

DANVERS CONTRIBUTORY RETIREMENT SYSTEM

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

Financial Statements,
Required Supplementary Information,
and Other Information

For the Year Ended December 31, 2019

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INDEPENDENT AUDITORS' REPORT

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

We have audited the accompanying financial statements of the Danvers Contributory Retirement System (the System), a component unit of the Town of Danvers, 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 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 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 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

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accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Danvers Contributory Retirement 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 States of America require that the Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of Net Pension Liability, Contributions, and 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 black ink that reads "Melanson".

Andover, Massachusetts
December 3, 2020

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Danvers 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, 2019.

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 other 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 and 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, receivables, and liabilities.

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, 2019. It reflects contributions by members and participating employers, investment activity, along with deductions for retirement benefits, refunds, 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 Required Supplementary Information includes this Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of Net Pension Liability, Contributions, and Investment Returns.

Financial Highlights

- The System's total net position restricted for pensions was \$127,992,206 at December 31, 2019.
- The System's net position increased by \$20,235,758, which is primarily due to investment returns being \$10,682,395 greater than expected in calendar year 2019.
- Employer and employee contributions to the plan were \$15,251,380, which represents a \$4,486,596 increase over the prior year. This increase is due to an additional contribution made by the Danvers Electric Division, which is discussed further in note 9 to the financial

statements. The employer share of contributions represents 75% of the total contributions made to the System.

- Benefits paid to plan participants increased by \$693,534, or 5%, totaling \$13,594,006. At December 31, 2019, there were 413 retirees and beneficiaries in receipt of pension benefits.
- The System’s funded ratio (based on the System’s GASB 68 valuation) as of the December 31, 2019 actuarial valuation was 61.60%.

Financial Statement Analysis

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

FIDUCIARY NET POSITION

(in thousands)

	<u>2019</u>	<u>2018</u>
Assets		
Cash and receivables	\$ 4,278	\$ 4,872
Investments	<u>123,908</u>	<u>103,419</u>
Total assets	128,186	108,291
Liabilities		
Accounts payable	<u>194</u>	<u>535</u>
Net Position		
Restricted for pensions	<u>\$ 127,992</u>	<u>\$ 107,756</u>

The System’s total assets as of December 31, 2019 were \$128,186,784 and were comprised mostly of cash and investments. Total assets increased \$19,895,882 or 18% from the prior year primarily due to investment results being approximately \$10.7m greater than anticipated. Total liabilities decreased by \$339,876 over the prior year.

CHANGES IN FIDUCIARY NET POSITION

(in thousands)

	<u>2019</u>	<u>2018</u>
Additions		
Contributions	\$ 15,955	\$ 11,483
Investment income, net	<u>18,808</u>	<u>(7,946)</u>
Total additions	34,763	3,537
Deductions		
Benefit payments	13,594	12,900
Other	<u>933</u>	<u>772</u>
Total deductions	<u>14,527</u>	<u>13,672</u>
Changes in net position	20,236	(10,135)
Net Position Restricted for Pensions		
Beginning of year	<u>107,756</u>	<u>117,891</u>
End of year	<u>\$ 127,992</u>	<u>\$ 107,756</u>

The System was 60.3% funded based on its actuarial funding valuation of January 1, 2020 with 3 years remaining in its amortization period for the Danvers Electric Division and 15 years for all other member units.

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 a net gain of \$34,762,671. Employer's contributions increased by \$4,706,497, or 64% in calendar year 2019, which was due to an additional contribution made by the Danvers Electric Division. Further information on the contribution can be found in note 9 to the financial statements. The System had net investment gain of \$18,807,501 versus loss of \$(7,946,257) in 2018.

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds and transfers of member contributions, reimbursement payments in accordance with Massachusetts General Law, 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 2019 were \$14,526,913, which represent an increase of \$855,400, or 6%, over deductions of \$13,671,513 in calendar year 2018. The payment of pension benefits increased by \$693,534 or 5% over the previous year.

Requests for Information

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

Susan Little, Retirement Manager
Danvers Contributory Retirement System
1 Sylvan Street
Danvers, Massachusetts 01923

DANVERS CONTRIBUTORY RETIREMENT SYSTEM
(A Component Unit of the Town of Danvers, Massachusetts)

Statement of Fiduciary Net Position
December 31, 2019

Assets	
Cash and short-term investments	\$ 3,901,839
Investments:	
Equities	16,447,558
Pooled investments	107,460,766
Accounts receivable	<u>376,621</u>
Total assets	<u>\$ 128,186,784</u>
Liabilities	
Accounts payable	<u>\$ 194,578</u>
Total liabilities	194,578
Net Position	
Restricted for pensions	<u>127,992,206</u>
Total liabilities and net position	<u>\$ 128,186,784</u>

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

DANVERS CONTRIBUTORY RETIREMENT SYSTEM
(A Component Unit of the Town of Danvers, Massachusetts)

Statement of Changes in Fiduciary Net Position
For the Year Ended December 31, 2019

Additions

Contributions:	
Employers	\$ 12,017,086
Plan members	3,234,294
Other systems and Commonwealth of Massachusetts	335,928
Other	<u>367,862</u>
Total contributions	15,955,170
Investment income (loss):	
Appreciation in fair value of investments	19,463,842
Less: management fees	<u>(656,341)</u>
Net investment gain	<u>18,807,501</u>
Total additions	34,762,671

Deductions

Benefit payments to plan members and beneficiaries	13,594,006
Refunds to plan members	214,820
Transfers to other systems	420,266
Administrative expenses	<u>297,821</u>
Total deductions	<u>14,526,913</u>
Net increase	20,235,758

Net position restricted for pensions

Beginning of year	<u>107,756,448</u>
End of year	<u>\$ 127,992,206</u>

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

DANVERS CONTRIBUTORY RETIREMENT SYSTEM

Notes to Financial Statements

1. Description of Plan

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

Membership of the plan consisted of the following at January 1, 2020 (the latest actuarial valuation):

Retirees and beneficiaries receiving benefits	413
Inactive members entitled to a return of employee contributions/Terminated plan members entitled to but not yet receiving benefits	146
Active plan members	491
Total	1,050
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 system. In addition, all employees hired on or 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%
July 1, 1996 - present	9%

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.

Employer Contributions

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 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.

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.

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.

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 – Total annual allowance, payable in monthly installments, commencing at retirement and terminated at the members 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 terminate from service 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%.

2. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

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 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 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, 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 Town of Danvers and Danvers Housing Authority employees are recognized as revenue in the period in which employees provide services to the respective member unit.

Investments

Investment Policy

Investments are reported at fair value in accordance with PERAC requirements. 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, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 17.53%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested throughout the year.

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 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 \$4,009,254 was fully collateralized.

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. The system's investments at December 31, 2019 were either not subject to credit risk or were unrated.

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's investments are not subject to custodial credit risk.

Concentration of Credit Risk

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

Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded from concentration of credit disclosure.

As of December 31, 2019, the System did not have any investments subject to concentration of concentration of credit risk as investment classifications exceeding 5% are exempt from disclosure.

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. As of December 31, 2020 the System did not have any investments subject to interest rate risk.

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's policy for foreign current risk is that securities of foreign-based issuers that cannot be transacted in US dollars on US exchanges are prohibited.

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 in 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 has the following fair value measurements as of December 31, 2019:

<u>Description</u>	<u>Fair Value Measurements Using:</u>		
	<u>Quoted prices in active markets for identical assets (Level 1)</u>	<u>Significant observable inputs (Level 2)</u>	<u>Significant unobservable inputs (Level 3)</u>
Investments by fair value level:			
Equity securities			
Equity securities	\$ <u>16,447,558</u>	\$ <u>16,447,558</u>	\$ <u>-</u>
Subtotal	16,447,558	\$ <u>16,447,558</u>	\$ <u>-</u>

(continued)

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Investments measured at
the net asset value (NAV):

<u>Description</u>	<u>Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (If currently eligible)</u>	<u>Redemption Notice Period</u>
External Investment Pools				
PRIT Core Real Estate Fund	8,004,962	\$ -	Monthly	30 days
PRIT Emerging Markets Fund	10,596,673	-	Monthly	30 days
PRIT Hedge Funds	7,686,789	-	Monthly	30 days
PRIT International Equity Fund	25,517,570	-	Monthly	30 days
PRIT Alternative Investments	2,637,661	1,601,562	Monthly	30 days
Barings US High Yield Bond Fund	5,793,729	-	Monthly	31 days
Western Asset	20,208,054	-	Monthly	30 days
Limited Partnerships				
BPG Investments Partnership IX, LP	165,891	-	*	*
Palladian Partners VII, LP	1,392,037	-	*	*
Realty Associates Fund X UTP LP	254,263	-	*	*
Index Funds				
Rhumline S&P 500 Index Fund	18,567,685	-	Daily	1 day
Rhumline Russell 1000 Growth	<u>6,635,452</u>	-	Daily	1 day
Subtotal	<u>107,460,766</u>			
Total	<u>\$ 123,908,324</u>			

* As standard to limited partnership investments, not fully redeemed until the end of partnership term; distributions based on cash flow of the partnerships.

5. Accounts Receivable

The accounts receivable balances are primarily comprised of investments sold and plan member contributions not received until after December 31, 2019.

6. Accounts Payable

The accounts payable balances are primarily comprised of reimbursements to other systems and investments purchased but not paid until after December 31, 2019.

7. 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.

8. Net Pension Liability of Participating Employers

The net pension liability was based on an actuarial valuation dated January 1, 2020.

Net Pension Liability of Employers

The components of the net pension liability of the participating employers at December 31, 2019 were as follows:

Total pension liability	\$ 207,786,722
Plan fiduciary net position	<u>(127,992,206)</u>
Employers' net pension liability	<u>\$ 79,794,516</u>
Plan fiduciary net position as a percentage of total pension liability	61.60%

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 Normal
Remaining amortization period	3 years for the Danvers Electric Division and 15 Years for all others
Actuarial assumptions:	
Investment rate of return	7.50%
Projected salary increases:	
Group 1	6.00% - 4.25%, based on service
Group 2	7.00% - 4.75%, based on service
Inflation rate	2.70% per year
Post-retirement cost-of-living adjustment	3.00% of the first \$13,000

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.

Mortality rates were based on the following:

Pre- and post-retirement and beneficiary mortality:	Based on the RP-2014 Blue Collar Mortality Table with full generational mortality improvement using Scale MP-2018.
Mortality for disabled members:	Based on the RP-2014 Blue Collar Mortality Table set forward one year with full generational mortality improvement using Scale MP-2018.

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 Asset Allocation</u>	<u>Long-term Expected Real Rate of Return</u>
Domestic Equity	30.00%	5.10%
International Equity	25.00%	4.64%
Fixed Income	17.00%	0.80%
Alternatives	25.00%	6.82%
Cash & Cash Equivalents	<u>3.00%</u>	0.00%
Total	<u>100.00%</u>	

Discount Rate

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board’s funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System’s fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of Discount Rate

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

<u>Year Ended</u>	1% Decrease <u>(6.50%)</u>	Current Discount Rate <u>(7.50%)</u>	1% Discount <u>(8.50%)</u>
December 31, 2019	\$ 102,898,743	\$ 79,794,516	\$ 60,205,883

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:

	<u>Deferred Outflows of Resources</u>	<u>Deferred (Inflows) of Resources</u>
Differences between expected and actual experience	\$ 1,855,686	\$ -
Changes of assumptions	1,572,607	-
Net difference between projected and actual investment earnings on pension plan investments	-	(2,798,111)
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>10,314,935</u>	<u>(10,314,935)</u>
Total	<u>\$ 13,743,228</u>	<u>\$ (13,113,046)</u>

The following summarizes changes in deferred outflows/(inflows), excluding employer-specific amounts:

	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	2019	5.16	\$ -	\$ 1,281,177	\$ 248,290	\$ 1,032,887
	2017	5.17	227,341	-	71,716	155,625
	2016	5.30	1,180,386	-	513,212	667,174
Changes in Assumptions	2019	5.16	-	486,289	94,242	392,047
	2017	5.17	1,579,375	-	498,225	1,081,150
	2016	5.30	175,878	-	76,468	99,410
Changes in proportion and differences between employer contributions and proportionate share of contributions	2019	5.16	-	10,755,461	2,084,394	8,671,067
	2018	5.17	1,183,373	-	283,782	899,591
	2017	5.17	702,275	-	221,538	480,737
	2016	5.30	290,539	-	126,321	164,218
	2015	5.70	241,207	-	141,885	99,322
Total Deferred Outflows of Resources			5,580,374	12,522,927	4,360,073	13,743,228
Deferred (Inflows) of Resources:						
Net Differences between projected and actual investment earnings on pension plan investments	2019	5.00	-	(10,682,395)	(2,136,479)	(8,545,916)
	2018	5.00	13,459,902	-	3,364,976	10,094,926
	2017	5.00	(5,866,786)	-	(1,955,595)	(3,911,191)
	2016	5.00	(871,861)	-	(435,931)	(435,930)
	2015	5.00	1,795,588	-	1,795,588	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	2019	5.16	-	(10,755,461)	(2,084,394)	(8,671,067)
	2018	5.17	(1,183,373)	-	(283,782)	(899,591)
	2017	5.17	(702,275)	-	(221,538)	(480,737)
	2016	5.30	(290,539)	-	(126,321)	(164,218)
	2015	5.70	(241,207)	-	(141,885)	(99,322)
Total Deferred (Inflows) of Resources			6,099,449	(21,437,856)	(2,225,361)	(13,113,046)
Total Collective Deferred Outflows (Inflows) of Resources			\$ 11,679,823	\$ (8,914,929)	\$ 2,134,712	\$ 630,182

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

Fiscal Year*	Total
2021	\$ 339,125
2022	362,277
2023	1,667,921
2024	(1,793,947)
2025	54,806
Thereafter	-
	<u>\$ 630,182</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.

9. Net Pension Liability of Participating Employers

The net position for the Danvers Retirement System as of December 31, 2019 was \$127,992,206. This includes an excess contribution of \$5,000,000 made by the Electric Division in calendar year 2014 and an excess contribution of \$4,131,369 made by the Electric Division in calendar year 2019. The value of this additional contributions as of December 31, 2019 is \$11,200,495. Since this amount is contributed by the Electric Department solely for their own use and not for any cost-sharing purpose, it is applied only towards the Electric Department's liability in the allocation of results to individual employers. This is consistent with a memorandums of understanding issued by the Municipal Light Board and the Danvers Retirement Board, dated November 13, 2015 and October 24, 2019.

The System's net pension liability (prior to the allocation of the \$11,200,495 discussed above) is allocated to member units (including departments and divisions) based on fiscal year 2020 actuarially determined contributions. However, because of the treatment of the additional Electric Division contributions, the System has allocated the deferred outflows of resources and deferred inflows of resources (other than proportion and contribution changes) based on the member unit's proportional share of the net pension liability after the allocation of the \$11,200,495.

DANVERS CONTRIBUTORY RETIREMENT SYSTEM

Schedule of Changes in the Net Pension Liability
(Unaudited)

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability						
Service cost	\$ 4,809,840	\$ 4,624,846	\$ 3,720,704	\$ 3,569,021	\$ 3,298,870	\$ 3,164,384
Interest on unfunded liability - time value of money	14,843,264	14,385,211	14,147,151	13,435,902	13,431,210	13,007,186
Changes of benefit terms	-	-	-	930,654	-	-
Differences between expected and actual experience	1,281,177	-	370,773	2,720,022	-	-
Changes of assumptions	486,289	-	2,575,825	405,282	-	-
Benefit payments, including refunds of member contributions	<u>(13,468,398)</u>	<u>(12,706,956)</u>	<u>(12,212,361)</u>	<u>(11,857,960)</u>	<u>(11,189,819)</u>	<u>(10,821,671)</u>
Net change in total pension liability	7,952,172	6,303,101	8,602,092	9,202,921	5,540,261	5,349,899
Total pension liability - beginning	<u>199,834,550</u>	<u>193,531,449</u>	<u>184,929,357</u>	<u>175,726,436</u>	<u>170,186,175</u>	<u>164,836,276</u>
Total pension liability - ending (a)	207,786,722	199,834,550	193,531,449	184,929,357	175,726,436	170,186,175
Plan Fiduciary Net Position						
Contributions - employer	12,017,086	7,301,589	6,760,731	6,317,667	5,853,934	10,686,405
Contributions - member	2,809,528	3,160,074	2,773,534	2,617,135	2,605,540	2,433,972
Net investment income	18,670,829	(8,086,335)	17,643,023	9,510,814	(1,106,853)	2,035,488
Benefit payments, including refunds of member contributions	(13,468,398)	(12,706,956)	(12,212,361)	(11,857,960)	(11,189,819)	(10,821,671)
Administrative expense	154,358	142,460	154,085	152,728	128,873	(188,747)
Other	<u>52,355</u>	<u>54,963</u>	<u>50,329</u>	<u>-</u>	<u>-</u>	<u>-</u>
Net change in plan fiduciary net position	20,235,758	(10,134,205)	15,169,341	6,740,384	(3,708,325)	4,145,447
Plan fiduciary net position - beginning	<u>107,756,448</u>	<u>117,890,653</u>	<u>102,721,312</u>	<u>95,980,928</u>	<u>99,689,253</u>	<u>95,543,806</u>
Plan fiduciary net position - ending (b)	<u>127,992,206</u>	<u>107,756,448</u>	<u>117,890,653</u>	<u>102,721,312</u>	<u>95,980,928</u>	<u>99,689,253</u>
Net pension liability (asset) - ending (a-b)	\$ <u>79,794,516</u>	\$ <u>92,078,102</u>	\$ <u>75,640,796</u>	\$ <u>82,208,045</u>	\$ <u>79,745,508</u>	\$ <u>70,496,922</u>

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

DANVERS CONTRIBUTORY RETIREMENT SYSTEM

Schedules of Net Pension Liability, Contributions, and Investment Returns
(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	\$ 207,786,722	\$ 199,834,550	\$ 193,531,449	\$ 184,929,357	\$ 175,726,436	\$ 170,186,175
Plan fiduciary net position	<u>127,992,206</u>	<u>107,756,448</u>	<u>117,890,653</u>	<u>102,721,312</u>	<u>95,980,928</u>	<u>99,689,253</u>
Net pension liability (asset)	\$ <u>79,794,516</u>	\$ <u>92,078,102</u>	\$ <u>75,640,796</u>	\$ <u>82,208,045</u>	\$ <u>79,745,508</u>	\$ <u>70,496,922</u>
Plan fiduciary net position as a percentage of the total pension liability	61.60%	53.92%	60.92%	55.55%	54.62%	58.58%
Covered payroll	\$ 28,661,365	\$ 29,176,993	\$ 27,424,233	\$ 26,767,949	\$ 26,834,535	\$ 24,485,565
Participating employer net pension liability (asset) as a percentage of covered payroll	278.40%	315.58%	275.82%	307.11%	297.17%	287.91%

Schedule of Contributions

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially determined contribution	\$ 7,885,717	\$ 7,301,589	\$ 6,760,731	\$ 6,259,936	\$ 5,796,238	\$ 5,366,886
Contributions in relation to the actuarially determined contribution	<u>12,017,086</u>	<u>7,301,589</u>	<u>6,760,731</u>	<u>6,317,667</u>	<u>5,853,934</u>	<u>10,686,405</u>
Contribution deficiency (excess)	\$ <u>(4,131,369)</u>	\$ <u>-</u>	\$ <u>-</u>	\$ <u>(57,731)</u>	\$ <u>(57,696)</u>	\$ <u>(5,319,519)</u>
Covered payroll	\$ 28,661,365	\$ 29,176,993	\$ 27,424,233	\$ 26,767,949	\$ 26,834,535	\$ 24,485,565
Contributions as a percentage of covered payroll	41.93%	25.03%	24.65%	23.60%	21.81%	43.64%

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	17.53%	-6.94%	17.57%	10.05%	5.17%	7.11%

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



Independent Auditors' Report

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

Report on Schedules

We have audited the accompanying schedule of employer allocations of the Danvers Contributory Retirement System as of and for the year ended December 31, 2019. 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 totals) included in the accompanying schedule of pension amounts by employer of the Danvers Contributory Retirement 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 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

Nashua, New Hampshire
Manchester, New Hampshire
Andover, Massachusetts
Greenfield, Massachusetts
Ellsworth, Maine



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.

Opinions

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the Danvers Contributory Retirement 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 Danvers Contributory Retirement 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 3, 2020

DANVERS CONTRIBUTORY RETIREMENT SYSTEM

Schedule of Employer Allocations

<u>Employer</u>	FY 2020 Actual Employer <u>Contributions</u>	<u>Allocation Percentage*</u>
Town of Danvers	\$ 5,484,586	79.31%
School Department	893,690	12.93%
Electric Division	5,207,017	1.52%
Water Division	253,667	3.67%
Sewer Division	46,473	0.67%
Danvers Housing Authority	<u>131,653</u>	<u>1.90%</u>
Total	\$ <u><u>12,017,086</u></u>	<u><u>100.00%</u></u>

*See Note 9 in the audited financial statements

See actuarial assumptions in the Danvers Contributory Retirement System audited financial statements.

DANVERS CONTRIBUTORY RETIREMENT SYSTEM

Schedule of Pension Amounts by Employer
As of and for the year ended December 31, 2019

	Town of Danvers	School Department	Electric Division	Water Division	Sewer Division	Danvers Housing Authority	Total
Net Pension Liability							
Beginning net pension liability	\$ 69,073,541	\$ 10,453,162	\$ 7,471,131	\$ 3,193,630	\$ 373,992	\$ 1,512,646	\$ 92,078,102
Ending net pension liability	\$ 63,287,836	\$ 10,312,484	\$ 1,211,642	\$ 2,927,119	\$ 536,262	\$ 1,519,173	\$ 79,794,516
Deferred Outflows of Resources							
Difference between expected and actual experience	\$ 1,471,808	\$ 239,826	\$ 28,178	\$ 68,073	\$ 12,471	\$ 35,330	\$ 1,855,686
Changes of assumptions	1,247,291	203,240	23,879	57,688	10,569	29,940	1,572,607
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>3,551,870</u>	<u>1,138,112</u>	<u>5,114,602</u>	<u>160,952</u>	<u>174,082</u>	<u>175,317</u>	<u>10,314,935</u>
Total Deferred Outflows of Resources	<u>\$ 6,270,969</u>	<u>\$ 1,581,178</u>	<u>\$ 5,166,659</u>	<u>\$ 286,713</u>	<u>\$ 197,122</u>	<u>\$ 240,587</u>	<u>\$ 13,743,228</u>
Deferred Inflows of Resources							
Net difference between projected and actual investment earnings on pension plan investments	2,219,280	361,622	42,488	102,644	18,805	53,272	2,798,111
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>4,742,004</u>	<u>662,119</u>	<u>4,494,872</u>	<u>264,417</u>	<u>38,244</u>	<u>113,279</u>	<u>10,314,935</u>
Total Deferred Inflows of Resources	<u>\$ 6,961,284</u>	<u>\$ 1,023,741</u>	<u>\$ 4,537,360</u>	<u>\$ 367,061</u>	<u>\$ 57,049</u>	<u>\$ 166,551</u>	<u>\$ 13,113,046</u>
Pension Expense							
Proportionate share of pension expense	\$ 8,552,487	\$ 1,393,591	\$ 163,737	\$ 395,560	\$ 72,468	\$ 205,296	\$ 10,783,139
Proportion changes and differences between employer contributions and proportionate share recognized as expense	<u>(401,822)</u>	<u>158,456</u>	<u>205,138</u>	<u>(9,945)</u>	<u>32,528</u>	<u>15,645</u>	<u>-</u>
Total Pension Expense	<u>\$ 8,150,665</u>	<u>\$ 1,552,047</u>	<u>\$ 368,875</u>	<u>\$ 385,615</u>	<u>\$ 104,996</u>	<u>\$ 220,941</u>	<u>\$ 10,783,139</u>
Contributions							
Actuarially determined contribution	\$ 5,484,586	\$ 893,690	\$ 1,075,648	\$ 253,667	\$ 46,473	\$ 131,653	\$ 7,885,717
Contributions made	<u>(5,484,586)</u>	<u>(893,690)</u>	<u>(5,207,017)</u>	<u>(253,667)</u>	<u>(46,473)</u>	<u>(131,653)</u>	<u>(12,017,086)</u>
Contribution deficiency / (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (4,131,369)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (4,131,369)</u>
Contributions as a percentage of covered payroll	30.92%	20.01%	25.58%	16.75%	51.75%	20.38%	41.93%
Deferred Outflows/(Inflows) Recognized in Future Pension Expense							
June 30, 2021	\$ (122,022)	\$ 186,228	\$ 232,317	\$ (10,947)	\$ 34,061	\$ 19,488	\$ 339,125
June 30, 2022	(7,091)	162,193	195,645	(37,534)	33,237	15,827	362,277
June 30, 2023	990,565	303,974	242,017	39,691	44,330	47,344	1,667,921
June 30, 2024	(1,576,891)	(120,767)	(32,890)	(72,749)	22,514	(13,164)	(1,793,947)
June 30, 2025	<u>25,124</u>	<u>25,809</u>	<u>(7,790)</u>	<u>1,191</u>	<u>5,931</u>	<u>4,541</u>	<u>54,806</u>
Total Deferred Outflows / (Inflows) Recognized in Future Pension Expense	<u>\$ (690,315)</u>	<u>\$ 557,437</u>	<u>\$ 629,299</u>	<u>\$ (80,348)</u>	<u>\$ 140,073</u>	<u>\$ 74,036</u>	<u>\$ 630,182</u>
Discount Rate Sensitivity							
1% decrease (6.50%)	\$ 81,612,611	\$ 13,298,428	\$ 1,562,469	\$ 3,774,656	\$ 691,535	\$ 1,959,044	\$ 102,898,743
Current discount rate (7.50%)	\$ 63,287,836	\$ 10,312,484	\$ 1,211,642	\$ 2,927,119	\$ 536,262	\$ 1,519,173	\$ 79,794,516
1% increase (8.50)	\$ 47,751,402	\$ 7,780,888	\$ 914,198	\$ 2,208,545	\$ 404,616	\$ 1,146,234	\$ 60,205,883
Covered Payroll	\$ 17,739,825	\$ 4,466,689	\$ 4,204,614	\$ 1,514,526	\$ 89,799	\$ 645,912	\$ 28,661,365

See actuarial assumptions in the Danvers Contributory Retirement System audited financial statements.