ROSELLI, CLARK & ASSOCIATES
Certified Public Accountants

**MAYNARD CONTRIBUTORY RETIREMENT SYSTEM (a Component Unit of the Town of Maynard, Massachusetts)**

Report on Examination of Basic Financial Statements and Additional Information

Year Ended December 31, 2018

Report on Internal Control and Compliance
Year Ended December 31, 2018

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CPA

**MAYNARD CONTRIBUTORY RETIREMENT SYSTEM**
**(A Component Unit of the Town of Maynard, Massachusetts)**

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**DECEMBER 31, 2018**

ROSELLI, CLARK & ASSOCIATES
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**INDEPENDENT AUDITORS' REPORT**

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

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

**Management's Responsibility for the Financial Statements**

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

**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 and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' 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 auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

**Opinions**

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

**Other Matters**

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules listed under the required supplementary information section in the accompanying 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 sufficient evidence to express an opinion or provide any assurance.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued a report dated April 29, 2019 on our consideration of the System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Roselli, Clark & Associates

Roselli, Clark & Associates
Certified Public Accountants
Woburn, Massachusetts
April 29, 2019

# MANAGEMENT'S DISCUSSION AND ANALYSIS

Our discussion and analysis of the Maynard Contributory Retirement System's (the "System") financial performance provides an overview of the System's financial activities for the calendar year ended December 31, 2018. You should read it in conjunction with the basic financial statements, footnotes and required supplementary information that follows this discussion.

## Financial Highlights

The System's funding objective is to meet long-term benefit obligations through contributions and investment income. At December 31, 2018, the System's funded ratio was approximately 68% based on the actuarial value of assets at that date. The System's actuary projects the System to be fully funded by December 31, 2035.

The System's money-weighted return on investments, net of investment management fees, was approximately -2.4% in 2018. The negative return on investments in 2018 was due primarily to a significant decline in the U.S. equity markets in the fourth calendar quarter of 2018. Prior to the fourth calendar quarter, the U.S. equity markets were on track to meet or exceed the System's targeted annual investment return (currently 7.0% per annum). It's important to note that the U.S. equity markets rebounded significantly in the first calendar quarter of 2019, which was erased nearly all of the fourth calendar quarter of 2018's losses.

This negative return on investments was the primary contributor to the nearly $3.7 million decrease in the System's fiduciary net position in 2018.

## Overview of the Financial Statements

This discussion and analysis is intended as an introduction to the System's basic financial statements. The basic financial statements are comprised of a Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, Notes to Financial Statements and Required Supplementary Information.

***Statement of Fiduciary Net Position*** – presents information on the System's assets, deferred outflows of resources, liabilities, deferred inflows of resources and fiduciary net position restricted for pensions. This statement reflects the System's investments at fair value, as well as cash, receivables and other assets and liabilities. Over time, the increase or decrease in net position serves as a useful indicator of the System's financial health and condition.

***Statement of Changes in Net Position*** – presents information showing how the System's fiduciary net position changed during the year. It reflects contributions by members and participating employers along with deductions for retirement benefits, refunds, withdrawals and administrative expenses. Investment income, including realized and unrealized gains on pooled investments, during the year is also presented.

***Notes to the 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*** – includes this management's discussion and analysis and various unaudited schedules.

## Financial Analysis

### Fiduciary Net Position

The System's total assets as of December 31, 2018 approximated $42.3 million and principally consisted of investments in equities and pooled investment funds. Total assets decreased nearly $3.7 million, or approximately 8.0%, from December 31, 2017. System liabilities primarily consist of open trades and various trade payables at both December 31, 2018 and 2017.

| | December 31, 2018 | December 31, 2017 |
|---|---|---|
| Assets: | | |
| Cash and cash equivalents | $ 455,609 | $ 505,029 |
| Investments, at fair value | 41,647,603 | 45,314,351 |
| Receivables and other assets | 155,760 | 115,609 |
| Total Assets | 42,258,972 | 45,934,989 |
| Liabilities | 91,897 | 100,166 |
| Fiduciary Net Position | $ 42,167,075 | $ 45,834,823 |

### Change in Fiduciary Net Position

The negative annual investment return in 2018 resulted in negative net investment income of over $3.3 million. The 2018 net investment return was -2.4% versus a 16.7% net return in 2017. The negative investment return was the primary cause of the nearly $3.7 million decrease in fiduciary net position in 2018.

| | Year Ended December 31, 2018 | Year Ended December 31, 2017 |
|---|---|---|
| Additions: | | |
| Contributions | $ 3,683,634 | $ 3,520,377 |
| Investment income, net | (3,348,638) | 6,496,410 |
| Total Additions | 334,996 | 10,016,787 |
| Deductions: | | |
| Benefits and refunds to Plan members | 3,880,128 | 3,477,986 |
| Administrative and other expenses | 122,616 | 119,278 |
| Total Deductions | 4,002,744 | 3,597,264 |
| Change in Fiduciary Net Position | $ (3,667,748) | $ 6,419,523 |

***Additions*** – The amount needed to finance pension benefits is accumulated through the collection of employers and employees' contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 Cost of Living Adjustments and through earnings on investments. In 2018, contributions from the employers and employees increased by over $163,000. This increase was due primarily to an increase in employer contributions (i.e., appropriations) of over $131,000. Employer contributions represent over $2.3 million, or approximately 63.3%, of total contributions. Employer contributions are determined by actuarial valuation.

As previously noted, the money-weighted rate of return, net of investment expense, was approximately -2.4% in 2018 versus 16.7% in 2017. This caused to the significant decrease in net investment income year-over-year.

***Deductions*** – The primary deductions for the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions and the costs of administering the system. Benefit payments in 2018 were over $402,000, or 11.6%, greater than 2017 benefit payments. This increase was due primarily to an increase in member transfers from the System into other Massachusetts retirement systems as well as an increase in the number of beneficiaries paid year-over-year. Administrative expenses were fairly consistent year-over-year.

**Overall Financial Position**

The System's actuarially estimated funding ratio decreased from nearly 78% at December 31, 2017 to 68% at December 31, 2018 as a result of the System's negative net investment return in 2018 and the decision to reduce the long-term expected rate of investment return, which is commonly referred to as the discount rate, from 7.5% to 7.0% per annum.

U.S. equity markets rebounded significantly in the first calendar quarter of 2019, erasing virtually all the 2018 investment losses incurred by the System, which if that trend continues for the duration of 2019, will have positive impacts to the System's funding ratio at December 31, 2019. The decrease in the discount rate is a common trend in public pension systems. Management does not expect that its discount rate will be reduced significantly in future actuarial studies.

The current investment mix employed by the System causes its investment return to lag the returns posted by the major U.S. stock market indices during "bull" equity cycles. However, the System has adopted this investment strategy as a means to better hedge against potential significant downside market risk present within the U.S. stock market. Management believes that the volatility in the stock markets may continue for the foreseeable future. Accordingly, management intends to actively monitor the System's investment positions to best maximize returns while mitigating risk within prudent fiduciary expectations.

**Contacting the System's Financial Management Personnel**

Our discussion and analysis is designed to provide the Maynard Retirement Board, our membership, taxpayers, investors and creditors with a general overview of the System's financial results and to demonstrate the System's accountability for the funding it receives. If you have any questions about this report or need additional financial information, contact the Retirement Office at 195 Main Street, Maynard, Massachusetts 01754.

## MAYNARD CONTRIBUTORY RETIREMENT SYSTEM
**(A Component Unit of the Town of Maynard, Massachusetts)**

### STATEMENT OF FIDUCIARY NET POSITION
### DECEMBER 31, 2018

| | |
|---|---|
| Assets: | |
| Cash and cash equivalents | $ 455,609 |
| Investments, at fair value: | |
| Equity securities | 21,798,460 |
| PRIT | 19,849,143 |
| Receivables: | |
| Contributions | 82,444 |
| Open trades | 71,983 |
| Other | 1,333 |
| Total Assets | 42,258,972 |
| Liabilities: | |
| Accounts payable and accrued expenses | 39,312 |
| Open trades | 52,585 |
| Total Liabilities | 91,897 |
| Net Position Restricted for Pensions | $ 42,167,075 |

See accompanying notes to basic financial statements.

# MAYNARD CONTRIBUTORY RETIREMENT SYSTEM
**(A Component Unit of the Town of Maynard, Massachusetts)**

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
## YEAR ENDED DECEMBER 31, 2018

| | |
|---|---|
| Additions: | |
| Employer contributions | $ 2,328,100 |
| Employee contributions | 1,024,847 |
| Other contributions | 327,388 |
| Total contributions | 3,680,335 |
| Investment income: | |
| Interest and dividends | 1,165,904 |
| Net appreciation in fair value of investments | (4,254,080) |
| Less investment management fees | (260,462) |
| Total net investment income | (3,348,638) |
| Other income | 3,299 |
| Total Additions | 334,996 |
| Deductions: | |
| Benefits and refunds to Plan members: | |
| Benefits to retirees and survivors | 3,053,484 |
| Member refunds | 94,605 |
| Transfers and reimbursements to other systems | 732,039 |
| Administrative expenses: | |
| Operations payroll and related personnel costs | 59,509 |
| Other | 63,107 |
| Total Deductions | 4,002,744 |
| Net Change in Net Position | (3,667,748) |
| Net Position Restricted for Pensions: | |
| Beginning of the year | 45,834,823 |
| End of the year | $ 42,167,075 |

See accompanying notes to basic financial statements.

## 1. DESCRIPTION OF THE PLAN

***General –*** The Maynard Contributory Retirement System (the "System") is a multi-employer defined benefit pension plan established and administered by the Maynard Retirement Board under the provisions of Chapter 32 of the Massachusetts General Laws, as amended, to provide pension benefits for participants. The System is a component unit of the Town of Maynard (the "Town"). The Town and the Maynard Housing Authority ("MHA") contribute to the System.

Employees of the Town (with the exception of teachers and certain administrative personnel employed by the School Department who participate in a separate plan) and the MHA are covered by the System. Participation in the System is mandatory immediately upon the commencement of employment for all permanent, full-time employees.

At December 31, 2018, membership in the System consisted of:

| | |
|---|---|
| Retirees and beneficiaries currently receiving benefits | 117 |
| Active plan members | 213 |
| Inactive plan members | 79 |
| Total | 409 |

***Plan Benefits –*** Massachusetts contributory retirement system benefits are uniform from system to system. For employees with service dates beginning before April 2, 2012, the System provides for retirement allowance benefits up to a maximum of 80% of a participant's highest consecutive three-year average annual rate of regular compensation. For those employees who began their service after April 2, 2012, the System provides for retirement allowance benefits up to a maximum of 80% of a participant's highest consecutive five-year average annual rate of regular compensation. Benefit payments are based upon a participant's age, length of creditable service, level of compensation and group classification.

The retirement allowance consists of two parts – an annuity and a pension. Participants' accumulated total deductions and a portion of the interest they generate constitute the annuity. The differential between the total retirement benefit and annuity is the pension.

Participants who resign from service and who are not eligible to receive a retirement allowance are entitled to request a refund of their accumulated total contributions. In addition, depending upon the number of years of creditable service, such employees are entitled to receive interest, which has accrued on those contributions. A vested employee who has not reached their eligible retirement age and elects to leave his accumulation on deposit may apply for benefits upon reaching that age.

Survivor benefits are extended to eligible beneficiaries of participants whose death occurs prior to or following retirement.

***Retirement Requirements –*** In order to receive retirement benefits, participants must meet one of the following two categories:

Normal Retirement – Generally, normal retirement occurs between ages 65 and 67. However, most participants with a hire date before April 2, 2012, may retire after twenty years of service or at any time after attaining age 55. For most participants hired on or after April 2, 2012, they must attain the age of 60 before they can retire. Participants with hire dates subsequent to January 1, 1978 must have a minimum of ten years' creditable service in order to retire at age 55 or 60, as applicable. Participants become vested after ten years of service. Benefits commencing before age 65 are generally provided at a reduced rate. However, members working in certain occupations may retire with full benefits earlier than age 65.

Participants who resign from service and who are not eligible to receive a retirement allowance or are under the age of 55 may request a refund of their accumulated total contributions. In addition, depending on the number of years of creditable service, these employees may be entitled to interest that has accrued on their contributions. A vested employee under the age of 55 who elects to leave his accumulated contributions on deposit may apply for pension benefits upon reaching his eligible retirement age.

Disability Retirements **–** The System provides for both an ordinary disability retirement, where a participant is permanently incapacitated from a cause unrelated to employment, and an accidental disability retirement, where the disability is the result of an injury or illness received or aggravated in the performance of one's duty. The amount of benefits to be received in such cases is dependent upon several factors, including the age at which the disability retirement occurs, the years of service, average compensation and veteran status. In addition, certain provisions are in place relative to death benefits for beneficiaries of employees who die in active service.

***Public Availability of Financial Statements*** – The Maynard Retirement Board issues a publicly available financial report that includes financial statements and required supplementary information for the System. That report may be obtained by writing to the Maynard Retirement Board, 195 Main Street, Maynard, Massachusetts 01754.

## 2. SIGNIFICANT ACCOUNTING POLICIES

***Basis of Accounting –*** The financial statements of the System have been prepared on the accrual basis of accounting. The accounting records of the System are maintained on a calendar-year basis in accordance with the standards and procedures established by Public Employee Retirement Administration Commission ("PERAC") and Massachusetts law.

***Estimates –*** The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America, or GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

***Cash and Cash Equivalents –*** Cash and cash equivalents include cash on hand, demand deposits and short-term holdings with remaining maturities of three months or less.

***Investments*** **–** The carrying amounts of the System's investments approximates fair value. When actively quoted observable prices are not available, the System generally uses either implied pricing from similar investments or valuation models based on net present values of estimated future cash flows (adjusted as appropriate for liquidity, credit, market and/or other risk factors).

The System categorizes its fair value measurements within the fair value hierarchy established by GAAP. This hierarchy is based on valuation inputs used to measure the fair value of the asset or liability. The three levels of the hierarchy are as follows:

- *Level 1* – Inputs are quoted prices in active markets for identical investments at the measurement date.

- *Level 2* – Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the investment through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

- *Level 3* – Inputs reflect the System's best estimate of what market participants would use in pricing the investment at the measurement date.

The remaining investments not categorized under the fair value hierarchy are shown at net asset value ("NAV"). These are investments in non-governmental entities for which a readily determinable fair value is not available, such as member units or an ownership interest in partners' capital to which a proportionate share of net assets is attributed. Investments at NAV are commonly calculated by subtracting the fair value of liabilities from the fair value of assets.

The following table presents the fair value of the System's investments by type as of December 31, 2018:

| | Fair | Fair Value Measurements Using | | |
|---|---|---|---|---|
| | Value | Level 1 | Level 2 | Level 3 |
| **Investments by fair value level** | | | | |
| Equity securities | $ 21,798,460 | $ 21,798,460 | $ - | $ - |
| Total investments by fair value level | 21,798,460 | $ 21,798,460 | $ - | $ - |
| **Investments measured at NAV** | | | | |
| PRIT funds | 19,849,143 | | | |
| Total investments measured at fair value | $ 41,647,603 | | | |

The PRIT funds are administered by the Commonwealth of Massachusetts' Pension Reserve Investment Management Board, or PRIM. The System holds five separate pooled PRIT funds, each of which consists of a diverse set of investments that includes private equity, distressed debt, derivatives, venture and real estate investments. The determination of the fair value of these investments is very subjective and the period-end values are reported to the System as NAV. Investments in the PRIT funds are generally more liquid than investments in private equity and real estate holdings, but generally cannot be resold to third parties. The System may liquidate its investments in the PRIT funds at any time with less than thirty days' notice. Distributions from the PRIT funds are received regularly and deposited into an accompanying short-term cash investment account.

***Fair Value of Financial Instruments* –** The carrying amounts of cash and cash equivalents, accounts receivable and other current assets, accounts payable and accrued expenses approximate their fair value due to the relatively short-term maturities.

***Revenue Recognition* –** Contributions are recognized as additions in the period in which they become due pursuant to formal commitments, and statutory or contractual requirements. Contributions appropriated by the Town and MHA are on a fiscal-year basis. Investment purchases and sales are recorded on their trade dates. Interest and dividends are recorded when earned. Investment income is allocated to the funds on the basis of a rate determined annually by PERAC.

## 3. SYSTEM ADMINISTRATION

The System is administered by a five-person Board consisting of the Town Accountant, two members who are elected by the participants in or retired from the service of the System, one member appointed by the Town, and one member appointed by the other members of the Board.

At the time of this report, the Board was comprised as follows:

| | | Term Expires |
|---|---|---|
| Ex-Officio Member: | Mr. Michael Guzzo | No Specified Date |
| Appointed Member: | Mr. Kevin Petersen | No Specified Date |
| Elected Member: | Ms. Jean Ignachuck | April 1, 2020 |
| Elected Member: | Mr. Clifford Wilson | April 1, 2021 |
| Board Appointed Member: | Mr. Christopher Connolly, Sr. | April 1, 2022 |

The Board is required to meet at least once a month and keep a record of its proceedings. The Board annually submits a financial statement of condition for the System with the Commissioner of PERAC.

## 4. DEPOSITS AND INVESTMENTS

Massachusetts General Laws Chapter 32 and PERAC regulations require the System to invest funds only in pre-approved investment instruments, which include but are not necessarily limited to bank deposits, money markets, certificates of deposit, U.S. obligations, repurchase agreements, certain corporate bonds and equities and investment pools.

***Investment Policy*** – The investment of the System's funds is the responsibility of the Board. The Board manages its investments using a September 2018 investment policy. The September 2018 investment policy updated several investment allocation ratios from the previous investment policy statement, which was issued in March 2016. The investment objective is to pursue return and manage risk by adopting a broad-based approach to asset class diversification. The Board believes that applied prudently this plan will provide sufficient flexibility to adapt to changing global investment dynamics and maximize the System's ability to meet its long-term objectives. Furthermore, the investment policy establishes benchmarks by asset class to compare its actual performance against.

The System's investment policy outlines a target allocation for its investments. Boston Advisors, the System's external investment advisor, monitors target allocations and reports these metrics to the Board quarterly. The investment policy requires that asset classes that fall out of compliance with the target allocations must be cured within sixty days.

The System's portfolio target weights at the broad asset class level were as follows:

| Asset Class | Target Allocation |
|---|---|
| Equity securities | 55.0% |
| Fixed income | 30.0% |
| Non-traditional asset classes | 7.5% |
| Real estate | 7.5% |

***Custody of Investments –*** People's United Bank is the custodian of the System's investment portfolio. The System transitioned its investment custodian from State Street Bank and Trust to People's United Bank in 2018.

***Investment Management –*** Boston Advisors provided investment advisory services to the System throughout all of 2018. The System may terminate this service agreement for various reasons including, but not limited to, certain breaches of contract.

***Rate of Return*** – The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. The 2018 money-weighted rate of return was approximately -2.39%.

***Custodial Credit Risk: Deposits –*** Deposits are subject to the risk of bank failure. The System may be unable to recover the full amount of its deposits in any one bank institution in the event of a bank failure. The System's policy for custodial credit risk of deposits is to rely on Federal Deposit Insurance Corporation ("FDIC") insurance coverage for the first $250,000 of deposits held at each financial institution. At December 31, 2018, all the System's bank deposits were fully insured.

***Custodial Credit Risk: Investments –*** Custodial credit risk for investments is the risk that, in the event of a failure of the counterparty, the System will not be able to recover the value of its investments or collateral securities that are in the possession of the outside party. The System's policy for custodial credit risk of investments intends that all investments are either insured and/or registered in the name of the System. At December 31, 2018, the System was not exposed to custodial credit risk on its investments.

***Interest Rate Risk: Deposits –*** This is the risk that fair value losses may arise due to increasing interest rates; such risk is reduced by the fact that the System maintains such funds in highly liquid bank accounts; thereby, allowing for timely re-allocation of such holdings should the need arise.

***Interest Rate Risk: Investments –*** Debt securities are subject to interest rate risk. Debt securities may be adversely affected by changes in interest rates, which may negatively affect the fair value of individual debt instruments. The System does not have a formal investment policy that limits investments maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

***Foreign Currency Risk: Deposits and Investments –*** A risk that fluctuations in exchange rates will adversely affect the fair value of an investment or deposit. The System did not have any securities denominated in foreign currencies at December 31, 2018.

***Securities Credit Risk: Investments* –** In the case of investments, there is the risk that in the event an invested party will be unable to fulfill its obligations, such as to provide required payments to investors, to meet current or future performance expectations, to abide by industry regulations and proper operational practices, ceasing to exist, or filing for bankruptcy. In those instances, the System may not be able to recover the full amount of its principal investment and/or investment earnings. As previously noted, PERAC and Massachusetts statutory regulations have been enacted to reduce this risk. In evaluating its credit risk, the System may rely on credit ratings assigned by Moody's Investor Services, Inc. and Standard and Poor's Financial Services, LLC. The System does voluntarily self-impose certain investment restrictions; however, those can be changed at the Board's discretion. The System maintains a significant portion (approximately 99%) of its monetary assets as investment holdings.

None of the System's investments were subject to credit quality ratings from leading credit rating agencies. At December 31, 2018, uninsured short-term investment funds with fair values of $447,942 were reported as cash equivalents. These funds represent temporary holdings of excess cash resources. The System intends to reinvest these amounts in less than one year. Accordingly, the fair values of these amounts have been classified as cash equivalents in these financial statements.

***Concentration of Credit Risk: Investments* –** The System's investment policy prohibits its ownership of any domestic or international equity holding whose value exceeds 5% of the System's total investment balance. The following investments in pooled funds held by the System at December 31, 2018 represent approximately 47.6% of the System's total investments:

| | |
|---|---|
| PRIT Real Estate Fund | 10.6% |
| PRIT Fixed Income Fund | 10.1% |
| PRIT Value Added Fixed Income Fund | 9.4% |
| PRIT Emerging Markets Fund | 9.0% |
| PRIT Hedge Fund | 8.5% |

## 5. FUNDING POLICY

***Employee Contributions* –** Employees whose creditable service began prior to January 1, 1975, contribute 5% of their base salary or wage; those whose service date is subsequent to January 1, 1975, and prior to January 1, 1984, contribute 7%; those whose service date is subsequent to January 1, 1984, and prior to July 1, 1996, contribute 8%, and those whose service date is subsequent to July 1, 1996, contribute 9%. In addition, employees hired on or after January 1, 1979 contribute an additional 2% on earnings in excess of $30,000.

***Employer Contributions (Funding)* –** Under the provisions of Chapter 32 of Massachusetts General Law, participating employers are assessed their share of the total retirement cost based on independent actuarial study. Significant actuarial assumptions are used to compute the actuarially determined employer contribution requirement.

Employer contributions of $2,328,100 were made in 2018 in accordance with the funding policy. Employer contributions as a percentage of covered payroll was approximately 24% in 2018.

***Cost of Living Adjustment (COLA)*** – Through 1998, the Massachusetts Legislature was able to grant cost-of-living increases to benefits being paid to retirees. These increases were expressed as a percentage of the retiree's allowance subject to a maximum dollar increase. All COLA's granted from 1982 through June 30, 1998, are reimbursed to the System by the Commonwealth of Massachusetts since the Commonwealth was financially responsible for COLA adjustments during this time frame; any COLA's granted thereafter by the Board are required to be funded by the System directly. A COLA may be approved in excess of the Consumer Price Index, or CPI, but for 2018 is not to exceed 3% annually on the first $15,000 of a retirement allowance. The System has historically approved a COLA annually, usually at the maximum 3% rate.

The Commonwealth is expected to continue funding the cost-of-living amounts granted to retirees prior to 1998 for the duration of their selected retirement option.

## 6. ACTUARIAL VALUATION

The System is statutorily required to adopt the funding schedule that will fully amortize the unfunded actuarial accrued liability by June 30, 2040. As of the latest actuarial valuation, the System has selected a funding schedule that fully amortizes the unfunded actuarial accrued liability by June 30, 2036.

The components of the System's net pension liability at December 31, 2018 (dollar amounts are in thousands) were as follows:

| | |
|---|---|
| Total pension liability | $ 61,759 |
| Plan fiduciary net position | 42,167 |
| Net pension liability | $ 19,592 |
| Plan fiduciary net position as a percentage of total pension liability | 68.3% |

The total pension liability was determined by an actuarial valuation as of January 1, 2017 and updated to roll forward to December 31, 2018. The significant actuarial assumptions used in the January 1, 2017 report were as follows:

| | |
|---|---|
| Actuarial cost method: | Entry age normal |
| Amortization method: | Top appropriation increasing 6.0% |
| Remaining amortization period: | 17 years from July 1, 2018 |
| Asset valuation method: | Market value |
| Investment rate of return: | 7.0% per annum (formerly 7.5%) |
| Projected salary increases: | Service based table with ultimate ranges of 4.25%, 4.50% and 4.75% for groups 1, 2 and 4, respectively |
| Cost of living adjustments: | 3% on the first $15,000 of benefits |

| | |
|---|---|
| Mortality rates: | Pre-retirement rates reflect the RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct).<br><br>Post-retirement rates reflect the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct).<br><br>For disabled retirees, the mortality rate is assumed to be in accordance with RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2012 (gender distinct).<br><br>It is assumed that 55% of pre-retirement deaths are job-related for group 1and 2 members and 90% are job-related for group 4 members. For members retired under an Accidental Disability, 40% of deaths are assumed to be from the same cause as the disability. |

***Discount Rate*** – The discount rate used to measure the total pension liability in the January 1, 2017 actuarial valuation report was 7.0%. The projection of cash flows used to determine the discount rate assumed plan member contributions were made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially-determined contribution rates and the member rate. Based on those assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

***Expected Real Rate of Return*** – The long-term expected rate of return on System investments was determined using a building-block method in which best-estimate ranges of expected future rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. The System's investment policy sets long-term expected rates of returns using a representative benchmark index for each major asset class in the System's target asset allocation (see the discussion of the System's investment policy in Note 4). The following table summarizes these target benchmarks:

| Asset Class | Corresponding Benchmark |
|---|---|
| Equity securities: | |
| Domestic | S&P 500/Russell 2000 blend |
| International | FTSE All World Ex-US Index/MSCI Emerging Markets Index blend |
| Fixed income | Barclays Capital Aggregate Bond Index |
| Non-traditional asset classes | HFRI Fund of Funds Composite Index |
| Real estate | FTSE NAREIT US Index |

***Sensitivity Analysis*** – The following illustrates the net position liability at December 31, 2018 calculated using the current discount rate of 7.0%, as well as the projection of that the net position liability would be if it were calculated using a discount rate that in 1.0% lower (6.0%) and 1.0% higher (8.0%) that the current rate (dollar amounts in thousands):

| | 1% Decrease (6.0%) | Current Discount (7.0%) | 1% Increase (8.0%) |
|---|---|---|---|
| Net pension liability | $ 26,569 | $ 19,592 | $ 13,689 |

## 7. NET POSITION ASSETS HELD IN TRUST

Net position assets held in trust, as of December 31, 2018, were comprised of the following legally required five funds:

| Description | Amount | Purpose |
|---|---|---|
| Annuity Savings Fund | $ 9,171,918 | Active members' contribution balance |
| Annuity Reserve Fund | 2,787,083 | Retired members' contribution balance |
| Pension Fund | 470,015 | Amounts appropriated to fund future retirement |
| Military Service Fund | 31,185 | Members' contributions while on military leave |
| Pension Reserve Fund | 29,706,874 | Remaining net assets |
| Total | $ 42,167,075 | |

## 8. COMMITMENTS AND CONTINGENCIES

The System is subject to a variety of claims that arise from time to time in the ordinary course of business. Although management of the System currently believes that resolving claims against the System, individually or in aggregate, will not have a material adverse impact on the System's financial position or its results of operations, these matters are subject to inherent uncertainties and management's views of these matters may change in the future.

* * * * * *

## MAYNARD CONTRIBUTORY RETIREMENT SYSTEM
**(A Component Unit of the Town of Maynard, Massachusetts)**

**REQUIRED SUPPLEMENTARY INFORMATION - UNAUDITED**

### SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
*(dollar amounts are in thousands)*

| | 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|
| Total pension liability: | | | | | |
| Service cost | $ 1,770 | $ 1,694 | $ 1,507 | $ 1,442 | $ 1,209 |
| Interest | 4,147 | 3,842 | 3,925 | 3,618 | 3,561 |
| Differences between expected and actual experience | - | (994) | - | (694) | - |
| Changes in assumptions | - | 2,900 | - | 2,600 | - |
| Benefit payments, including refunds | (3,263) | (3,068) | (3,067) | (2,802) | (2,627) |
| Net change in total pension liability | 2,654 | 4,374 | 2,365 | 4,164 | 2,143 |
| Total pension liability - beginning of year | 59,105 | 54,731 | 52,366 | 48,202 | 46,059 |
| Total pension liability - end of year (a) | $ 61,759 | $ 59,105 | $ 54,731 | $ 52,366 | $ 48,202 |
| Plan fiduciary net position: | | | | | |
| Contributions - employer | $ 2,328 | $ 2,196 | $ 2,072 | $ 1,955 | $ 1,847 |
| Contributions - employee | 1,025 | 997 | 916 | 904 | 886 |
| Contributions - nonemployer contributing entities | 327 | 327 | 273 | 199 | 240 |
| Net investment income | (3,349) | 6,496 | 2,823 | (47) | 3,211 |
| Benefit payments, including refunds | (3,880) | (3,448) | (3,313) | (3,117) | (2,822) |
| Administrative expenses | (123) | (119) | (117) | (82) | (90) |
| Other | 4 | 1 | 6 | - | - |
| Net change in plan fiduciary net position | (3,668) | 6,450 | 2,660 | (188) | 3,272 |
| Plan fiduciary net position - beginning of year | 45,835 | 39,385 | 36,725 | 36,913 | 33,641 |
| Plan fiduciary net position - end of year (b) | $ 42,167 | $ 45,835 | $ 39,385 | $ 36,725 | $ 36,913 |
| Net pension liability - end of year (a) - (b) | $ 19,592 | $ 13,270 | $ 15,346 | $ 15,641 | $ 11,289 |
| Plan fiduciary net position as a percentage of the total pension liability | 68.28% | 77.55% | 71.96% | 70.13% | 76.58% |
| Covered payroll | $ 9,838 | $ 9,838 | $ 9,285 | $ 9,285 | $ 7,932 |
| Net pension liability as a percentage of covered payroll | 199.15% | 134.89% | 165.28% | 168.45% | 142.32% |

These schedules are presented to illustrate the requirement to show information for ten years. However, until a full ten-year trend is completed, information is presented for those years in which information is available.

See accompanying independent auditors' report.

## MAYNARD CONTRIBUTORY RETIREMENT SYSTEM
**(A Component Unit of the Town of Maynard, Massachusetts)**

**REQUIRED SUPPLEMENTARY INFORMATION - UNAUDITED**

### SCHEDULE OF CONTRIBUTIONS
*(dollar amounts are in thousands)*

| | 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|
| Actuarially-determined contribution | $ 2,328 | $ 2,196 | $ 2,072 | $ 1,955 | $ 1,865 |
| Contributions in relation to the actuarially-determined contribution | 2,328 | 2,196 | 2,072 | 1,955 | 1,865 |
| Contribution deficiency (excess) | $ - | $ - | $ - | $ - | $ - |
| Covered payroll | $ 9,838 | $ 9,838 | $ 9,285 | $ 9,285 | $ 7,932 |
| Contribution as a percentage of covered payroll | 23.66% | 22.32% | 22.32% | 21.06% | 23.51% |

### SCHEDULE OF INVESTMENT RETURNS

| | 2018 | 2017 | 2016 | 2015 | 2014 |
|---|---|---|---|---|---|
| Annual money-weighted rate of return, net of investment expense | -2.39% | 16.70% | 7.93% | -0.62% | 10.63% |

These schedules are presented to illustrate the requirement to show information for ten years. However, until a full ten-year trend is completed, information is presented for those years in which information is available.

See accompanying independent auditors' report.

**MAYNARD CONTRIBUTORY RETIREMENT SYSTEM**
**(A Component Unit of the Town of Maynard, Massachusetts)**

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION**
**AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2018**

## A. CHANGES OF BENEFIT TERMS

The System may be amended or terminated in whole or in part at any time by the Massachusetts Legislature, provided that no such modification, amendment or termination shall be made that would deprive a current member of superannuation pension rights or benefits provided under applicable laws of Massachusetts, if such member has paid the stipulated contributions specified in sections or provisions of such laws. There were no significant changes to the System's benefit terms in 2018.

## B. SIGNIFICANT ACTUARIAL ASSUMPTIONS AND METHODS

The significant actuarial assumptions used in the January 1, 2017 report were as follows:

| | |
|---|---|
| Actuarial cost method: | Entry age normal |
| Amortization method: | Top appropriation increasing 6.0% |
| Remaining amortization period: | 17 years from July 1, 2018 |
| Asset valuation method: | Market value |
| Investment rate of return: | 7.0% per annum (formerly 7.5%) |
| Projected salary increases: | Service based table with ultimate ranges of 4.25%, 4.50% and 4.75% for groups 1, 2 and 4, respectively |
| Cost of living adjustments: | 3% on the first $15,000 of benefits |
| Mortality rates: | Pre-retirement rates reflect the RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct).<br><br>Post-retirement rates reflect the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct).<br><br>For disabled retirees, the mortality rate is assumed to be in accordance with RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2012 (gender distinct). |

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**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 Maynard Retirement Board
Maynard Contributory Retirement System
Maynard, Massachusetts

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Maynard Contributory Retirement System (the "System"), a component unit of the Town of Maynard, Massachusetts, as of and for the year ended December 31, 2018, and the related notes to the financial statements which collectively comprise the System's basic financial statements and have issued our report thereon dated April 29, 2019.

**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) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions 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 entity'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 may exist that have not been identified.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the System's financial statements are free of 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 determination of financial statement amounts. 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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Roselli, Clark & Associates

Roselli, Clark & Associates
Certified Public Accountants
Woburn, Massachusetts
April 29, 2019

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

We have audited the accompanying schedule of employer allocations of the Maynard Contributory Retirement System (the "System"), a component unit of the Town of Maynard, Massachusetts, as of and for the year ended December 31, 2018. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources and total pension expense (specified column totals) included in the accompanying schedule of pension amounts by employer of the System as of and for the year ended December 31, 2018, and the related notes thereto.

**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 financial statements that are free from material misstatement, whether due to fraud or error.

## Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Audit Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer.

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

**Opinions**

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

**Other Matters**

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended December 31, 2018, and our report thereon, dated April 29, 2019 expressed an unmodified opinion on those financial statements.

Roselli, Clark & Associates

Roselli, Clark & Associates
Certified Public Accountants
Woburn, Massachusetts
April 29, 2019

**MAYNARD CONTRIBUTORY RETIREMENT SYSTEM**
**(A Component Unit of the Town of Maynard, Massachusetts)**

## SCHEDULE OF EMPLOYER ALLOCATIONS
## YEAR ENDED DECEMBER 31, 2018

*Dollar amounts are in thousands*

| Employer | Actual Employer Contributions | Employer Allocation Percentage |
|---|---|---|
| Town of Maynard | $ 2,255 | 96.9% |
| Maynard Housing Authority | 73 | 3.1% |
| Total | $ 2,328 | 100.0% |

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

# MAYNARD CONTRIBUTORY RETIREMENT SYSTEM
**(A Component Unit of the Town of Maynard, Massachusetts)**

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

*Dollar amounts are in thousands*

| | Town of Maynard | Maynard Housing Authority | Total |
|---|---|---|---|
| Net pension liability | $ 18,985 | $ 607 | $ 19,592 |
| Deferred outflows of resources: | | | |
| Differences between actual and expected experience | $ - | $ - | $ - |
| Net difference between projected and actual investment earnings on pension plan investments | 3,402 | 109 | 3,511 |
| Changes of assumptions | 2,641 | 84 | 2,725 |
| Changes in proportion and differences between employer contributions and proportionate share of contributions | - | 23 | 23 |
| Total deferred outflows of resources | $ 6,043 | $ 216 | $ 6,259 |
| Deferred inflows of resources: | | | |
| Differences between actual and expected experience | $ 848 | $ 27 | $ 875 |
| Changes of assumptions | - | - | - |
| Changes in proportion and differences between employer contributions and proportionate share of contributions | 23 | - | 23 |
| Total deferred inflows of resources | $ 871 | $ 27 | $ 898 |
| Pension expense (income): | | | |
| Proportionate share of plan pension expense | $ 3,638 | $ 116 | $ 3,754 |
| Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions | (10) | 10 | - |
| Total employer pension expense (income) | $ 3,628 | $ 126 | $ 3,754 |

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

# MAYNARD CONTRIBUTORY RETIREMENT SYSTEM
## (A Component Unit of the Town of Maynard, Massachusetts)

## NOTES TO PENSION PLAN SCHEDULES
## AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2018

### A. INTRODUCTION

GASB Statement No, 68, *Accounting and Financial Reporting for Pensions*, establishes financial reporting requirements for governments that provide employees with pension benefits. GASB 68 requires employers to recognize a net pension liability or net pension asset as employees earn pension benefits. Employers participating in the Maynard Contributory Retirement System (the "Retirement System") will recognize their proportionate share of the collective pension amounts for all benefits provided by the Retirement System.

### B. METHOD OF PROPORTIONATE SHARE ALLOCATION

The basis for the proportionate share allocation by employer as found in the Schedule of Employer Allocations and Schedule of Pension Amounts by Employer is consistent with the manner in which employer contributions to the Retirement System are determined. The net pension liability, deferred outflows of resources, deferred inflows of resources and pension expense is based upon actual historical employer contributions to the Retirement System from the census data submitted to the Retirement System for pay periods ending December 31, 2018.

### C. EXPECTED FUTURE AMORTIZATION OF DEFERRED BALANCES

The following table (dollar amounts are in thousands) summarizes the expected amortization of the deferred outflows of resources and inflows of resources into pension expense.

| Measurement Period Ended December 31: | Town of Maynard | Maynard Housing Authority | Total |
|---|---|---|---|
| 2019 | $ 1,688 | $ 64 | $ 1,752 |
| 2020 | 1,042 | 47 | 1,089 |
| 2021 | 843 | 27 | 870 |
| 2022 | 1,568 | 50 | 1,618 |
| 2023 | 31 | 1 | 32 |
| | $ 5,172 | $ 189 | $ 5,361 |