the total for all entities of the titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified totals) included in the accompanying schedule of pension amounts by employer of the Contributory Retirement System as of and for the year ended December 31, 2021.

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 Needham Contributory Retirement System as of and for the year ended December 31, 2021, in accordance with accounting principles generally accepted in the United States of America.

We have audited the accompanying schedule of employer allocations of the Needham Contributory Retirement System (the System) as of and for the year December 31, 2021. We have also audited the columns titled net pension liability, total deferred outflows of resources excluding employer specific amounts, total deferred inflows of resources excluding employer specific amounts, and pension expense (specified column totals) included in the accompanying schedule of collective pension amounts of the Contributory Retirement System as of and for the year ended December 31, 2021.

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 excluding employer specific amounts, total deferred inflows of resources excluding employer specific amounts, and pension expense for the Contributory Retirement System as of and for the year ended December 31, 2021, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Schedule section of our report. We are required to be independent of the Needham Contributory Retirement System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We

Merrimack, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine

800.282.2440 | melansoncpas.com



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

Responsibilities of Management for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Audit of The Schedules

Our objectives are to obtain reasonable assurance about whether the schedules as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the schedules.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the schedules, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the schedules.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the schedules.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.



Restriction on Use

Our report is intended solely for the information and use of Contributory Retirement System management, the Retirement Board, System employers and their auditors as of and for the year ended December 31, 2021 and is not intended to be and should not be used by anyone other than these specified parties.

Melanson

Merrimack, New Hampshire
May 18, 2023

NEEDHAM RETIREMENT SYSTEM

Schedule of Employer Allocations

<u>Employer</u>	FY2021 Actual Employer <u>Contributions</u>	Employer Allocation <u>Percentage</u>
Town of Needham	\$ 10,276,804	98.65%
Needham Housing Authority	<u>140,635</u>	<u>1.35%</u>
Total	<u>\$ 10,417,439</u>	<u>100.00%</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, 2021

	Town of <u>Needham</u>	Needham Housing <u>Authority</u>	<u>Total</u>
Net Pension Liability	\$ 45,865,454	\$ 627,655	\$ 46,493,109
Deferred Outflows of Resources			
Changes of assumptions	\$ 15,024,060	\$ 205,600	\$ 15,229,660
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>183,704</u>	<u>114,330</u>	<u>298,034</u>
Total deferred outflows of resources	\$ <u>15,207,764</u>	\$ <u>319,930</u>	\$ <u>15,527,694</u>
Deferred (Inflows) of Resources			
Differences between expected and actual experience	\$ (8,903,017)	\$ (121,835)	\$ (9,024,852)
Net difference between projected and actual investment earnings on pension plan investments	(29,045,195)	(397,476)	(29,442,671)
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>(114,330)</u>	<u>(183,704)</u>	<u>(298,034)</u>
Total deferred (inflows) of resources	\$ <u>(38,062,542)</u>	\$ <u>(703,015)</u>	\$ <u>(38,765,557)</u>
Pension Expense			
Proportionate share of pension expense	\$ 6,292,738	\$ 86,114	\$ 6,378,852
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	<u>30,862</u>	<u>(30,862)</u>	<u>-</u>
Total employer pension expense	\$ <u>6,323,600</u>	\$ <u>55,252</u>	\$ <u>6,378,852</u>
Contributions			
Actuarially determined contribution	\$ 10,276,804	\$ 140,635	\$ 10,417,439
Contributions made	<u>(10,276,804)</u>	<u>(140,635)</u>	<u>(10,417,439)</u>
Contribution deficiency (excess)	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	25.63%	30.62%	25.69%
Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense			
June 30, 2023	\$ (3,288,241)	\$ (67,823)	\$ (3,356,064)
June 30, 2024	(6,354,365)	(116,043)	(6,470,408)
June 30, 2025	(7,591,917)	(93,898)	(7,685,815)
June 30, 2026	(5,594,139)	(103,104)	(5,697,243)
June 30, 2027	<u>(26,116)</u>	<u>(2,217)</u>	<u>(28,333)</u>
Total deferred outflows (inflows) of resources recognized in future pension expense	\$ <u>(22,854,778)</u>	\$ <u>(383,085)</u>	\$ <u>(23,237,863)</u>
Discount Rate Sensitivity			
1% decrease (5.25%)	\$ 80,873,971	\$ 1,106,736	\$ 81,980,707
Current discount rate (6.25%)	\$ 45,865,454	\$ 627,655	\$ 46,493,109
1% increase (7.25%)	\$ 16,545,030	\$ 226,414	\$ 16,771,444
Covered Payroll	\$ 40,089,796	\$ 459,330	\$ 40,549,126

See actuarial assumptions in the notes to the financial statements.



NEEDHAM RETIREMENT SYSTEM

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

**Annual Financial Statements and Other Information
For the Year Ended December 31, 2020**

(With Independent Auditors' Report Thereon)

CONTENTS

	<u>Page</u>
INDEPENDENT AUDITORS' REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	3
BASIC FINANCIAL STATEMENTS:	
Statement of Plan Fiduciary Net Position	6
Statement of Changes in Plan Fiduciary Net Position	7
Notes to Financial Statements	8
REQUIRED SUPPLEMENTAL INFORMATION:	
Schedule of Changes in the Net Pension Liability	18
Schedules of Net Pension Liability, Contributions, and Investment Returns	19
OTHER INFORMATION:	
Independent Auditors' Report	20
Schedule of Employer Allocations	22
Schedule of Pension Amounts by Employer	23



INDEPENDENT AUDITORS' REPORT

To the Retirement System Board
Needham Retirement System
Town of Needham, Massachusetts

Report on the Financial Statements

We have audited the accompanying financial statements of the Needham Retirement System (NRS), a component unit of the Town of Needham, Massachusetts as of and for the year ended December 31, 2020, 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

NRS 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 an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. 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.

Merrimack, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine

800.282.2440 | melansoncpas.com



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 Needham Retirement System as of December 31, 2020, 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.

A handwritten signature in cursive script that reads "Melanson".

Merrimack, New Hampshire
December 20, 2021

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Needham Retirement System (NRS), we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2020.

Overview of the Financial Statements

NRS financial statements are comprised of a statement of plan fiduciary position, statement of changes in plan fiduciary position, and notes to the financial statements. The required supplementary information that appears after the notes to the financial statements is not part of the basic financial statements, but is supplementary information required by the Governmental Accounting Standards Board (GASB).

The Statement of Plan Fiduciary Net Position reflects the resources available to pay members, retirees and beneficiaries at the close of the calendar year. This statement also provides information about the fair value and composition of the fiduciary net position.

The Statement of Changes in Plan Fiduciary Net Position presents information showing how NRS's net position available for benefits changed during the year ended December 31, 2020. It reflects contributions by members and participating employers, net investment income, including net appreciation in fair value of the investment portfolio, along with deductions for retirement benefits, refunds and transfers, and administrative expenses.

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 Notes provide information about the Plan, policies, and performance of NRS.

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.

Financial Highlights

- NRS's total net position available for benefits was \$203,305,040 at December 31, 2020.
- The System's net position increased by \$21,092,576.
- Employer and employee contributions to the plan were \$14,193,521 which represents a \$720,869 increase over the preceding year. The employer share of contributions represents 67% of the 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 \$14,517,225. At December 31, 2020, there were 459 retirees and beneficiaries in receipt of pension benefits.
- The NRS was 73.09% funded based on its accounting valuation report of December 31, 2020.

Financial Statement Analysis

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

FIDUCIARY NET POSITION		
	<u>2020</u>	<u>2019</u>
Assets		
Cash and receivables	\$ 2,080,090	\$ 2,050,988
Investments	<u>201,497,803</u>	<u>180,832,899</u>
Total Assets	<u>\$ 203,577,893</u>	<u>\$ 182,883,887</u>
Liabilities		
Accounts payable	<u>272,853</u>	<u>671,423</u>
Net Position	<u>203,305,040</u>	<u>182,212,464</u>
Total Liabilities and Net Position	<u>\$ 203,577,893</u>	<u>\$ 182,883,887</u>

CHANGES IN FIDUCIARY NET POSITION		
	<u>2020</u>	<u>2019</u>
Additions		
Contributions	\$ 14,537,834	\$ 13,871,795
Investment Income, net	<u>21,772,628</u>	<u>25,044,664</u>
Total Additions	36,310,462	38,916,459
Deductions		
Benefit payments	14,517,225	13,735,685
Other	<u>700,661</u>	<u>1,697,428</u>
Total Deductions	<u>15,217,886</u>	<u>15,433,113</u>
Changes in net position	21,092,576	23,483,346
Net position - beginning of year	<u>182,212,464</u>	<u>158,729,118</u>
Net position - end of year	<u>\$ 203,305,040</u>	<u>\$ 182,212,464</u>

The amount needed to finance benefits is accumulated through the collection of employers' and employees' contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA, Massachusetts General Laws Chapter 32 Section 3(8)c reimbursements, and earnings on

investments. Contributions and net investment gain for calendar year 2020 resulted in total additions to the plan of \$36,310,462. Employer's contributions increased by \$825,385 or 9.5% over the prior year. NRS had net investment gain of \$21,772,628, a decrease of \$3,272,036 from the previous year. Calendar year 2020 resulted in strong market performance, outperforming the total core benchmark, although the market returns were not as high as in 2019.

The primary deductions of NRS include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the NRS. Total deductions for 2020 were \$15,217,886, which represents a decrease of \$215,227 or 1.4% from the previous year. The payment of pension benefits increased by \$781,540 or 5.7% over the previous year. The increase in these expenses resulted from a higher retirement rate than expected during the COVID-19 pandemic and cost-of-living expenses.

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. The PRIT Fund's performance in calendar year 2020 was 12.6% gross (12.1% 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 NRS's finances. Questions concerning any of the information provided in this report, or requests for additional financial information, should be addressed to:

Needham Retirement System
Needham Town Hall
1471 Highland Avenue
Needham, Massachusetts 02492

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

Statement of Plan Fiduciary Net Position
December 31, 2020

Assets	
Cash and short-term investments	\$ 2,080,090
Investments - PRIT external investment pool	<u>201,497,803</u>
Total Assets	<u>\$ 203,577,893</u>
Liabilities and Net Position	
Accounts payable	<u>\$ 272,853</u>
Total Liabilities	272,853
Net position restricted for pensions	<u>203,305,040</u>
Total Liabilities and Net Position	<u>\$ 203,577,893</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 Plan Fiduciary Net Position
For the Year Ended December 31, 2020

Additions	
Contributions:	
Employers	\$ 9,513,643
Plan members	4,679,878
Other systems and Commonwealth of Massachusetts	<u>344,313</u>
Total contributions	14,537,834
Investment income:	
Investment earnings	11,719,435
Change in fair value of investments	10,932,025
Less: management fees	<u>(878,832)</u>
Net investment gain	<u>21,772,628</u>
Total additions	36,310,462
Deductions	
Benefit payments to plan members and beneficiaries	14,517,225
Refunds to plan members	201,323
Transfers to other systems	177,211
Administrative expenses	<u>322,127</u>
Total deductions	<u>15,217,886</u>
Net increase	21,092,576
Net position restricted for pensions	
Beginning of year	<u>182,212,464</u>
End of year	<u>\$ 203,305,040</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 (NRS), a cost sharing, multiple employer, public employee retirement system (PERS). Eligible employees must participate in the plan. 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 plan, contribution percentages and benefits paid. The Needham Retirement Board does not have the authority to amend benefit provisions.

Membership of each plan consisted of the following at December 31, 2020:

Number of retired participants and beneficiaries	459
Number of inactive participants entitled to a return of their employee contributions	235
Number of inactive participants with a vested right to a deferred or immediate benefit	20
Number of active participants	<u>742</u>
Total	<u>1,456</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 plan. 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 plan provides for retirement allowance benefits up to a maximum of 80% of a member's highest three-year average annual rate of regular compensation for those hired

prior to April 2, 2012 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 NRS 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 NRS is included as a pension trust fund in the Town's basic financial systems. NRS 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 NRS as reflected in the accompanying financial statements for the year ended December 31, 2020 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of NRS are summarized below:

Basis of Accounting

NRS follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the Town of Needham and Needham Housing Authority employees are recognized as revenue in the period in which employees provide services to the respective member unit. 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.

Investment Policy

Investments are reported at fair value. NRS 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, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 12.06%. 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, NRS deposits may not be returned. Massachusetts General Law Chapter 32, Section 23, limits the plan'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." NRS does not have a deposit policy for custodial credit risk.

As of December 31, 2020, NRS's bank balance of \$1,797,659 represents deposits of \$250,000 insured by FDIC, \$1,061,586 collateralized by the Federal Home Loan Bank of Pittsburgh, and \$486,073 invested in PRIT. PRIT Cash Fund III is measured at amortized cost, which approximates 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

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 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, 2020, NRS maintained its investments in the State Investment Pool (PRIT)* with a fair value of \$201,497,803. 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.

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. NRS does not have policies for custodial credit risk.

NRS's investments of \$201,497,803 are invested in the State investment pool (PRIT) and are not subject to custodial credit risk disclosure.

Concentration of Credit Risk

NRS invests in PRIT fund, consistent with Massachusetts General Law Chapter 32, Section 23.

Fair Value

NRS investment in PRIT is measured at the net asset value. At December 31, 2020, there are no unfunded commitments. Redemption frequency is monthly with a 30 day redemption notice period.

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 NRS's financial position.

6. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at December 31, 2020 were as follows:

Total pension liability	\$ 278,144,569
Plan fiduciary net position	<u>203,305,040</u>
Employers' net pension liability	<u>\$ 74,839,529</u>
Plan fiduciary net position as a percentage of total pension liability	73.09%

Actuarial Assumptions

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

Valuation Date	1/1/2020
Actuarial cost method	Entry Age
Actuarial assumptions:	
Investment rate of return	6.50%
Projected salary decreases	3.75% for Group 1
	4.00% for Group 2
	4.25% for Group 4
Inflation rate	3.00%
Post-retirement cost-of-living adjustment	3% of the first \$14,000

Actuarial valuation of the ongoing plans 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
- Healthy: RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally using Scale MP-2016
- Disabled: RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D

Changes of Assumptions

Effective January 1, 2020:

- The investment rate of return assumption was lowered from 7.25% to 6.50%.
- The administrative expense assumption was increased from \$325,000 for calendar 2018 to \$375,000 for calendar 2020.
- The salary increase assumption was updated from a scale that varies by length of service with ultimate rates of 4.25% for Group 1, 4.50% for Group 2, and 4.75% for Group 4 to a scale that varies by length of service with ultimate rates of 3.75% for Group 1, 4.00% for Group 2, and 4.25% for Group 4.
- The allowance for wage inflation was lowered from 3.50% to 3.00%.
- A liability of approximately \$3.7 million for future net 3(8)(c) payments was included. Previously, no liability was included for net 3(8)(c) payments.

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 PRIT's targeted asset allocation as of December 31, 2020, are summarized in the following table.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term (20 Year) Expected Real Rate of Return</u>
Domestic equity	22.00%	6.28%
International developed markets equity	12.00%	7.00%
International emerging markets equity	5.00%	8.82%
Core fixed income	15.00%	0.38%
High-yield fixed income	8.00%	2.97%
Real estate	10.00%	3.50%
Commodities	4.00%	3.45%
Hedge fund, GTAA, Risk parity	10.00%	2.35%
Private equity	<u>14.00%</u>	10.11%
Total	<u>100.00%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 6.50%. 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 NRS'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.

Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 6.50%, 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 (5.50%) or 1-percentage-point higher (7.50%) than the current rate:

	1% Decrease <u>(5.50%)</u>	Current Discount Rate <u>(6.50%)</u>	1% Increase <u>(7.50%)</u>
Net pension liability of participating employers as of December 31, 2020	\$ 107,468,369	\$ 74,839,529	\$ 47,477,527

Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the NRS for the year ended December 31, 2020:

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Differences between expected and actual experience	\$ 171,400	\$ (1,086,957)
Changes of assumptions	14,494,511	-
Net difference between projected and actual earnings on pension plan investments	-	(12,508,984)
Changes in proportion and differences between contributions and proportionate share of contributions	<u>280,563</u>	<u>(280,563)</u>
Total	<u>\$ 14,946,474</u>	<u>\$ (13,876,504)</u>

The following summarizes changes in deferred outflows/inflows:

	Measurement	Amortization	Beginning Balance on Prior Measurement	Current Measurement Period	Amortization of Amounts Recognized in Current Period	End of Year
	Year	Period	Period Deferrals	Additions	Pension Expense	Balance
Deferred Outflows of Resources:						
Difference between expected and actual experience	2017	5	\$ 342,800	\$ -	(171,400)	\$ 171,400
Change of assumption	2016	5	1,003,696	-	(1,003,696)	-
Change of assumption	2017	5	3,258,040	-	(1,629,020)	1,629,020
Change of assumption	2019	5	17,153,989	-	(4,288,498)	12,865,491
Change in proportionate share	2016	5	23,481	-	(23,481)	-
Change in proportionate share	2017	5	16,692	-	(8,346)	8,346
Change in proportionate share	2018	5	18,530	-	(6,177)	12,353
Change in proportionate share	2019	5	154,214	-	(38,554)	115,660
Change in proportionate share	2020	5	-	180,254	(36,050)	144,204
Total Deferred Outflows of Resources			21,971,442	180,254	(7,205,222)	14,946,474
Deferred (Inflows) of Resources:						
Difference between expected and actual experience	2016	5	(182,392)	-	182,392	-
Difference between expected and actual experience	2019	5	(1,449,276)	-	362,319	(1,086,957)
Net Differences between projected and actual earnings on pension plan Investments	2016	5	37,962	-	(37,962)	-
Net Differences between projected and actual earnings on pension plan Investments	2017	5	(5,302,136)	-	2,651,068	(2,651,068)
Net Differences between projected and actual earnings on pension plan Investments	2018	5	9,343,034	-	(3,114,345)	6,228,689
Net Differences between projected and actual earnings on pension plan Investments	2019	5	(10,843,096)	-	2,710,774	(8,132,322)
Net Differences between projected and actual earnings on pension plan Investments	2020	5	-	(9,942,856)	1,988,573	(7,954,283)
Change in proportionate share	2016	5	(23,481)	-	23,481	-
Change in proportionate share	2017	5	(16,692)	-	8,346	(8,346)
Change in proportionate share	2018	5	(18,530)	-	6,177	(12,353)
Change in proportionate share	2019	5	(154,214)	-	38,554	(115,660)
Change in proportionate share	2020	5	-	(180,254)	36,050	(144,204)
Total Deferred (Inflows) of Resources			(8,608,821)	(10,123,110)	4,855,427	(13,876,504)
Total Collective Deferred (Inflows) Outflows of Resources			\$ 13,362,621	\$ (9,942,856)	\$ (2,349,795)	\$ 1,069,970

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>
2022	\$ 1,472,398	\$ 18,132
2023	2,301,683	39,495
2024	(758,836)	(14,331)
2025	<u>(1,994,196)</u>	<u>5,625</u>
Total	<u>\$ 1,021,049</u>	<u>\$ 48,921</u>

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

	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability							
Service cost	\$ 7,182,254	\$ 6,033,684	\$ 5,820,915	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest	17,406,916	17,240,269	16,589,494	15,828,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	-	(1,811,595)	-	857,000	(911,964)	-	(32,335)
Changes of assumptions	-	21,442,487	-	8,145,100	5,018,477	-	2,153,215
Changes of benefit terms	-	-	-	-	-	-	1,861,711
Benefit payments, including refunds of member contributions	(14,122,112)	(13,980,939)	(13,312,979)	(12,430,464)	(12,076,857)	(11,477,777)	(10,562,871)
Net change in total pension liability	10,467,058	28,923,906	9,097,430	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859	179,834,295
Total pension liability - ending (a)	278,144,569	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859
Plan Fiduciary Net Position							
Contributions - employer	9,513,643	8,688,258	7,934,482	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	4,258,353	4,069,066	3,776,530	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income	21,764,818	25,006,514	(3,723,913)	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	(14,122,112)	(13,980,939)	(13,312,979)	(12,430,464)	(12,076,857)	(11,477,777)	(10,562,870)
Administrative expense	(322,126)	(299,553)	(328,142)	(303,310)	(229,753)	(229,912)	(293,797)
Net change in plan fiduciary net position	21,092,576	23,483,346	(5,654,022)	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	182,212,464	158,729,118	164,383,140	142,326,470	134,691,303	136,261,674	128,673,500
Plan fiduciary net position - ending (b)	203,305,040	182,212,464	158,729,118	164,383,140	142,326,470	134,691,303	136,261,674
Net pension liability (asset) - ending (a-b)	\$ 74,839,529	\$ 85,465,047	\$ 80,024,487	\$ 65,273,035	\$ 69,785,519	\$ 65,048,655	\$ 55,404,185

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>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 278,144,569	\$ 267,677,511	\$ 238,753,605	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>203,305,040</u>	<u>182,212,464</u>	<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>74,839,529</u>	\$ <u>85,465,047</u>	\$ <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	73.09%	68.07%	66.48%	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 43,397,457	\$ 41,727,828	\$ 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	172.45%	204.82%	203.50%	173.35%	199.87%	193.10%	171.99%

Schedule of Contributions

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 9,513,643	\$ 8,688,258	\$ 7,934,482	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>9,513,643</u>	<u>8,688,258</u>	<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>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>
Covered payroll	\$ 43,397,457	\$ 41,727,828	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	21.92%	20.82%	20.18%	19.42%	19.21%	18.26%	17.45%

Schedule of Investment Returns

Year Ended December 31

	<u>2020</u>	<u>2019</u>	<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	12.06%	16.09%	-2.36%	17.11%	7.42%	0.61%	7.64%

Schedule is 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

Report on Schedules

We have audited the accompanying schedule of employer allocations of the Needham Retirement System (NRS) as of and for the year ended December 31, 2020. We have also audited the total for all entities of the net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified totals) included in the accompanying schedule of pension amounts by employer of the plan as of and for the year ended December 31, 2020.

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 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 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 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 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

Merrimack, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine



entity's preparation and fair presentation of the schedule of employer allocations and specified 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 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 of the Needham Retirement System as of and for the year ended December 31, 2020, 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 NRS management, the Retirement Board, NRS employers, and their auditors as of and for the year ended December 31, 2020 and is not intended to be and should not be used by anyone other than these specified parties.

A handwritten signature in black ink that reads "Melanson".

Merrimack, New Hampshire
December 20, 2021

NEEDHAM RETIREMENT SYSTEM

Schedule of Employer Allocations

<u>Employer</u>	FY2021 Actual Employer <u>Contributions</u>	Employer Allocation <u>Percentage</u>
Town of Needham	\$ 9,368,084	98.469997%
Needham Housing Authority	<u>145,559</u>	<u>1.530003%</u>
Total	\$ <u>9,513,643</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, 2020

	Town of Needham	Needham Housing Authority	Total
Net Pension Liability	\$ 73,694,482	\$ 1,145,047	\$ 74,839,529
Deferred Outflows of Resources			
Differences between expected and actual experience	\$ 168,778	\$ 2,622	\$ 171,400
Changes of assumptions	14,272,745	221,766	14,494,511
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>124,006</u>	<u>156,557</u>	<u>280,563</u>
Total deferred outflows of resources	\$ <u>14,565,529</u>	\$ <u>380,945</u>	\$ <u>14,946,474</u>
Deferred Inflows of Resources			
Differences between expected and actual experience	\$ 1,070,327	\$ 16,630	\$ 1,086,957
Net difference between projected and actual investment earnings on pension plan investments	12,317,596	191,388	12,508,984
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>156,557</u>	<u>124,006</u>	<u>280,563</u>
Total deferred inflows of resources	\$ <u>13,544,480</u>	\$ <u>332,024</u>	\$ <u>13,876,504</u>
Pension Expense			
Proportionate share of pension expense	\$ 11,009,710	\$ 171,066	\$ 11,180,776
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	<u>28,154</u>	<u>(28,154)</u>	<u>-</u>
Total employer pension expense	\$ <u>11,037,864</u>	\$ <u>142,912</u>	\$ <u>11,180,776</u>
Contributions			
Actuarially determined contribution	\$ 9,368,084	\$ 145,559	\$ 9,513,643
Contributions made	<u>(9,368,084)</u>	<u>(145,559)</u>	<u>(9,513,643)</u>
Contribution deficiency (excess)	\$ -	\$ -	\$ -
Contributions as a percentage of covered payroll	21.92%	21.92%	21.92%
Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense			
June 30, 2022	\$ 1,472,398	\$ 18,132	\$ 1,490,530
June 30, 2023	2,301,683	39,495	2,341,178
June 30, 2024	(758,836)	(14,331)	(773,167)
June 30, 2025	<u>(1,994,196)</u>	<u>5,625</u>	<u>(1,988,571)</u>
Total deferred outflows (inflows) of resources recognized in future pension expense	\$ <u>1,021,049</u>	\$ <u>48,921</u>	\$ <u>1,069,970</u>
Discount Rate Sensitivity			
1% decrease (5.50%)	\$ 105,824,100	\$ 1,644,269	\$ 107,468,369
Current discount rate (6.50%)	\$ 73,694,482	\$ 1,145,047	\$ 74,839,529
1% increase (7.50%)	\$ 46,751,119	\$ 726,408	\$ 47,477,527
Covered Payroll	\$ 42,733,475	\$ 663,982	\$ 43,397,457

See actuarial assumptions in the notes to the financial statements.



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, 2019

(With Independent Auditors' Report Thereon)

CONTENTS

	<u>Page</u>
INDEPENDENT AUDITORS' REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	3
BASIC FINANCIAL STATEMENTS:	
Statement of Plan Fiduciary Net Position	6
Statement of Changes in Plan Fiduciary Net Position	7
Notes to Financial Statements	8
REQUIRED SUPPLEMENTAL INFORMATION:	
Schedule of Changes in the Net Pension Liability	18
Schedules of Net Pension Liability, Contributions, and Investment Returns	19
OTHER INFORMATION:	
Independent Auditors' Report	20
Schedule of Employer Allocations	22
Schedule of Pension Amounts by Employer	23



INDEPENDENT AUDITORS' REPORT

To the Retirement System Board
Town of Needham, Massachusetts

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, 2019, 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.

Merrimack, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine

800.282.2440 | melansoncpas.com



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, 2019, 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.

A handwritten signature in cursive script that reads "Melanson".

Andover, Massachusetts
December 16, 2020

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, 2019.

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. The required supplementary information that appears after the notes to the financial statements is not part of the basic financial statements, but is supplementary information required by the Governmental Accounting Standards Board (GASB).

The Statement of Plan Fiduciary Net Position reflects the resources available to pay members, retirees and beneficiaries at the close of the System's calendar year. This statement also provides information about the fair value and composition of the System's fiduciary net position.

The Statement of Changes in Plan Fiduciary Net Position presents information showing how the System's net position available for benefits changed during the year ended December 31, 2019. It reflects contributions by members and participating employers, net investment income, including net appreciation in fair value of the investment portfolio, along with deductions for retirement benefits, refunds and transfers, and administrative expenses.

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 Notes provide information about the Plan, policies, and performance of the System.

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.

Financial Highlights

- The System's total net position available for benefits was \$182,212,464 at December 31, 2019.
- The System's net position increased by \$23,483,346.
- Employer and employee contributions to the plan were \$13,472,652 which represents a \$1,481,070 increase over the preceding year. The employer share of contributions represents 63% 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 \$13,735,685. At December 31, 2019, there were 459 retirees and beneficiaries in receipt of pension benefits.
- The System was 68.07% funded based on its accounting valuation report of December 31, 2019.

Financial Statement Analysis

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

FIDUCIARY NET POSITION

	<u>2019</u>	<u>2018</u>
Assets		
Cash and receivables	\$ 2,050,988	\$ 4,080,627
Investments	<u>180,832,899</u>	<u>154,662,006</u>
Total Assets	<u>\$ 182,883,887</u>	<u>\$ 158,742,633</u>
Liabilities		
Accounts payable	<u>671,423</u>	<u>13,515</u>
Net Position	<u>182,212,464</u>	<u>158,729,118</u>
Total Liabilities and Net Position	<u>\$ 182,883,887</u>	<u>\$ 158,742,633</u>

CHANGES IN FIDUCIARY NET POSITION

	<u>2019</u>	<u>2018</u>
Additions		
Contributions	\$ 13,871,795	\$ 12,228,828
Investment income, net	<u>25,044,664</u>	<u>(3,706,483)</u>
Total Additions	38,916,459	8,522,345
Deductions		
Benefit payments	13,735,685	13,350,840
Other	<u>1,697,428</u>	<u>825,527</u>
Total Deductions	<u>15,433,113</u>	<u>14,176,367</u>
Changes in net position	23,483,346	(5,654,022)
Net position - beginning of year	<u>158,729,118</u>	<u>164,383,140</u>
Net position - end of year	<u>\$ 182,212,464</u>	<u>\$ 158,729,118</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 2019 resulted in total additions to the plan of \$38,916,459. Employer's contributions increased by

\$753,776 or 9.5% over the prior year. The System had net investment gain of \$25,044,664, comparing to net investment loss of \$3,706,483 in the previous year due to the market not rebounding until January 2019 after a challenging and volatile financial markets of calendar year 2018. Particularly, the fourth quarter of 2018 was dismal. Calendar year 2019 was a very strong year.

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 2019 were \$15,433,113, which represents an increase of \$1,256,746 or 8.9% from the previous year. The payment of pension benefits increased by \$384,845 or 2.9% over the previous year. The increase in these expenses resulted from new retirees and cost-of-living expenses.

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. The PRIT Fund's performance in calendar year 2019 was 16.6% gross (16.1% net). The PRIT Fund's trailing 10-year return, net of fees, is 8.6%. 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

NEEDHAM RETIREMENT SYSTEM

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

**Statement of Plan Fiduciary Net Position
December 31, 2019**

Assets	
Cash and short-term investments	\$ 2,050,988
Investments - PRIT external investment pool	<u>180,832,899</u>
Total Assets	<u>\$ 182,883,887</u>
Liabilities and Net Position	
Accounts payable	<u>\$ 671,423</u>
Total Liabilities	671,423
Net position restricted for pensions	<u>182,212,464</u>
Total Liabilities and Net Position	<u>\$ 182,883,887</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, 2019

Additions	
Contributions:	
Employers	\$ 8,688,258
Plan members	4,784,394
Other systems and Commonwealth of Massachusetts	<u>399,143</u>
Total contributions	13,871,795
Investment income:	
Investment earnings	12,953,964
Change in fair value of investments	12,960,537
Less: management fees	<u>(869,837)</u>
Net investment gain	<u>25,044,664</u>
Total additions	38,916,459
Deductions	
Benefit payments to plan members and beneficiaries	13,735,685
Refunds to plan members	307,377
Transfers to other systems	1,081,447
Administrative expenses	<u>308,604</u>
Total deductions	<u>15,433,113</u>
Net increase	23,483,346
Net position restricted for pensions	
Beginning of year	<u>158,729,118</u>
End of year	<u>\$ 182,212,464</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, 2019:

Number of retired participants and beneficiaries	459
Number of inactive participants entitled to a return of their employee contributions	195
Number of inactive participants with a vested right to a deferred or immediate benefit	16
Number of active participants	<u>692</u>
Total	<u>1,362</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, 2019 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, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 16.09%. 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, 2019, the System's bank balance of \$1,804,283 represents deposits of \$255,272 insured by FDIC, \$980,742 collateralized by the Federal Home Loan Bank of Pittsburgh, and \$568,269 invested in PRIT. PRIT Cash Fund III is measured at amortized cost, which approximates 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

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, 2019, the System maintained its investments in the State Investment Pool (PRIT)* with a fair value of \$180,832,899. 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.

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 \$180,832,899 are invested in the State investment pool (PRIT) and are not subject to custodial credit risk disclosure.

Concentration of Credit Risk

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

Fair Value

The System has the following investments measured at the net asset value (NAV) as of December 31, 2019:

<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	\$ 180,832,899	\$ -	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, 2019 were as follows:

Total pension liability	\$ 267,677,511
Plan fiduciary net position	<u>182,212,464</u>
Employers' net pension liability	<u>\$ 85,465,047</u>
Plan fiduciary net position as a percentage of total pension liability	68.07%

Actuarial Assumptions

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

Valuation Date	1/1/2020
Actuarial cost method	Entry Age
Actuarial assumptions:	
Investment rate of return	6.50%
Projected salary decreases	3.75% for Group 1 4.00% for Group 2 4.25% for Group 4
Inflation rate	3.00%
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
- Healthy: RP-2014 Blue Collar Healthy Annuitant Mortality Table projected generationally using Scale MP-2016
- Disabled: RP-2000 Healthy Annuitant Mortality Table projected generationally from 2015 with Scale BB2D

Changes of Assumptions

Effective January 1, 2020:

- The investment rate of return assumption was lowered from 7.25% to 6.50%.
- The administrative expense assumption was increased from \$325,000 for calendar 2018 to \$375,000 for calendar 2020.
- The salary increase assumption was updated from a scale that varies by length of service with ultimate rates of 4.25% for Group 1, 4.50% for Group 2, and 4.75% for Group 4 to a scale that varies by length of service with ultimate rates of 3.75% for Group 1, 4.00% for Group 2, and 4.25% for Group 4.
- The allowance for wage inflation was lowered from 3.50% to 3.00%.
- A liability of approximately \$3.7 million for future net 3(8)(c) payments was included. Previously, no liability was included for net 3(8)(c) payments.

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, 2019, 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%	6.15%
International developed markets equity	13.00%	6.78%
International emerging markets equity	5.00%	8.65%
Core fixed income	15.00%	1.11%
High-yield fixed income	8.00%	3.51%
Real estate	10.00%	4.33%
Commodities	4.00%	4.13%
Hedge fund, GTAA, Risk parity	11.00%	3.19%
Private equity	13.00%	9.99%
Total	<u>100.00%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 6.50%. 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.

Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 6.50%, 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 (5.50%) or 1-percentage-point higher (7.50%) than the current rate:

	1% Decrease <u>(5.50%)</u>	Current Discount Rate <u>(6.50%)</u>	1% Increase <u>(7.50%)</u>
Net pension liability of participating employers as of December 31, 2020	\$ 117,121,059	\$ 85,465,047	\$ 58,892,891

Deferred Outflows/Inflows of Resources

The following schedule reflects the deferred outflows/inflows of resources for the System for the year ended December 31, 2019:

	Deferred Outflows of Resources	Deferred (Inflows) of Resources
Differences between expected and actual experience	\$ 342,800	\$ (1,631,668)
Changes of assumptions	21,415,725	-
Net difference between projected and actual earnings on pension plan investments	-	(6,764,236)
Changes in proportion and differences between contributions and proportionate share of contributions	<u>212,917</u>	<u>(212,917)</u>
Total	<u>\$ 21,971,442</u>	<u>\$ (8,608,821)</u>

The following summarizes changes in deferred outflows/inflows:

	Measurement	Amortization	Beginning Balance on Prior Measurement Period	Current Measurement Period Additions	Amortization of Amounts Recognized in Current Period Pension Expense	End of Year Balance
	Year	Period	Period Deferrals			
Deferred Outflows of Resources:						
Difference between expected and actual experience	2017	5	\$ 514,200	\$ -	(171,400)	\$ 342,800
Change of assumption	2016	5	2,007,392	-	(1,003,696)	1,003,696
Change of assumption	2017	5	4,887,060	-	(1,629,020)	3,258,040
Change of assumption	2019	5	-	21,442,486	(4,288,497)	17,153,989
Change in proportionate share	2015	5	7,491	-	(7,491)	-
Change in proportionate share	2016	5	46,963	-	(23,482)	23,481
Change in proportionate share	2017	5	25,038	-	(8,346)	16,692
Change in proportionate share	2018	5	24,707	-	(6,177)	18,530
Change in proportionate share	2019	5	-	192,764	(38,550)	154,214
Total Deferred Outflows of Resources			7,512,851	21,635,250	(7,176,659)	21,971,442
Deferred (inflows) of Resources:						
Difference between expected and actual experience	2016	5	(364,785)	-	182,393	(182,392)
Difference between expected and actual experience	2019	5	-	(1,811,595)	362,319	(1,449,276)
Net Differences between projected and actual earnings on pension plan investments	2015	5	1,928,237	-	(1,928,237)	-
Net Differences between projected and actual earnings on pension plan investments	2016	5	75,924	-	(37,962)	37,962
Net Differences between projected and actual earnings on pension plan investments	2017	5	(7,953,204)	-	2,651,068	(5,302,136)
Net Differences between projected and actual earnings on pension plan investments	2018	5	12,457,379	-	(3,114,345)	9,343,034
Net Differences between projected and actual earnings on pension plan investments	2019	5	-	(13,553,870)	2,710,774	(10,843,096)
Change in proportionate share	2015	5	(7,491)	-	7,491	-
Change in proportionate share	2016	5	(46,963)	-	23,482	(23,481)
Change in proportionate share	2017	5	(25,038)	-	8,346	(16,692)
Change in proportionate share	2018	5	(24,707)	-	6,177	(18,530)
Change in proportionate share	2019	5	-	(192,764)	38,550	(154,214)
Total Deferred (inflows) of Resources			6,039,352	(15,558,229)	910,056	(8,608,821)
Total Collective Deferred (inflows) Outflows of Resources			\$ 13,552,203	\$ 6,077,021	\$ (6,266,603)	\$ 13,362,621

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>
2021	\$ 4,347,041	\$ (8,674)
2022	3,475,292	3,809
2023	4,306,704	23,045
2024	<u>1,238,400</u>	<u>(22,996)</u>
Total	<u>\$ 13,367,437</u>	<u>\$ (4,816)</u>

NEEDHAM RETIREMENT SYSTEM

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

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability						
Service cost	\$ 6,033,684	\$ 5,820,915	\$ 5,144,459	\$ 4,947,106	\$ 4,772,654	\$ 4,532,712
Interest	17,240,269	16,589,494	15,828,091	15,395,269	14,779,222	13,879,132
Differences between expected and actual experience	(1,811,595)	-	857,000	(911,964)	-	(32,335)
Changes of assumptions	21,442,487	-	8,145,100	5,018,477	-	2,153,215
Changes of benefit terms	-	-	-	-	-	1,861,711
Benefit payments, including refunds of member contributions	<u>(13,980,939)</u>	<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	28,923,906	9,097,430	17,544,186	12,372,031	8,074,099	11,831,564
Total pension liability - beginning	<u>238,753,605</u>	<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)	267,677,511	238,753,605	229,656,175	212,111,989	199,739,958	191,665,859
Plan Fiduciary Net Position						
Contributions - employer	8,688,258	7,934,482	7,314,235	6,706,800	6,149,812	5,621,400
Contributions - member	4,069,066	3,776,530	3,614,088	3,405,234	3,161,293	3,193,112
Net investment income	25,006,514	(3,723,913)	23,862,121	9,829,743	826,213	9,630,329
Benefit payments, including refunds of member contributions	<u>(13,980,939)</u>	<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>(299,553)</u>	<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	23,483,346	(5,654,022)	22,056,670	7,635,167	(1,570,371)	7,588,174
Plan fiduciary net position - beginning	<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>	<u>128,673,500</u>
Plan fiduciary net position - ending (b)	<u>182,212,464</u>	<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>85,465,047</u>	\$ <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>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability	\$ 267,677,511	\$ 238,753,605	\$ 229,656,175	\$ 212,111,989	\$ 199,739,958	\$ 191,665,859
Plan fiduciary net position	<u>182,212,464</u>	<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>85,465,047</u>	\$ <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	68.07%	66.48%	71.58%	67.10%	67.43%	71.09%
Covered payroll	\$ 41,727,828	\$ 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	204.82%	203.50%	173.35%	199.87%	193.10%	171.99%

Schedule of Contributions

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 8,688,258	\$ 7,934,482	\$ 7,314,235	\$ 6,706,800	\$ 6,149,812	\$ 5,621,400
Contributions in relation to the actuarially determined contribution	<u>8,688,258</u>	<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>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>-</u>
Covered payroll	\$ 41,727,828	\$ 39,323,917	\$ 37,654,836	\$ 34,915,587	\$ 33,686,645	\$ 32,213,389
Contributions as a percentage of covered payroll	20.82%	20.18%	19.42%	19.21%	18.26%	17.45%

Schedule of Investment Returns

Year Ended December 31

	<u>2019</u>	<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	16.09%	-2.36%	17.11%	7.42%	0.61%	7.64%

Schedule is 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

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, 2019. We have also audited the total for all entities of the net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2019.

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 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 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

Merrimack, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine



allocations and specified 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 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 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, 2019, 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, 2019 and is not intended to be and should not be used by anyone other than these specified parties.

A handwritten signature in black ink that reads "Melanson".

Andover, Massachusetts
December 16, 2020

NEEDHAM RETIREMENT SYSTEM

Schedule of Employer Allocations

<u>Employer</u>	<u>FY2020 Actual Employer Contributions</u>	<u>Employer Allocation Percentage</u>
Town of Needham	\$ 8,577,048	98.719997%
Needham Housing Authority	<u>111,210</u>	<u>1.280003%</u>
Total	<u>\$ 8,688,258</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, 2019

	Town of <u>Needham</u>	Needham Housing Authority	<u>Total</u>
Net Pension Liability	\$ 84,371,091	\$ 1,093,956	\$ 85,465,047
Deferred Outflows of Resources			
Differences between expected and actual experience	\$ 338,412	\$ 4,388	\$ 342,800
Changes of assumptions	21,141,603	274,122	21,415,725
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>194,388</u>	<u>18,529</u>	<u>212,917</u>
Total deferred outflows of resources	<u>\$ 21,674,403</u>	<u>\$ 297,039</u>	<u>\$ 21,971,442</u>
Deferred Inflows of Resources			
Differences between expected and actual experience	\$ 1,610,783	\$ 20,885	\$ 1,631,668
Net difference between projected and actual investment earnings on pension plan investments	6,677,654	86,582	6,764,236
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>18,529</u>	<u>194,388</u>	<u>212,917</u>
Total deferred inflows of resources	<u>\$ 8,306,966</u>	<u>\$ 301,855</u>	<u>\$ 8,608,821</u>
Pension Expense			
Proportionate share of pension expense	\$ 14,135,125	\$ 183,276	\$ 14,318,401
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	<u>56,713</u>	<u>(56,713)</u>	<u>-</u>
Total employer pension expense	<u>\$ 14,191,838</u>	<u>\$ 126,563</u>	<u>\$ 14,318,401</u>
Contributions			
Actuarially determined contribution	\$ 8,577,048	\$ 111,210	\$ 8,688,258
Contributions made	<u>(8,577,048)</u>	<u>(111,210)</u>	<u>(8,688,258)</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Contributions as a percentage of covered payroll	20.82%	20.82%	20.82%
Deferred Outflows (Inflows) of Resources Recognized in Future Pension Expense			
June 30, 2021	\$ 4,347,041	\$ (8,674)	\$ 4,338,367
June 30, 2022	3,475,292	3,809	3,479,101
June 30, 2023	4,306,704	23,045	4,329,749
June 30, 2024	<u>1,238,400</u>	<u>(22,996)</u>	<u>1,215,404</u>
Total deferred outflows (inflows) of resources recognized in future pension expense	<u>\$ 13,367,437</u>	<u>\$ (4,816)</u>	<u>\$ 13,362,621</u>
Discount Rate Sensitivity			
1% decrease (5.50%)	\$ 115,621,906	\$ 1,499,153	\$ 117,121,059
Current discount rate (6.50%)	\$ 84,371,092	\$ 1,093,955	\$ 85,465,047
1% Increase (7.50%)	\$ 58,139,060	\$ 753,831	\$ 58,892,891
Covered Payroll	\$ 41,199,710	\$ 534,118	\$ 41,727,828

See actuarial assumptions in the notes to the financial statements.

COMMONWEALTH OF MASSACHUSETTS

Public Employee Retirement Administration Commission

10 Cabot Road, Suite 300 | Medford, MA 02155

Phone: 617-666-4446 | Fax: 617-628-4002

Web: www.mass.gov/perac