# WATERTOWN RETIREMENT SYSTEM AUDIT REPORT JAN. 1, 2017 - DEC. 31, 2021



**PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION** COMMONWEALTH OF MASSACHUSETTS

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COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION PHILIP Y. BROWN, ESQ., Chair WILLIAM T. KEEFE, Executive Director

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

February 5, 2025

The Public Employee Retirement Administration Commission (PERAC) has completed a review of the audits of the Watertown Retirement System conducted by the firms of Marcum, LLP and Melanson. They conducted these audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits in *Government Auditing Standards*, issued by the Comptroller General of the United States. The audits covered the period from January 1, 2017 to December 31, 2021.

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

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

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

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



Watertown Audit Report February 5, 2025 Page 2

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

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

The financial statements and footnotes presented in this report were limited to the express results as of and for the years ended December 31, 2021, December 31, 2020, December 31, 2019, December 31, 2018, and December 31, 2017.

In closing, I wish to acknowledge the work of Marcum, LLP and Melanson who conducted these examinations, and the PERAC examiners who conducted limited procedures to supplement the field work and express my appreciation to the Watertown Retirement Board and staff for their courtesy and cooperation.

Sincerely,

Bell Keefe

William T. Keefe Executive Director

## EXPLANATION OF FINDING AND RECOMMENDATION

## New Retirements' Allowance Calculations:

We tested the retirement allowance calculations of 20 new retirees during the audit period and found issues with five retirements as follows:

- One superannuation retiree had unpaid leaves during the year before retirement. Actual pay
  was used in the average salary determination instead of the rate in effect immediately
  preceding the absence, which is allowed pursuant to G.L. c. 32, §5(3)(b). Also, this member's
  three years of regular compensation included four longevity payments. Only three years'
  worth of any payment should be included in the three-year average salary. The net effect of
  these is that the retiree is underpaid.
- One superannuation retirement's three-year period was short by one week of pay. This retiree is underpaid.
- Three superannuation retirees had pay from outside the three-year period included in the average salary. One had retroactive payments which belonged to prior years, the second retiree had an extra two weeks included and the third had both. These retirees were overpaid.

Lastly, one superannuation retiree should have received four COLAs as of December 2021 but instead, he received only three. It appears this was due to a recalculation done in October 2017 after the member had retired in February 2017.

**Recommendation**: The Retirement Board should recalculate the above noted retirement allowances. When calculating any amounts owed on allowances, interest must be applied.

In calculating these allowances, the Board should use payroll records instead of relying on the contributions that had been withheld.

## **Board Response:**

The Board will further review the calculations performed on the noted retirement allowances and will make any necessary adjustments.

## FINAL DETERMINATION:

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

## SUPPLEMENTARY INFORMATION

## SCHEDULE OF ALLOCATION OF INVESTMENTS OWNED

	AS OF DECEMBER 31, 2021		
		PERCENTAGE	
		OF TOTAL	
	MARKET VALUE	ASSETS	
Cash	\$1,225,715	0.4%	
Pooled Domestic Equity Funds	85,175,291	29.9%	
Pooled International Equity Funds	55,771,306	19.6%	
Pooled Domestic Fixed Income Funds	46,196,014	16.2%	
Pooled Global Fixed Income Funds	9,187,209	3.2%	
Pooled Alternative Investment Funds	23,183,081	8.1%	
Pooled Real Estate Funds	27,819,408	9.8%	
Pooled Domestic Balanced Funds	16,363,425	5.8%	
Hedge Funds	<u>19,546,808</u>	<u>6.9%</u>	
Grand Total	<u>\$284,468,257</u>	<u>100.0</u> %	

## (percentages by category)

For the year ending December 31, 2021, the rate of return for the investments of the Watertown Retirement System was 16.24%. For the ten-year period ending December 31, 2021, the rate of return for the investments of the Watertown Retirement System averaged 10.45%. For the 37-year period ending December 31, 2021, since PERAC began evaluating the returns of the retirement systems, the rate of return on the investments of the Watertown Retirement System was 8.72%.

The composite rate of return for all retirement systems for the year ending December 31, 2021 was 19.51%. For the ten-year period ending December 31, 2021, the composite rate of return for the investments of all retirement systems averaged 10.86%. For the 37-year period ending December 31, 2021, since PERAC began evaluating the returns of the retirement systems, the composite rate of return on the investments of all retirement systems averaged 9.58%.

## SUPPLEMENTARY INFORMATION (Continued)

## ADMINISTRATION OF THE SYSTEM

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

Ex-officio Member:	Megan Langan		
Appointed Member:	John T. Loughran	Serves until successor	is appointed
Elected Member:	Domenic Arone	Term Expires:	10/15/2025
Elected Member:	Thomas V. Thibaut, Jr., Chairperson	Term Expires:	10/15/2026
Appointed Member:	Kathleen Kiely-Becchetti	Term Expires:	01/31/2027

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

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

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

## **BOARD REGULATIONS**

The Watertown Retirement Board has adopted Supplemental Regulations which are available on the PERAC website at <a href="https://www.mass.gov/watertown-retirement-board-regulations">https://www.mass.gov/watertown-retirement-board-regulations</a>

## SUPPLEMENTARY INFORMATION (Continued)

## MEMBERSHIP EXHIBIT

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Retirement in Past Years										
Superannuation	12	11	20	16	13	13	16	17	20	12
Ordinary Disability	0	0	0	0	1	0	1	0	0	0
Accidental Disability	1	2	3	4	0	1	2	3	1	0
Total Retirements	13	13	23	20	14	14	19	20	21	12
Total Retirees, Beneficiaries										
and Survivors	402	401	411	419	413	418	415	423	428	418
Total Active Members	546	518	538	574	569	537	532	551	547	561
Pension Payments										
Superannuation	\$6,156,380	\$6,351,866	\$6,554,251	\$6,849,207	\$7,461,767	\$7,413,710	\$7,643,375	\$7,898,947	\$8,505,061	\$8,674,909
Survivor/Beneficiary Payments	684,861	732,786	809,106	808,652	822,063	860,625	809,281	836,186	744,850	722,460
Ordinary Disability	117,404	119,182	144,639	146,038	148,551	201,338	190,473	185,990	167,502	161,605
Accidental Disability	1,773,904	1,696,669	1,708,633	1,936,370	2,124,006	2,083,531	2,117,364	2,246,967	2,202,928	2,296,007
Other	1,065,903	1,137,051	1,274,599	1,162,172	1,292,918	1,330,443	1,546,599	1,619,783	1,503,243	<u>1,441,070</u>
Total Payments for Year	\$ <u>9,798,451</u>	\$ <u>10,037,554</u>	\$ <u>10,491,229</u>	\$ <u>10,901,519</u>	\$ <u>11,849,305</u>	\$ <u>11,889,647</u>	\$ <u>12,307,092</u>	\$ <u>12,787,873</u>	\$ <u>13,123,584</u>	\$ <u>13,296,051</u>

## WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM (A COMPONENT UNIT OF THE CITY OF WATERTOWN, MASS ACHUSETTS)

## FINANCIAL STATEMENTS, REQUIRED SUPPLEMENTARY INFORMATION, AND OTHER INFORMATION

## FOR THE YEAR ENDED DECEMBER 31, 2021



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## **INDEPENDENT AUDITORS' REPORT**

To the Retirement Board Watertown Contributory Retirement System

## **Opinions**

We have audited the financial statements of the Watertown Contributory Retirement System (the System), a component unit of the City of Watertown, Massachusetts, as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of the Watertown Contributory Retirement System, as of December 31, 2021, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinions**

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

#### Responsibilities of Management for the Financial Statements

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

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

Marcum LLP / 10 New England Business Center Drive / Suite 107 / Andover, MA 01810 / Phone 978.749.0005 / marcumllp.com

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#### Auditors' Responsibilities for the Audit of the Financial Statements

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

In performing an audit in accordance with GAAS, we:

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

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

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis, the Schedule of Changes in the Net Pension Liability, and the Schedules of the Net Pension Liability, Contributions, and Investment Returns, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Marcum LLP

Andover, MA April 19, 2024

## MANAGEMENT'S DISCUSSION AND ANALYSIS

## FOR THE YEAR ENDED DECEMBER 31, 2021

As management of the Watertown 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, 2021.

#### **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, 2021. It reflects contributions by members and participating employers, investment activity, along with deductions for retirement benefits, refunds, transfers, and administrative expenses.

#### Notes to Financial Statements

The notes 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 \$285,499.121 at December 31, 2021.
- The System's net position increased by \$35,371,998, which is primarily due to investment gains during the year.
- Employer and employee contributions to the plan were \$12,113,427, which represents a \$6,323,474 decrease over the prior year. This decrease is primarily due to a reduction in the PERAC assessment as the System has begun to exceed 100% funding. The employer share of contributions represents 63.29% of the total contributions made to the System.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

#### FOR THE YEAR ENDED DECEMBER 31, 2021

- Benefits paid to plan participants increased by \$246,369 or 1.59%, totaling \$15,760,939. At December 31, 2021, there were 358 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 10.
- The System's funded ratio (based on the System's GASB 68 report) as of the January 1, 2022 actuarial valuation was 113.7%.

## **Financial Statement Analysis**

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

	2021	2020
Assets		
Cash and receivables	\$ 2,324	\$ 696
Investments	283,242	249,463
Total Assets	285,566	250,159
Liabilities		
Accounts payable	67	32
Total Liabilities	67	32
Net Position		
Restricted for pensions	\$ 285,499	\$ 250,127

### FIDUCIARY NET POSITION

The System's total assets as of December 31, 2021 were \$285,566.349 and were comprised primarily of cash and investments. Total assets increased by \$35,407,188 or 14.15%, from the prior year primarily due to an increase in investment value.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

### FOR THE YEAR ENDED DECEMBER 31, 2021

	2021		2020	
Additions				
Contributions	\$	12,555	\$	18,906
Investment income, net		39,515		27,933
Total Additions		52,070		46,839
Deductions				
Benefit payments		15,761		15,515
Other		937		647
Total Deductions		16,698		16,162
Change in Net Position		35,372		30,677
Net Position Restricted for Pensions				
Beginning of Year		250,127		219,450
End of Year	\$	285,499	\$	250,127

## CHANGES IN FIDUCIARY NET POSITION

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 2021 resulted in total additions of \$52,070.200. Employers' contributions decreased by \$7,079,095, or 48.01% in calendar year 2021. The System had net investment income of \$39,515,192 versus an investment gain of \$27,932,948 in 2020, primarily due to the market performing more favorably in calendar years 2021 and 2020.

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 2021 were S16,698,202, which represents an increase of \$536,096, or 3.32%, over deductions of \$16,162,106 in calendar year 2020. The payment of pension benefits increased by \$246,369 or 1.59% over the previous year.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

## FOR THE YEAR ENDED DECEMBER 31, 2021

## **Requests for Information**

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

Watertown Contributory Retirement System Executive Director 149 Main Street Watertown, Massachusetts 02472

## WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM (A COMPONENT UNIT OF THE CITY OF WATERTOWN, MASSACHUSETTS)

## STATEMENT OF FIDUCIARY NET POSITION

## FOR THE YEAR ENDED DECEMBER 31, 2021

Assets	
Cash and Short-Term Investments	S 1,225,715
Investments in:	
Domestic stock fund	14,141,458
Equity mutual funds	126,115,255
Fixed income mutual funds	40,122,009
External investment pool	94,417,276
Limited partnership	8,446,543
Total Investments	283,242,541
Accounts receivable	1,098.093
Total Assets	<u>\$ 285,566,349</u>
Liabilities	
Accounts payable	67,228
Net Position	
Restricted for pension purposes	285,499,121
Total Liabilities and Net Position	<u>S 285,566,349</u>

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

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## **WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM** (A COMPONENT UNIT OF THE CITY OF WATERTOWN, MASSACHUSETTS)

## STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

## FOR THE YEAR ENDED DECEMBER 31, 2021

Additions	
Contributions Employers	\$ 7,666.647
Plan members	4,446,780
Other systems and Commonwealth of Massachusetts	376,303
Other	65,278
Total Contributions	12,555,008
Investment Income	
Appreciation in fair value of investments	41,300,593
Less: Management fees	(1,785,401)
Net Investment Gain	39,515,192
Total Additions	52,070,200
Deductions	
Benefit payments to plan members and beneficiaries	15,760,939
Refunds to plan members	291,695
Transfers to other systems	355,393
Administrative expenses	290,175
Total Deductions	16,698,202
Net Increase	35,371,998
Net Position Restricted for Pensions	
Beginning of Year	250,127,123
End of Year	\$ 285,499,121

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

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## NOTES TO FINANICAL STATEMENTS

### FOR THE YEAR ENDED DECEMBER 31, 2021

### NOTE 1 -DESCRIPTION OF PLAN

Substantially all employees of the City of Watertown (except teachers and administrators under contract employed by the School Department) and Watertown Housing Authority are members of the Watertown 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 Watertown Contributory Retirement Board does not have the authority to amend benefit provisions.

Membership of the plan consisted of the following at January 1, 2022:

Retirees and beneficiaries receiving benefits	358
Inactive members entitled to a return of their employee contributions	261
Active plan members	525
	1,144
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% when at least 30 years of creditable service has been attained.

## NOTES TO FINANICAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2021

#### NOTE 1 -DESCRIPTION OF PLAN (CONTINUED)

#### PARTICIPANT RETIREMENT BENEFITS

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

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest 5-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100%, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

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 City 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.

### NOTES TO FINANICAL STATEMENTS

### FOR THE YEAR ENDED DECEMBER 31, 2021

#### NOTE 1 -DESCRIPTION OF PLAN (CONTINUED)

#### PARTICIPANT RETIREMENT BENEFITS (CONTINUED)

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

#### PARTICIPANT REFUNDS

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

## NOTES TO FINANICAL STATEMENTS

### FOR THE YEAR ENDED DECEMBER 31, 2021

#### NOTE 1 -DESCRIPTION OF PLAN (CONTINUED)

#### EMPLOYER CONTRIBUTIONS

Employers are required to contribute at actuarially determined rates as accepted by the Public Employee Retirement Administration Commission (PERAC).

#### NOTE 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 City of Watertown, Massachusetts (the City), the System is included as a pension trust fund in the City's basic financial statements. The System is governed by a five-member board. The five members include two appointed by the City, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of Public Employee Retirement Administration Commission.

#### SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2021 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of 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 Member's 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.

### NOTES TO FINANICAL STATEMENTS

#### FOR THE YEAR ENDED DECEMBER 31, 2021

## NOTE 2 - NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### **INVESTMENTS (CONTINUED)**

#### Rate of Return

For the year ended December 31, 2021, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 16.24%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested throughout the year.

#### NOTE 3 - CASH AND SHORT-TERM INVESTMENTS

#### CUSTODIAL CREDIT RISK - DEPOSITS

Custodial credit risk is the risk that in the event of a bank failure, the System's deposits may not be returned. 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, 2021, none of the System's bank balance of \$1,395,321 was exposed to custodial credit risk as uninsured or uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

#### **NOTE 4 - INVESTMENTS**

The following is a summary of the System's investments as of December 31, 2021:

Investment Type	Amount
Domestic stock fund	\$ 14,141,458
Equity mutual funds	126,115,255
Fixed income mutual funds	40,122,009
External investment pool*	94,417,276
Limited partnership	8,446,543
Total Investments	\$ 283,242,541

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

## NOTES TO FINANICAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2021

### NOTE 4 – INVESTMENTS (CONTINUED)

#### CUSTODIAL CREDIT RISK

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

\$14,141,458 of the System's investments were exposed to custodial credit risk as uninsured and uncollateralized. However, \$94,417,276 of the System's investments were held in the State investment pool (PRIT). Investments in external/State investment pools and mutual funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form.

#### 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.

All of the System's investments in fixed income mutual funds of \$40,122,009 had a rating of AA2 at December 31, 2021.

#### 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, 2021, the System did not have any investments subject to concentration of credit risk disclosure as any investment classifications exceeding 5% are exempt.

### NOTES TO FINANICAL STATEMENTS

### FOR THE YEAR ENDED DECEMBER 31, 2021

#### Note 4 – Investments (Continued)

#### INTEREST RATE RISK

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

All of the System's investments in fixed income mutual funds of 40,122,009 matured in less than one year.

#### FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. The System does not have a formal investment policy related to foreign currency risk.

### FAIR VALUE

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 *Fair Value Measurement and Application* (GASB 72).

The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

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

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

## NOTES TO FINANICAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2021

## NOTE 4 – INVESTMENTS (CONTINUED)

## FAIR VALUE (CONTINUED)

The System has the following fair value measurements as of December 31, 2021:

		Fair Value Measurements Using:				
Investment Type	Amount	Quoted prices in active markets for identical assets (Level 1)	Significant observable inputs (Level 2)		Significant unobservable inputs (Level 3)	
Investments by fair value level						
Domestic stock funds Equity mutual funds Fixed income mutual funds	\$ 14,141,458 126,115,255 40,122,009	\$ 14,141,458 126,115,255 40,122,009	\$		\$	 
Investments measured at the net asset value (NAV):						
External investment pools Limited partnerships	94,417,276 8.446,543					
	\$ 283,242,541					

Description		Value	Unfinded	Redemption Frequency (If currently eligible)	Redemption Notice Period
External investment pools:					
Prim Alternative Investments - PE VY2011	\$	1,108,210	\$ 129,714	Illiquid	N/A
Prim Alternative Investments - PE VY2013		1,626,306	77,639	Illiquid	N/A
Prim Alternative Investments - PE VY2014		1,876,545	137.932	Illiquid	N/A
Hedge Funds		19,546,808		Quarterly	30 Days
Domestic Equity Fund		32,314,522		Monthly	5 Days
Core Real Estate Fund		19,379,497		Monthly	5 Days
Prim Alternative Investments - PE VY2015		2,911,729	146,178	Thiquid	N/A
Prim Alternative Investments - PE VY2016		1,459.790	168,848	Illiquid	N/A
Prim Alternative Investments - PE VY2017		3,683,889	781,995	Illiquid	N/A
Prim Alternative Investments - PE VY2012		1,268,895	73,918	Illiquid	N/A
Prim Alternative Investments - PE VY2018		3,180,146	767.392	Illiquid	N/A
Prim Alternative Investments - PE VY2019		3,214,264	1,160,854	Illiquid	N/A
Prim Alternative Investments - PE VY2020		1,715.150	2,037,550	Illiquid	N/A
Prim Alternative Investments - PE VY2021		1,131,525	4,128.824	Illiquid	N/A
Total external investment pools	\$	94,417,276			
Limited partnerships:					
RCP Fund IV LP	\$	6,633	\$ 	Thiquid	N/A
Terracap Partners IV Instit LP		868,372		Illiquid	$N/\Lambda$
TA Realty Core Property FD LP		5,191,844		Quarterly	45 days
American Strat Val Rity FD LP	_	2,379,694		Quarterly	30 days
Fotal limited partnerships	\$	8,446,543			

### NOTES TO FINANICAL STATEMENTS

#### FOR THE YEAR ENDED DECEMBER 31, 2021

### NOTE 5 - ACCOUNTS RECEIVABLE

Annually the Public Employee Retirement Administration (PERAC) determines the amount of employer contributions (pension appropriations) to be made to the System. The accounts receivable balance primarily represents legal amounts due from employers for pension appropriation not received until after December 31, 2021.

#### NOTE 6 – COLLECTIVE PENSION EXPENSE

The calculation of collective pension expense for the year ended December 31, 2021 is presented in the following table:

Service Cost	S	3,815,556
Interest		18,430,781
Employee contributions		(4,446,779)
Projected earnings on plan investments		(7,652,244)
Differences in expected and actual experience		1,280,985
Differences in projected and actual earnings on investments		(19,223,640)
Changes of assumptions		3,854,455
Changes in benefit terms		3,815,556
Administrative expenses	_	330,940
Total pension expense	<u>S</u>	205,610

Each employer's proportionate share of the collective pension expense is equal to the collective pension expense multiplied by the employer's proportionate share percentage for the year ended December 31, 2021, as shown in the schedule of employer allocations.

#### NOTE 7 - ACCOUNTS PAYABLE

This balance represents calendar year 2021 expenditures paid after December 31, 2021.

#### NOTE 8 - 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.

## NOTES TO FINANICAL STATEMENTS

#### FOR THE YEAR ENDED DECEMBER 31, 2021

## NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The net pension liability was based on an actuarial valuation dated January 1, 2022.

#### NET PENSION LIABILITY OF EMPLOYERS

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

Total pension liability	251,018,259
Plan fiduciary net position	(285,499,121)
Employers' net pension asset	(34,480,862)
Plan fiduciary net position as a percentage of total pension liability	113.7%

### ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the January 1, 2022 actuarial valuation is shown below:

Valuation date	1/1/2022
	Entry Age
Actuarial cost method	Normal Cost
	Method
Remaining amortization period	2
Actuarial assumptions:	
Investment rate of return	7.70%
Projected salary increases	
Group 1	3.50%
Group 2	3.50%
Group 4	3.50%
Inflation rate	3.00%
Post-retirement cost-of-living adjustment	3% on \$14,000

Actuarial valuations of the ongoing System 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.

## NOTES TO FINANICAL STATEMENTS

#### FOR THE YEAR ENDED DECEMBER 31, 2021

### NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

#### ACTUARIAL ASSUMPTIONS (CONTINUED)

Mortality rates were represented by the various SOA Pub-2010 Public Retirement Plan Mortality Tables specific to the Group, Pre-retirement versus Post, Disabled and Beneficiaries, with Scale MP-2018 improvements until 2025.

#### TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the System's targeted asset allocation as of December 31, 2021, are summarized in the following table.

Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return
Core fixed income	15.00%	2.40%
Global bonds	2.00%	2.50%
Domestic large cap	24.00%	4.20%
Domestic small cap	7.00%	3.90%
International developed equity	20.00%	6.30%
International emerging markets equity	7.00%	8.20%
Real estate	10.00%	4.80%
Hedge funds	5.00%	5.50%
Private equity	10.00%	7.10%
	100.00%	

## NOTES TO FINANICAL STATEMENTS

### FOR THE YEAR ENDED DECEMBER 31, 2021

### NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

#### DISCOUNT RATE

The discount rate used to measure the total pension liability was 7.70%. 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 (asset) of the participating employers calculated using the discount rate of 7.70%, as well as what the participating employers' net pension liability (asset) would be if it were calculated using a discount rate that is 1 percentage-point lower or 1 percentage-point higher than the current rate:

	Current	
1%	Discount	1%
Decrease	Rate	Increase
(6.70%)	(7.70%)	(8.70%)
\$ (8,289,395)	\$ (34,480,862)	S (56,772,413)

## NOTES TO FINANICAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2021

## NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

## **DEFERRED OUTFLOWS/INFLOWS OF RESOURCES**

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 2,336,418	\$ 1,489,975
Changes of assumptions	2,409,974	
Net difference between projected and actual investment earnings on pension plan investments		25,737,652
Changes in proportion and differences between employer Contributions and proportionate share of contributions	50,336	50,336
	\$ 4,796,728	\$ 27,277,963

## NOTES TO FINANICAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2021

## NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

## **DEFERRED OUTFLOWS/INFLOWS OF RESOURCES (CONTINUED)**

The following summarizes changes in deferred outflows and inflows:

	Measurement Year	Amortization Period	Beginning Balance on Príor Measurement Period Deferrals	Current Measurement Period A däitions	Amortization of Amounts Recognized in Current Period Pension Expense	End of Year Balance
Deferred Outflows of Resources						
Differences between expected and actual			e 141.607	s	0 241 607	<u>_</u>
experience:	2018	4.37	\$ 341.587	s	<b>\$</b> 341,587	\$
	2020	4.42	3,022,098		1,248,801	1,773,297
	2021	4.36	801,731		238,610	563,121
Change in assumptions	2018	4.26	4,182,206		3,319,210	862,996
	2021	4.36	881,531		262,360	619,171
	2022	4.4		1,200,692	272,885	927,807
Changes in proportion and differences						
between employer contributions and			522		522	
proportionate share of contributions:	2018	4.37				
	2019	4.26	12,410		9,849	2,561
	2020	4.42	2,121		877	1,214
	2021	4.36	7,847	.53,084	2,335 12,065	5,512 41,019
	2022	4.4		.13,064	12,003	41,019
Total Deferred Outflows of Resources			9,252,053	1,253,776	5,709,101	4,796,728
Deferred Inflows of Resources						
Differences between expected and actual			149,784		118,876	30,908
experience	2018	4.26	10,001			
	2022	4.4		1,888,205	429,138	1,459,067
Net difference between projected and						
actual investment earnings on pension			2,428,956		2,428,956	
plan investments:	2018	5				
	2019	5	(9,974.698)		(4.987,349)	(4.987,349)
	2020 2021	5	11,953,392 8,594,484		3,984,464	7,968.928
	2022	5	0,_1%4,404	20,387,762	2,148,621 4,077,552	6,445,863 16,310,210
Changes is a second in and differences	2022	5		10,001,701	4,07.02	10,010,010
Changes in proportion and differences between employer contributions and			522		522	
proportionate share of contributions:	2018	4.37				
proportional and of contract distances	2019	4.26	12.410		9,849	2,561
	2020	4.42	2,121		877	1.244
	2021	4.36	7,847		2,335	5,512
	2022	4.4		53,081	12,065	41,019
Total Deferred Inflows of Resources			13,174,818	22,329,051	8,225,906	27,277,963
Total Collective Deferred						
Outflows (Inflows) of Resources			\$ (3,922,765)	\$ (21,075,275)	\$ (2,516,805)	\$ (22,481,235)

## NOTES TO FINANICAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2021

## NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

## DEFERRED OUTFLOWS/INFLOWS OF RESOURCES (CONTINUED)

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

Fiscal	
Year	Total
2023	\$ (2,797,682)
2024	(9,341,424)
2025	(6,202,074)
2026	(4,140,055)
	\$ (22,481,235)
# **REQUIRED SUPPLEMENTARY INFORMATION** SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

(Unaudited) (Amounts expressed in thousands)

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Service cost	\$ 3,815,556	\$ 3,729,807	\$ 3,628,350	\$ 3,305,996	\$ 3,338,860	\$ 3,895,597	\$ 3,895,599	\$ 3,745,767
Interest on unfinded liability - time value of money	18,430,781	17 <b>,941,564</b>	17,119,562	15,945,986	15,330,990	14,442,636	14,615,997	14,213,781
Changes in plan provisions	3,815,556					778,002		-
Experience (gain)/loss	(1,888,205)	1,040,341	5,519,700	(506,412)	4,034,420	11,104,9 <b>8</b> 2		-
Changes of assumptions	1,200,692	1,143,891		14,139,836		(1,926,591)		-
Benefit payments, including refunds of member contributions	(16,408,027)	(15,889,574)	(15,773,758)	(15,378,326)	(14,413,329)	(14,006,492)	(13,810,095)	(13,081,678)
Net Change in Total Pension Liability	8,966,353	7,966,029	10,493,854	17,507,080	8,290,941	14,288,134	4,701,501	<b>4,877,87</b> 0
Total Pension Liability - Beginning	242,051,906	234,085,877	223,592,023	206,084,943	197,794,002	183,505,868	178,804,367	173,926,497
Total Pension Liability - Ending (a)	251,018,259	242,051,906	234,085,877	223,592,023	206,084,943	197,794,002	183,505,868	178,804,367
Plan Fiduciary Net Position								
Contributions - employer	7,666,647	14,745,742	13,300,956	18,698,742	1 <b>7,173,496</b>	15,598,496	14,023,496	12,465,133
Contributions - member	4,446,779	3,691,160	3,986,192	4,369,364	3,400,281	3,465,100	3,193,042	3,186,332
Net investment income	39,611,402	27,964,023	34,298,396	(9,967,302)	24,612,432	8,827,366	1,842,184	7,674,151
Benefit payments, including refunds of member contributions	(16,408,027)	(15,889,574)	(15,773,758)	(15,378,326)	(14,413,329)	(14,006,492)	(13,288,770)	(12,587,850)
Administrative expense	(330,941)	(303,609)	(320,979)	(339,624)	(309,692)	(279,447)	(300,358)	(279,447)
Other	386,138	469,548	462,057	456,764	<b>48</b> 1, <b>871</b>	480,658	537,085	487,925
Net Change in Plan Fiduciary Net Position	35,371,998	30,677,290	35,952,864	(2,160,382)	30,945,059	14,085,681	6,006,679	10,946,244
Plan Fiduciary Net Position - Beginning	250,127,123	219,449,833	183,496,969	185,657,351	154,712,292	140,626,611	134,619,932	123,673,688
Plan Fiduciary Net Position - Ending (b)	285,499,121	250,127,123	219,449,833	183,496,969	185,657,351	154,712,292	140,626,611	134,619,932
Net Pension Lizbility (Asset) - Ending (a-b)	<u>\$ (34,480,862</u> )	<u>\$ (8,075,217</u> )	\$ 14,636,044	\$ 40,095,054	\$ 20,427,592	\$ 43,081,710	\$ 42,879,257	\$ 44,184,435

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

See independent auditors' report.

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULES OF NET PENSION LIABILITY, CONTIRUBTIONS, AND INVESTMENT RETURNS (Unaudited) (Amounts expressed in thousands)

Schedule of Net Pension Liability	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	\$ 251,018,259	\$ 242,051,906	\$ 234,085,877	\$ 223,592,023	\$ 206,084,943	\$ 197,794,002	\$ 183,505,868	\$ 178,804,367
Plan fiduciary net position	(285,499,121)	(250,127,123)	(219,449,833)	(183,496,969)	(185,657,351)	(154,712,292)	(140,626,611)	(134,619,932)
Net pension liability (asset)	\$ (34,480,862)	\$ (8,075,217)	<b>\$</b> 14,636,044	\$ 40,095,054	\$ 20,427,592	\$ 43,081,710	\$ 42,879,257	\$ 44,184,435
Plan fiduciary net position as a percentage of the total pension liability	113.7%	103.3%	93.7%	<b>82</b> .1%	90.1%	78.2%	76.6%	75.3%
Covered payroll	\$ 38,164,294	\$ 36,198,756	\$ 35,322,996	\$ 33,927,238	\$ 33,501,993	\$ 35,192,067	\$ 31,539,610	\$ 30,326,548
Participating employer net pension liability as a percentage of covered payroll	-90.3%	-22.3%	<b>41.4%</b>	118.2%	61.0%	122,4%	136.0%	145.7%
Schedule of Contributions	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution Contributions in relation to the actuarially	\$ 7,666,647	\$ 14,745,742	\$ 13,300,956	\$ 18,698,742	<b>\$</b> 17,173,496	\$  15,598,496	\$ 14,023,496	\$ 12,448,496
determined contribution	(7,666,647)	(14,745,742)	(13,300,956)	(18,698,742)	(17,173,496)	(15,598,496)	(14,023,496)	(12,448,496)
Contribution deficiency (excess)	<u>\$</u>	<u>s</u>	<u>s</u>	<u>s</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>s</u>
Covered payroll	\$ 38,164,294	<b>\$ 36</b> ,1 <b>98</b> ,756	\$ 35,322,996	\$ 33,927,238	\$ 33,501,993	\$ 35,192,067	\$ 31,539,610	\$ 30,326,548
Contributions as a percentage of covered payroll	20.1%	40.7%	37.7%	55.1%	51.3%	44.3%	44.5%	41.0%
Schedule of Investment Returns								
Year Ended December 31	2021	2020	<b>2</b> 01 <b>9</b>	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	16.24%	13.42%	19.85%	-4.58%	1 <b>4.44%</b>	6.68%	0.78%	6.42%

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

See independent auditors' report.



# **INDEPENDENT AUDITORS' REPORT**

To the Retirement Board Watertown Contributory Retirement System

# **Opinions**

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

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the Watertown Contributory Retirement System as of and for the year ended December 31, 2021, in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinions**

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

## **Responsibilities of Management for the Schedules**

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

#### Auditors' Responsibilities for the Audit of the Schedules

Our objectives are to obtain reasonable assurance about whether the schedules as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that

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

In performing an audit in accordance with GAAS, we:

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

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

## **Other Matters**

We have audited, in accordance with GAAS, the financial statements of the Watertown Contributory Retirement System as of and for the year ended December 31, 2021, and our report dated April 19, 2024 expressed an unmodified opinion on those finance statements.

#### **Restriction on Use**

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

Marcune LLP

Andover, MA April 19, 2024

Employer	FY 2022 Actual Employer Contributions	Allocation Percentage
City of Watertown Housing Authority	\$ 7,459,084 207,563	97.2926% 2.7074%
Total	7,666,647	100.00%

# SCHEDULE OF EMPLOYER ALLOCATIONS

See actuarial assumptions in the City of Watertown, Massachusetts Contributory Retirement System audited financial statements.

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# SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

# AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2021

		~		Housing		
N		City		Authority		Total
Net Pension Liability	3	(33,547,327)	\$	(933,535)	5	(34,480,862)
Deferred Outflows of Resources					_	
Diffèrences between expected and actual experience	\$	2,273,162	\$	63,256	Ş	2,336,418
Changes of assumptions		2,344,727		65,247		2,409,974
Changes in proportion and differences between employer contributions and proportionate share of contributions	_	50,336			_	50,336
Total Deferred Outflows of Resources	\$	4,668,225	\$	128,503	S	4,796,728
Deferred Inflows of Resources						
Differences between expected and actual experience	\$	1,449,635	\$	40,340	S	1,489,975
Net difference between projected and actual investment earnings on pension plan investments		25,040.830		696,822		25,737,652
Changes in proportion and differences between employer contributions and proportionate share of contributions				50,336		50,336
Total Deferred Inflows of Resources	\$	26,490,465	\$	787,498	S	27,277,963
Pension Expense						
Proportionate share of pension expense	\$	200,043	\$	5,567	S	205,610
Net amortization of deferred amounts from changes in proportion and differences between employer						
contributions and proportionate share of contributions	_	24,528	_	(24,528)	_	
Total Pension Expense	\$	224,571	\$	(18,961)	S	205,610
Contributions						
Actuarially determined contribution	\$	7,459,084	\$	207,563	S	7,666,647
Contributions made		(7,459,084)		(207,563)	_	(7,666,647)
Contribution deficiency/(excess)	\$		\$		S	
Contributions as a percentage of covered payroll		20%		20%		20%
Deferred Outflows/(Inflows) Recognized in Future Pension Expense						
June 30, 2023 June 30, 2024 June 30, 2025 June 30, 2026 Total Deferred Outflows/(Inflows) Recognized in	\$	(2,703,938) (9,073,582) (6,021,211) (4,023,509)	\$	(93,744) (267,842) (180,863) (116,546)	s	(2,797,682) (9,341,424) (6,202,074) (4,140,055)
Future Pension Expense	\$	(21,822,240)	\$	(658,995)	S	(22,481,235)
Discount Rate Sensitivity						
1% decrease (6.70%)	\$	(8,064.968)	\$	(224,427)	S	(8,289,395)
Current discount rate (7.70%)	\$	(33,547,327)	\$	(933,535)	S	(34,480,862)
1% increase (8.70%)	\$	(55,235,357)	\$	(1,537,056)	S	(56,772,413)
Covered Payroll	\$	37,131,034	\$	1,033,260	S	38,164,294

See actuarial assumptions in the City of Watertown, Massachusetts Contributory Retirement System audited financial statements.

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# FINANCIAL STATEMENTS, REQUIRED SUPPLEMENTARY INFORMATION, AND OTHER INFORMATION

# FOR THE YEAR ENDED DECEMBER 31, 2020



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# **INDEPENDENT AUDITORS' REPORT**

To the Retirement Board Watertown Contributory Retirement System City of Watertown, Massachusetts

We have audited the accompanying financial statements of the Watertown Contributory Retirement System (the System), a component unit of the City of Watertown, Massachusetts, as of and for the year ended December 31, 2020, and the related notes to the financial statements, which collectively comprise the basic financial statements as listed in the table of contents.

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

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 System'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 System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

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# Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Watertown Contributory Retirement System as of December 31, 2020, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

# Other Matters

## Required Supplementary Information

Accounting principles generally accepted in the United 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. 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.

Marcum LLP

Andover, MA April 19, 2024

# MANAGEMENT'S DISCUSSION AND ANALYSIS

### **DECEMBER 31, 2020**

As management of the Watertown 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, 2020.

#### **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, 2020. It reflects contributions by members and participating employers, investment activity, along with deductions for retirement benefits, refunds, transfers, and administrative expenses.

#### Notes to Financial Statements

The notes 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 \$250,127,123 at December 31, 2020.
- The System's net position increased by \$30,677,291, which is primarily due to investment gains during the year.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

### **DECEMBER 31, 2020**

- Employer and employee contributions to the plan were \$18,436,901, which represents a \$1,149,753 increase over the prior year. The employer share of contributions represents 79.98% of the total contributions made to the System.
- Benefits paid to plan participants increased by \$612,178 or 4.118%, totaling \$15,514,570. At December 31, 2020, there were 431 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 9.
- The System's funded ratio (based on the System's GASB 68 valuation) as of the January 1, 2021 actuarial valuation was 103.3%.

## **Financial Statement Analysis**

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

## **Fiduciary Net Position**

	2020	2019
Assets Cash and receivables Investments	\$	
Total Assets	250,159	219,485
Liabilities Accounts payable Other	32	
Total Liabilities	32	35
Net Position Restricted for pensions	\$ 250,127	\$ 219,450

The System's total assets as of December 31, 2020 were \$250,159,161 and were comprised primarily of cash and investments. Total assets increased by \$30,674,339 or 13.98%, from the prior year primarily due to an increase in investment value.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

#### **DECEMBER 31, 2020**

	2020	2019
Additions		
Contributions	\$ 18,906	\$ 17,749
Investment income, net	27,933	34,267
Total Additions	46,839	52,016
Deductions		
Benefit payments	15,515	14,902
Other	647	1,161
Total Deductions	16,162	16,063
Change in Net Position	30,677	35,953
Net Position Restricted for Pensions		
Beginning of Year	219,450	183,497
End of Year	\$ 250,127	\$ 219,450

## **Changes in Fiduciary Net Position**

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 2020 resulted in total additions of \$46,839,397. Employers' contributions increased by \$1,444,786, or 10.86% in calendar year 2020. The System had net investment income of \$27,932,948 versus an investment gain of \$34,266,958 in 2019, primarily due to the market performing more favorably in calendar years 2020 and 2019.

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 2020 were \$16,162,106, which represents an increase of \$98,806, or 0.62%, over deductions of \$16,063,300 in calendar year 2019. The payment of pension benefits increased by \$612,178 or 4.11% over the previous year.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

# **DECEMBER 31, 2020**

## **Requests for Information**

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

Watertown Contributory Retirement System Executive Director 149 Main Street Watertown, Massachusetts 02472

# STATEMENT OF FIDUCIARY NET POSITION

# **DECEMBER 31, 2020**

Assets	
Cash and short-term investments	\$ 455,512
Investments in:	
Domestic stock fund	13,572,146
Equity mutual funds	101,226,991
Fixed income mutual funds	37,387,296
External investment pool	66,368,486
Limited partnership	30,907,967
Total Investments	249,462,886
Accounts receivable	240,763
Total Assets	\$ 250,159,161
Liabilities	
Accounts payable	\$ 32,038
Net Position	
Restricted for pension purposes	250,127,123
· · ·	
Total Liabilities and Net Position	\$ 250,159,161

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

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# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

# FOR THE YEAR ENDED DECEMBER 31, 2020

Additions	
Contributions:	
Employers	S 14,745,742
Plan members	3,691,159
Other systems and Commonwealth of Massachusetts	445,808
Other	23,740
Total Contributions	18,906,449
Investment Income	
Appreciation in fair value of investments	29,411,486
Less: Management fees	(1,478,538)
Net Investment Gain	27,932,948
Total Additions	46,839,397
Deductions	
Benefit payments to plan members and beneficiaries	15,514,570
Refunds to plan members	192,678
Transfers to other systems	182,327
Administrative expenses	272,531
Total Deductions	16,162,106
Net Increase	30,677,291
Net Position Restricted for Pensions	
Beginning of Year	219,449,832
End of Year	S 250,127,123

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

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## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 1 - DESCRIPTION OF PLAN

Substantially all employees of the City of Watertown (except teachers and administrators under contract employed by the School Department) and Watertown Housing Authority are members of the Watertown 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 Watertown Contributory Retirement Board does not have the authority to amend benefit provisions.

Membership of the plan consisted of the following at January 1, 2021:

Retirees and beneficiaries receiving benefits	431
Inactive members entitled to a return of their	
employee contributions	196
Active plan members	522
Total	1,149
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% when at least 30 years of creditable service has been attained.

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 1 - DESCRIPTION OF PLAN (CONTINUED)

#### PARTICIPANT RETIREMENT BENEFITS

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

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest 5-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100%, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

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 City 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.

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 1 - DESCRIPTION OF PLAN (CONTINUED)

#### PARTICIPANT RETIREMENT BENEFITS (CONTINUED)

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

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 1 - DESCRIPTION OF PLAN (CONTINUED)

#### PARTICIPANT REFUNDS

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

# EMPLOYER CONTRIBUTIONS

Employers are required to contribute at actuarially determined rates as accepted by the Public Employee Retirement Administration Commission (PERAC).

#### NOTE 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 City of Watertown, Massachusetts (the City), the System is included as a pension trust fund in the City's basic financial statements. The System is governed by a five-member board. The five members include two appointed by the City, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of Public Employee Retirement Administration Commission.

## SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the System as reflected in the accompanying financial statements for the year ended December 31, 2020 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of the System are summarized below:

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

# NOTE 2 - NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

#### 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 Member's 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, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 13.42%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested throughout the year.

## NOTE 3 - CASH AND SHORT-TERM INVESTMENTS

#### Custodial Credit Risk - Deposits

Custodial credit risk is the risk that in the event of a bank failure, the System's deposits may not be returned. 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, 2020, none of the System's bank balance of \$577,001 was exposed to custodial credit risk as uninsured or uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

# NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 4 - INVESTMENTS

The following is a summary of the System's investments as of December 31, 2020:

Investment Type	Amount		
Domestic stock fund	\$ 13,572,146		
Equity mutual funds	101,226,991		
Fixed income mutual funds	37,387,296		
External investment pool*	66,368,486		
Limited partnership	30,907,967		
Total Investments	\$ 249,462,886		

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

#### CUSTODIAL CREDIT RISK

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

\$13,572,146 of the System's investments were exposed to custodial credit risk as uninsured and uncollateralized. However, \$66,368,486 of the System's investments were held in the State investment pool (PRIT). Investments in external/State investment pools and mutual funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form.

#### 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.

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 4 – INVESTMENTS (CONTINUED)

#### CREDIT RISK (CONTINUED)

All of the System's investments in fixed income mutual funds of \$37,387,296 had a rating of AA2 at December 31, 2020.

## 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, 2020, the System did not have any investments subject to concentration of credit risk disclosure as any investment classifications exceeding 5% are exempt.

#### 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.

All of the System's investments in fixed income mutual funds of \$37,387,296 matured in less than one year.

#### FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. The System does not have a formal investment policy related to foreign currency risk.

## FAIR VALUE

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 Fair Value Measurement and Application (GASB 72).

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 4 - INVESTMENTS (CONTINUED)

#### FAIR VALUE (CONTINUED)

The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

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

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

The System has the following fair value measurements as of December 31, 2020:

		Fair Value Measurements Using			
		Quoted prices in active markets for identical	Significant observable inputs	Significant unobservable inputs	
Investment Type		(Level 1)	(Level 2)	(Level 3)	
Investments by fair value level					
Domestic stock funds	\$ 13,572,146	\$ 13,572,146	\$	\$	
Equity mutual finds	101,226,991	101,226,991			
Fixed income mutual funds	37,387,296	37,387,296			
Investments measured at the net asset value (NAV):					
External investment pools	66,368,486				
Limited partnerships	30,907,967				
Total	\$ 249,462,886				

# NOTES TO FINANCIAL STATEMENTS

# FOR THE YEAR ENDED DECEMBER 31, 2020

# NOTE 4 – INVESTMENTS (CONTINUED)

# FAIR VALUE (CONTINUED)

					Redemption		
			Unfunded		Frequency (If	Redemption	
Description		Value	C	ommitments	currently eligible)	Notice Period	
External investment pools							
Prim Alternative Investments - PE VY2011	\$	978,697	\$	129,818	Illiquid	N/A	
Prim Alternative Investments - PE V 12011	φ	1,192,079	φ	95,075	Illiquid	N/A	
Prim Alternative Investments - PE V 12013		1,192,079		95,075 176,228	Illiquid	N/A N/A	
Hedge Funds		17,858,835		170,220	Quarterly	30 Days	
Domestic Equity Fund		20,744,484			Monthly	50 Days 5 Days	
Core Real Estate Fund		20,744,464			Monthly	5 Days	
Prim Alternative Investments - PE VY2015		2,370,107		192,346	,	N/A	
Prim Alternative Investments - PE V 12015 Prim Alternative Investments - PE VY2016		1,047,277		271,413	Illiquid Illiquid	N/A	
Prim Alternative Investments - PE V 12010		2,164,846		1,452,805	Illiquid	N/A	
Prim Alternative Investments - PE V 12017					•	N/A	
		1,157,006		97,772	Illiquid Illiquid	N/A N/A	
Prim Alternative Investments - PE VY2018		1,473,209		1,445,205	Illiquid		
Prim Alternative Investments - PE VY2019		1,176,469 171,688		2,045,704 3,407,282	Illiquid Illiquid	N/A N/A	
Prim Alternative Investments - PE VY2020	_	171,088		3,407,282	Imdino	IN/A	
Total External Investment Pools	\$	66,368,486					
Limited partnerships							
Arsenal Real Estate Fund IA	\$	776	\$		Illiquid	N/A	
Auda Partners		16,893			Illiquid	N/A	
Earnest Partners International		23,536,461			Monthly	5 days	
RCP Fund IV LP		29,421			Illiquid	N/A	
Terracap Partners IV Instl LP		1,039,787			Illiquid	N/A	
TA Realty Core Property FD LP		4,195,098			Quarterly	45 days	
American Strat Val RIty FD LP	_	2,089,531			Quarterly	30 days	
Total Limited Partners hips	\$	30,907,967					

## NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### **NOTE 5 - ACCOUNTS RECEIVABLE**

Annually the Public Employee Retirement Administration (PERAC) determines the amount of employer contributions (pension appropriations) to be made to the System. The accounts receivable balance primarily represents legal amounts due from employers for pension appropriation not received until after December 31, 2020.

## NOTE 6 - COLLECTIVE PENSION EXPENSE

The calculation of collective pension expense for the year ended December 31, 2020 is presented in the following table:

Service Cost	S 3,729,807
Interest	17,941,564
Employee contributions	(3,691,160)
Projected earnings on plan investments	(17,220,918)
Differences in expected and actual experience	3,612,601
Differences in projected and actual earnings on investments	(3,048,882)
Changes of assumptions	3,352,415
Administrative expenses	303,610
Total pension expense	S 4,979,037

Each employer's proportionate share of the collective pension expense is equal to the collective pension expense multiplied by the employer's proportionate share percentage for the year ended December 31, 2020, as shown in the schedule of employer allocations.

## NOTE 7 - ACCOUNTS PAYABLE

This balance represents calendar year 2020 expenditures paid after December 31, 2020.

#### NOTE 8 - 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.

# NOTES TO FINANCIAL STATEMENTS

# FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS

The net pension liability was based on an actuarial valuation dated January 1, 2021.

## NET PENSION LIABILITY OF EMPLOYERS

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

Total pension liability Plan fiduciary net position	\$ 242,051,906 (250,127,123)			
Employers' net pension asset	\$ (8,075,217)			
Plan fiduciary net position as a percentage of total pension liability	103.3%			

### **ACTUARIAL ASSUMPTIONS**

A summary of the actuarial assumptions as of the January 1, 2021 actuarial valuation is shown below:

Valuation date	1/1/2021
	Entry Age
	Normal Cost
Actuarial cost method	Method
Remaining amortization period	2
Actuarial assumptions:	
Investment rate of return	7.75%
Projected salary increases	
Group 1	3.50%
Group 2	3.50%
Group 4	3.50%
Inflation rate	2.40%
Post-retirement cost-of-living adjustment	3% on \$13,000

# NOTES TO FINANCIAL STATEMENTS

## FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

## **ACTUARIAL ASSUMPTIONS (CONTINUED)**

Actuarial valuations of the ongoing System 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 represented by the various SOA Pub-2010 Public Retirement Plan Mortality Tables specific to the Group, Pre-retirement versus Post, Disabled and Beneficiaries, with Scale MP-2018 improvements until 2025.

#### TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the System's targeted asset allocation as of December 31, 2020, are summarized in the following table.

		Long-Term
	Target Asset	Expected Real
Asset Class	Allocation	Rate of Return
Core fixed income	15.00%	0.30%
Global bonds	2.00%	0.00%
Domestic large cap	24.00%	4.50%
Domestic small cap	7.00%	4.90%
International developed equity	20.00%	6.10%
International emerging markets equity	7.00%	7.60%
Real estate	10.00%	4.40%
Hedge funds	5.00%	4.50%
Private equity	10.00%	7.60%
Total	100.00%	

# NOTES TO FINANCIAL STATEMENTS

# FOR THE YEAR ENDED DECEMBER 31, 2020

#### NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

#### DISCOUNT RATE

The discount rate used to measure the total pension liability was 7.75%. 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 (asset) of the participating employers calculated using the discount rate of 7.75%, as well as what the participating employers' net pension liability (asset) would be if it were calculated using a discount rate that is 1 percentage-point lower or 1 percentage-point higher than the current rate:

	Current	
1%	Discount	1%
Decrease	Rate	Increase
(6.75%)	(7.75%)	(8.75%)
\$ 16,944,657	S (8,075,217)	\$ (29,373,892)

# NOTES TO FINANCIAL STATEMENTS

# FOR THE YEAR ENDED DECEMBER 31, 2020

## NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

# DEFERRED OUTFLOWS/(INFLOWS) OF RESOURCES

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

	Deferred Outflows of Resources		 ferred Inflows of Resources
Differences between expected and actual experience	\$	4,165,416	\$ 149,784
Changes of assumptions		5,063,737	
Net difference between projected and actual investment earnings on pension plan investments			13,002,134
Changes in proportion and differences between employer contributions and proportionate share of		22,900	 22,900
Total	\$	9,252,053	\$ 13,174,818

# NOTES TO FINANCIAL STATEMENTS

# FOR THE YEAR ENDED DECEMBER 31, 2020

# NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

# DEFERRED OUTFLOWS/(INFLOWS) OF RESOURCES (CONTINUED)

## The following summarizes changes in deferred outflows and inflows:

			Beginning	0	Amortization of Amounts	
	Measurement Year	Amortization Period	Balance on Prior Measurement Period Deferrals	Current Measurement Period Additions	Recognized in Current Period Pension Expense	End of Year Balance
Deferred Outflows of Resources						
Differences between expected and	2017	4.54	\$ 1,320,858	\$	\$ 1,320,858	s
	2018	4.37	1,264,795		923,208	341,587
	2020	4.42	4,270,899		1,248,801	3,022,098
	2021	4.36		1,040.341	238.610	801.731
Change in assumptions	2018	4.26	7,501,416		3,319,210	4,182,206
	2021	4.36		1,143,891	262,360	881,531
Changes in proportion and differences	2018	4.37	1,927		1,405	522
	2019	4.26	22.259		9,849	12,410
	2020	4.42	2,998		877	2,121
	2021	4.36		10.182	2.335	7,847
Total Deferred Outflows of Resources			14,385,152	2,194,414	7,327,513	9,252,053
Deferred Inflows of Resources						
Differences between expected and	2018	4.26	268,660		118,876	149,784
Change in assumptions	2017	4.54	229,155		229,155	
Net difference between projected and	2017	5	(525,809)		(525,809)	
	2018	5	4,857,911		2,428,955	2,428,956
	2019	5	(14,962,047)		(4,987,349)	(9,974.698)
	2020	5	15.937,856		3,984,464	11.953,392
	2021	5		10,743,105	2,148,621	8,594,484
Changes in proportion and differences	2018	4.37	1,927		1,405	522
	2019	4.26	22,259		9,849	12,410
	2020	4.42	2,998		877	2,121
	2021	4.36		10,182	2,335	7.847
Total Deferred Inflows of Resources			5,832,910	10,753,287	3,411,379	13,174,818
Total Collective Deferred Outflows (Inflows) of Resources			<u>\$ 8,552,242</u>	<u>\$ (8,558,873)</u>	<b>\$</b> 3,916,134	<u>\$ (3,922,765)</u>

# NOTES TO FINANCIAL STATEMENTS

# FOR THE YEAR ENDED DECEMBER 31, 2020

## NOTE 9 - NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS (CONTINUED)

# DEFERRED OUTFLOWS/(INFLOWS) OF RESOURCES (CONTINUED)

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

Fiscal Year	Total	
2022	\$ 1,717,001	
2023	1,436,123	
2024	(5,107,619)	
2025	(1,968,270)	
	\$ (3,922,765)	

# SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY REQUIRED SUPPLEMENTARY INFORMATION

# (UNAUDITED)

## FOR THE YEAR ENDED DECEMBER 31, 2020

	2020	2019	2018	2017	2016	2015	2014
Tetal Pension Liability							
Service cost	\$ 3,729,807	\$ 3,628,350	\$ 3,305,996	\$ 3,338,860	\$ 3,895,597	\$ 3,895,599	\$ 3,745,767
Interest on unfunded liability - time value of money	17 <b>,941,564</b>	17,119,562	15,945,986	15,330,990	14,442,636	14,615,997	14,213,781
Changes in plan provisions					778,002		
Experience (gain)/loss	1,040,341	5,519,700	(506,412)	4,034,420	11,104,982		
Changes of assumptions	1,143,891		14,139,836		(1,926,591)		
Benefit payments, including refinds of							
member contributions	(15,889,574)	(15,773,758)	(15,378,326)	<u>(14,413,329</u> )	(14,006,492)	(13,810,095)	(13,081,678)
Net Change in Total Pension Liability	7,966,029	10,493,854	17,507,080	8,290,941	14,288,134	4,701,501	4,877,870
Tetal Pension Liability - Beginning	234,085,877	223,592,023	206,084,943	197,794,002	183,505,868	178,804,367	173,926,497
Tetal Pension Liability - Ending (3)	242,051,906	234,085,877	223,592,023	206,084,943	197,794,002	183,505,868	178,804,367
Plan Fiduciary Net Position							
Contributions - employer	14,745,742	13,300,956	18,698,742	17,173,496	15,598,496	14,023,496	12,465,133
Contributions - member	3,691,160	3,986,192	4,369,364	3,400,281	3,465,100	3,193,042	3,186,332
Net investment income	27,964,023	34,298,396	(9,967,302)	24,612,432	8,827,366	1,842,184	7,674,151
Benefit payments, including refinds of							
member contributions	(15,889,574)	(15,773,758)	(15,378,326)	(14,413,329)	(14,006,492)	(13,288,770)	(12,587,850)
Administrative expense	(303,609)	(320,979)	(339,624)	(309,692)	(279,447)	(300,358)	(279,447)
Other	469,548	462,057	456,764	481,871	480,658	537,085	487,925
Net Change in Plan Fiduciary Net Position	30,677,290	35,952,864	(2,160,382)	30,945,059	14,085,681	6,006,679	10,946,244
Plan Fiduciary Net Position - Beginning	219,449,833	183,496,969	185,657,351	154,712,292	140,626,611	134,619,932	123,673,688
Plan Fiduciary Net Position - Ending (b)	250,127,123	219,449,833	183,496,969	185,657,351	154,712,292	140,626,611	134,619,932
Net Pension Liability (Asset) - Ending (a-b)	<u>\$ (8,075,217)</u>	\$ 14,636,044	\$ 40,095,054	\$ 20,427,592	\$ 43,081,710	\$ 42,879,257	\$ 44,184,435

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

See independent auditors' report.

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# SCHEDULES OF NET PENSION LIABILITY, CONTRIBUTIONS, AND INVESTMENT RETURNS REQUIRED SUPPLEMENTARY INFORMATION

# (UNAUDITED)

## FOR THE YEAR ENDED DECEMBER 31, 2020

	2020	2019	2018	2017	2016	2015	2014
Schedule of Net Pension Liability Total pension liability Plan fiduciary net position	\$ 242,051,906 (250,127,123)	\$ 234,085,877 (219,449,833)	\$ 223,592,023 (183,496,969)	\$ 206,084,943 (185,657,351)	\$ 197,794,002 (154,712,292)	\$ 183,505,868 (140,626,611)	\$ 178,804,367 (134,619,930)
Net Pension Liability (Asset)	<b>\$ (8,075,217)</b>	\$ 14,636,044	\$ 40,095,054	\$ 20,427,592	\$ 43,081,710	\$ 42,879,257	<b>\$ 44,184,437</b>
Plan fiduciary net position as a percentage of the total pension liability	103.3%	93.7%	82.1%	90.1%	78.2%	76.6%	75.3%
Covered payroll	\$ 36,198,756	\$ 35,322,996	\$ 33,927,238	\$ 33,501,993	\$ 35,192,067	\$ 31,539,610	\$ 30,326,548
Participating employer net pension liability as a percentage of covered payroll	-22.3%	41.4%	118.2%	61.0%	122.4%	136.0%	145. <b>7%</b>
Schedule of Contributions Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$ 14,745,742 (14,745,742)	\$ 13,300,956 (13,300,956)	\$ 18,698,742 (18,698,742)	\$ 17,173,496 (17,173,496)	\$ 15,598,496 (15,598,496)	\$ 14,023,496 (14,023,496)	\$ 12,448,496 (12,448,496)
Contribution Deficiency (Excess)	<u>s</u>	<u>s</u>	<u>\$</u>	<u>\$</u>	<u>s</u>	<u>s</u>	<u>\$</u>
Covered payroll	\$ 36,198,756	\$ 35,322,996	\$ 33,927,238	\$ 33,501,993	\$ 35,192,067	\$ 31,539,610	\$ 30,326,548
Contributions as a percentage of covered payroll	<b>4</b> 0. <b>7%</b>	37.7%	55.1%	51.3%	44.3%	<b>4</b> 4.5%	41.0%
Schedule of Investment Returns Year Ended December 31 Annual money weighted rate of return, net of investment expense	13.42%	19.85%	-4.58%	14. <b>44%</b>	6.58%	0.78%	6.42%

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

See independent auditors' report.

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# **INDEPENDENT AUDITORS' REPORT**

To the Retirement Board Watertown Contributory Retirement System City of Watertown, Massachusetts

## **Report on Schedules**

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

## Management's Responsibility for the Schedules

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

## Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified totals included in the schedule of pension amounts 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 auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the 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

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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 Watertown Contributory Retirement System as of and for the year ended December 31, 2020, in accordance with accounting principles generally accepted in the United States of America.

# **Other Matters**

We have audited, in accordance with GAAS, the financial statements of the Watertown Contributory Retirement System as of and for the year ended December 31, 2020, and our report dated April 19, 2024 expressed an unmodified opinion on those finance statements.

# Restriction on Use

Our report is intended solely for the information and use of Watertown Contributory Retirement System management, the Retirement Board, System employers and their auditors as of and for the year ended December 31, 2020 and is not intended to be and should not be used by anyone other than these specified parties.

Marcune LLP

Andover, MA April 19, 2024
# WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM (A COMPONENT UNIT OF THE CITY OF WATERTOWN, MASSACHUSETTS)

# SCHEDULES OF EMPLOYER ALLOCATIONS

# FOR THE YEAR ENDED DECEMBER 31, 2020

Employer	Actual Employer Contributions	Allocation Percentage		
City of Watertown Housing Authority	\$ 14,538,179 207,563	98.59% 1.41%		
Total	\$ 14,745,742	100.00%		

See actuarial assumptions in the City of Watertown, Massachusetts Contributory Retirement System audited financial statements.

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# WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM (A COMPONENT UNIT OF THE CITY OF WATERTOWN, MASSACHUSETTS)

# SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

# FOR THE YEAR ENDED DECEMBER 31, 2020

	_	City		Housing Authority		Total
Net Pension Liability	\$	(7,961,550)	\$	(113,667)	\$	(8,075,217)
Deferred Outflows of Resources						
Differences between expected and actual experience	\$	4,106,784	\$	58,632	\$	4,165,416
Changes of assumptions		4,992,460		71,277		5,063,737
Changes in proportion and differences between employer				,		,
contributions and proportionate share of contributions	_	21,895		1,005	_	22,900
Total Deferred Outflows of Resources	\$	9,121,139	\$	130,914	\$	9,252,053
Deferred Inflows of Resources						
Differences between expected and actual experience	\$	147.676	\$	2,108	\$	149,784
Net difference between projected and actual						
investment earnings on pension plan investments		12,819,117		183,017		13,002,134
Changes in proportion and differences between employer						
contributions and proportionate share of contributions	_	1,005	_	21,895	_	22.900
Total Deferred Inflows of Resources	\$	12,967,798	\$	207,020	\$	13,174,818
Pension Expense						
Proportionate share of pension expense	\$	4,908,952	\$	70,085	\$	4,979,037
Net amortization of deferred amounts from changes in				,		
proportion and differences between employer						
contributions and proportionate share of contributions	_	12.126		(12,126)	_	
Total Peusion Expense	\$	4,921,078	\$	57,959	\$	4,979,037
Contributions						
Actuarially determined contribution	\$	14,538,179	\$	207,563	\$	14,745,742
Contributions made	_	(14,538,179)		(207,563)		(14,745,742
Contribution deficiency/(excess)	\$		\$		\$	
Contributions as a percentage of covered payroll		41%		11%		41%
Deferred Outflows/(Inflows) Recognized in Future Pension Expense						
June 30, 2022	\$	1,692,832	\$	24,169	\$	1,717,001
June 30, 2023		1,415,908		20,215		1,436,123
June 30, 2024		(5,014.834)		(92,785)		(5,107,619
June 30, 2025	_	(1,940,565)		(27,705)		(1,968,270
Total Deferred Outflows/(Inflows) Recognized in						
Future Pension Expense	\$	(3,846,659)	\$	(76,106)	\$	(3,922,765
Discount Rate Sensitivity						
Proceeding and a company	\$	16,706,144	\$	238,513	\$	16,944,657
1% decrease (6.75%)	φ.					(0.025.017
•	Ŷ	(7,961,550)		(113, 667)		(8,075,217
1% decrease (6.75%)	ý	(7,961,550) (28,960.425)		(113,667) (413,467)		(8,075,217) (29,373,892)

See actuarial assumptions in the City of Watertown, Massachusetts Contributory Retirement System audited financial statements.

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(A Component Unit of the Town of Watertown, 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 Retirement Board Watertown Contributory Retirement System Town of Watertown, Massachusetts

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

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

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

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Watertown 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. 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.

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Melanson

Greenfield, Massachusetts August 3, 2021

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Watertown 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.

#### **Notes to Financial Statements**

The notes 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 \$219,449,832 at December 31, 2019.
- The System's net position increase by \$35,952,863, which is primarily due to investment gains during the year.

- Employer and employee contributions to the plan were \$17,287,148, which represents a \$(5,780,957) decrease over the prior year. The employer share of contributions represents 76.94% of the total contributions made to the System.
- Benefits paid to plan participants increased by \$403,004 or 2.78%, totaling \$14,902,392. At December 31, 2019, there were 363 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 9.
- The System's funded ratio (based on the System's GASB 68 valuation) as of the January 1, 2020 actuarial valuation was 93.7%, with 3 years remaining in its amortization period.

#### **Financial Statement Analysis**

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

FIDUCIARY NET POSITION

	ANTINET FOSTION	
	<u>2019</u>	<u>2018</u>
Assets		
Cash and receivables	\$ 1,408	\$ 1,622
Investments	218,077	181,936
Total Assets	<b>219,48</b> 5	<b>183,558</b>
Liabilities		
Accounts payable	35	14
Other	<u> </u>	47
Total Liabilities	35	61
Net Position		
Restricted for pensions	\$\$\$\$\$\$	\$ 183,497

# The System's total assets as of December 31, 2019 were \$219,484,822 and were comprised primarily of cash and investments. Total assets increased by \$35,926,617 or 19.57%, from the prior year primarily due to an increase in investment value.

CHANGES IN FIDUCIARY NET POSITI	ΟN
---------------------------------	----

	<u>2019</u>	<u>2019</u>		<u>2018</u>
Additions				
Contributions	\$ 17,749	17,749	\$	<b>23,568</b>
Investment income (loss), net	34,267	34,267		(10,011)
Total Additions	52,016	52,016		13,557
Deductions				
Benefit payments	14,902	14,902		1 <b>4,499</b>
Other	1,161	1,161	-	1,218
Total Deductions	16,063	16,063		15,717
Change in Net Position	35,953	35 <b>,95</b> 3		(2,160)
Net Position Restricted for Pensions				
Beginning of Year	183,497	183,497		185,657
End of Year	\$ <u>219,450</u>	219,450	\$	183,497

The amount needed to finance benefits is accumulated through the collection of employers' and employee's contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA and through earnings on investments. Contributions and net investment loss for calendar year 2019 resulted in total additions of \$52,016,163. Employers' contributions decreased by \$(5,397,786), or (28.87) % in calendar year 2019. The System had net investment income of \$34,266,958 versus an investment loss of \$(10,011,238) in 2018, primarily due to the market performing more favorably in calendar year 2019.

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 \$16,063,300, which represents an increase of \$346,353, or 2.20%, over deductions of \$15,716,947 in calendar year 2018. The payment of pension benefits increased by \$403,004 or 2.78% over the previous year.

#### **Requests for Information**

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

Watertown Contributory Retirement System Ms. Barbara Sheehan, Executive Director 149 Main Street Watertown, Massachusetts 02472

(A Component Unit of the Town of Watertown, Massachusetts) Statement of Fiduciary Net Position December 31, 2019

Assets		
Cash and short-term investments	\$ 1,143,367	,
Investments in:		
Domestic stock fund	11 <b>,90</b> 0,239	ł
Equity mutual funds	86,668,796	i
Fixed income mutual funds	35,554,563	ı –
External investment pool	57 <b>,8</b> 27,915	ı
Limited partnership	26,125,884	-
Total Investments	218,077,397	ł
Accounts receivable	264,058	)
Total Assets	\$ <u>219,484,822</u>	
Liabilities		
Accounts payable	\$ 34,990	I
Net Position		
Restricted for pension purposes	219,449,832	_
Total Liabilities and Net Position	\$ <u>219,484,822</u>	

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

(A Component Unit of the Town of Watertown, Massachusetts) Statement of Changes in Fiduciary Net Position For the Year Ended December 31, 2019

Additions Contributions:		
Employers	\$	13,300,956
Plan members	•	3,986,192
Other systems and Commonwealth of Massachusetts		438,830
Other		23,227
Total Contributions		17,749,205
Investment income:		
Appreciation in fair value of investments		35,673,077
Less: Management fees		(1,406,119)
Net Investment Gain		34,266,958
Total Additions		52,016,163
Deductions		
Benefit payments to plan members and beneficiaries		14,902,392
Refunds to plan members		115 <b>,942</b>
Transfers to other systems		755 <b>,424</b>
Administrative expenses		289,542
Total Deductions	_	16,063,300
Net Increase		35,952,863
Net Position Restricted for Pensions		
Beginning of Year		183,496,969
End of Year	\$_	219,449,832

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

#### **Notes to Financial Statements**

#### 1. Description of Plan

Substantially all employees of the Town of Watertown (except teachers and administrators under contract employed by the School Department) and Watertown Housing Authority are members of the Watertown 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 allow-ances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, contribution percentages, and benefits paid. The Watertown Contributory Retirement Board does not have the authority to amend benefit provisions.

Membership of the plan consisted of the following at January 1, 2020:

Retirees and beneficiaries receiving benefits	363
Inactive members entitled to a return of their	
employee contributions	239
Active plan members	528
Total	1,130
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% when at least 30 years of creditable service has been attained.

#### Participant Retirement Benefits

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

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest 5-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100%, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

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

#### **Employer Contributions**

Employers are required to contribute at actuarially determined rates as accepted by the Public Employee Retirement Administration Commission (PERAC).

#### 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 of Watertown, Massachusetts (the Town), the System is included as a pension trust fund in the Town's basic financial statements. The System is governed by a five-member board. The five members include two appointed by the Town, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of Public Employee Retirement Administration Commission.

#### 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 Member's 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 not available. 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 System's 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, \$595,319 of the System's bank balance of \$1,378,499 was exposed to custodial credit risk as uninsured or uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

#### 4. Investments

The following is a summary of the System's investments as of December 31, 2019:

Investment Type		<u>Amount</u>		
Domestic stock fund	\$	11,900,239		
Equity mutual funds		86,668,796		
Fixed income mutual funds		35,554,563		
External investment pool*		<b>57,827,91</b> 5		
Limited partnership	_	<b>26,125,884</b>		
Total Investments	\$	218,077,397		

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

#### **Custodial Credit Risk**

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

\$11,900,239 of the System's investments were exposed to custodial credit risk as uninsured and uncollateralized. However, \$57,827,915 of the System's investments were held in the State investment pool (PRIT). Investments in external/State investment pools and mutual funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form.

#### 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.

All of the System's investments in fixed income mutual funds of \$35, 554,563 had a rating of AA2 at December 31, 2019.

#### **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 credit risk disclosure as any investment classifications exceeding 5% are exempt.

#### **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.

All of the System's investments in fixed income mutual funds of \$35, 554,563 matured in less than one year.

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. The System does not have a formal investment policy related to foreign currency risk.

#### Fair Value

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 *Fair Value Measurement and Application* (GASB 72).

The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

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

• Level 3 – Unobservable inputs based on the best information available, using assumptions in determining the fair value of investments and derivative instruments.

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

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

			Fair Value Measurements Using:			Jsing:	
				Quoted prices in active markets for dentical assets		Significant observable inputs	Significant unobservable inputs
Investment Type		Amount		<u>(Level 1)</u>		<u>(Level 2)</u>	(Level 3)
Investments by fair value level:							
Domestic stock funds	\$	11,9 <b>00,2</b> 39	\$	11, <b>900,23</b> 9	\$	- \$	-
Equity mutual funds		86,668,796		86,668,796		-	-
Fixed income mutual funds		35,554,563		-		35,554,563	-
Investments measured at the net asset value (NAV):							
External investment pools		57,827,915					
Limited partnerships	_	26,125,884					
Total	\$_	218,077,397					

Description		<u>Value</u>	<u>c</u>	Unfunded commitments	Redemption Frequency (If currently <u>eligible)</u>	Redemption Notice <u>Period</u>
External investment pools:						
Prim Alternative Investments - PE VY2011	\$	1,062,258	\$	<b>138,58</b> 0	Illiquid	N/A
Prim Alternative Investments - PE VY2013		1,119,103		131,907	Illiquid	N/A
Prim Alternative Investments - PE VY2014		1,331,097		274,604	Illiquid	N/A
Hedge Funds		15,960,897		-	Quarterly	30 Days
Domestic Equity Fund		17,473,310		-	Monthly	5 Days
Core Real Estate Fund		15,347,411		-	Monthly	5 Days
Prim Alternative Investments - PE VY2015		1,840,993		287,809	Illiquid	N/A
Prim Alternative Investments - PE VY2016		701,924		351,145	Illiquid	N/A
Prim Alternative Investments - PE VY2017		1,106,479		1,892,541	Illiquid	N/A
Prim Alternative Investments - PE VY2012		949,030		120,613	Illiquid	N/A
Prim Alternative Investments - PE VY2018		541,514		2,227,842	Illiquid	N/A
Prim Alternative Investments - PE VY2019	-	3 <b>9</b> 3, <b>8</b> 99		2,796,370	Illiquid	N/A
Total external investment pools	\$_	57,827,915				
Limited partnerships:						
Arsenal Real Estate Fund IA	\$	44,451	\$	-	Illiquid	N/A
Auda Partners		86,158		95,686	Illiquid	N/A
Earnest Partners International		19,185,539		-	Monthly	5 days
RCP Fund IV LP		370,622		-	Illiquid	N/A
Terracap Partners IV Insti LP		1,168,852		-	Illiquid	N/A
TA Realty Core Property FD LP		4,116,566		-	Quarterly	45 days
American Strat Val Rity FD LP	_	1,153,696		916,000	Quarterly	30 days
Total limited partnerships	\$_	26,125,884				

#### 5. Accounts Receivable

Annually the Public Employee Retirement Administration (PERAC) determines the amount of employer contributions (pension appropriations) to be made to the System. The accounts receivable balance primarily represents legal amounts due from employers for pension appropriation not received until after December 31, 2019.

#### 6. Accounts Payable

This balance represents calendar year 2019 expenditures paid 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	\$	234,085,877
Plan fiduciary net position	_	(219,449,833)
Employers' net pension liability	\$_	14,636,044
Plan fiduciary net position as a percentage of total pension liability		
		93.7%

#### **Actuarial Assumptions**

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

Valuation date	1/1/2020
	Entry Age
	Normal Cost
Actuarial cost method	Method
Remaining amortization period	3
Actuarial assumptions:	
Investment rate of return	7.80%
Projected salary increases	
Group 1	3.50%
Group 2	3.50%
Group 4	3.50%
Inflation rate	2.40%
Post-retirement cost-of-living adjustment	3% on \$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 represented by the various SOA Pub-2010 Public Retirement Plan Mortality Tables specific to the Group, Pre-retirement versus Post, Disabled and Beneficiaries, with Scale MP-2018 improvements until 2025.

#### **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 longterm expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the System's targeted asset allocation as of December 31, 2019, are summarized in the following table.

		Long-Term
	Target	Expected
	Asset	Real Rate
Asset Class	<u>Allocation</u>	<u>of Return</u>
Core bonds	15. <b>00%</b>	1.45%
High yield fixed income	0.00%	2.95%
Global fixed income	2.00%	1.65%
Domestic large cap	24.00%	4.75%
Domestic small cap	7.00%	5.15%
International developed equity	20.00%	5.45%
International emerging markets equity	7.00%	6.25%
Real estate	10.00%	4.10%
Hedge funds	5.00%	3.60%
Private equity	10.00%	7.60%
Total	100.00%	

#### **Discount Rate**

The discount rate used to measure the total pension liability was 7.80%. 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 (asset) of the participating employers calculated using the discount rate of 7.80%, as well as what the participating employers'

net pension liability (asset) would be if it were calculated using a discount rate that is 1 percentage-point lower or 1 percentage-point higher than the current rate:

	Current	
1%	Discount	1%
Decrease	Rate	Increase
<u>(6.80%)</u>	<u>(7.80%)</u>	<u>(8.80%)</u>
\$ 38,925,160	\$ 14,636,044	\$ (6,048,577)

# Deferred Outflows/(Inflows) of Resources

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

	Deferred Outflows of Resources			Deferred (Inflows) of Resources
Differences between expected and actual experience	\$	6,856,552	\$	(268,660)
Changes of assumptions		7,501,416		(229,155)
Net difference between projected and actual investment earnings on pension plan investments		-		(5,307,911)
Changes in proportion and differences between employer contributions and proportionate share of contributions				
	-	28,208	-	(28,208)
Total	\$_	14,386,176	\$_	(5,833,934)

# The following summarizes changes in deferred outflows/(inflows):

	Measurement <u>Year</u>	Amortization <u>Period</u>	Beginning Balance on Prior Measurement <u>Period Deferrals</u>	Current Measurement Period <u>Additions</u>	Amortization of Amounts Recognized in Current Period <u>Pension Expense</u>	End of Year <u>Balance</u>
Deferred Outflows of Resources						
Differences between expected and actual experience:	2017	4.54	\$ 3,766,889	ş -	\$ 2,446,031	\$ 1,320,858
	2018	4.37	2,188,003		923,208	1,264,795
	2020	4.42	-	5,519,700	1,248,801	4,270,899
Change in assumptions	2018	4.26	10,820,626		3,319,210	7,501,416
Changes in proportion and differences between employer contributions and						
proportionate share of contributions:	2016	4.54	(1,350)	-	(1,350)	-
	2017	4.54	(70,603)	-	(45,847)	(24,756)
	2018	4.37	(28,569)	•	(12,054)	(16,515)
	2019	5.26	63,762	-	14,968	48,794
	2020	5.00		25,856	5,171	20,685
Total Deferred Outflows of Resources			16,738,758	5,545,556	7,898,138	14,386,176
Deferred (inflows) of Resources						
Differences between expected and actual experience	2018	4.26	(387,536)	-	(118,876)	(268,650)
Change in assumptions	2017	4.54	(653,514)	-	(424,359)	(229,155)
Net difference between projected and actual investment earnings on pension plan						
investments:	2016	5.00	1,818,798	-	1,818,798	-
	2017	5.00	1,051,619	-	525,810	525,809
	201B	5.00	(7,286,866)	•	(2,428,955)	(4,857,911)
	2019	5.00	19,949,396	-	<b>4,987,34</b> 9	14,962,047
Changes in proportion and differences between employer contributions and	2020	5.00	-	(19,922,320)	(3,984,454)	(15,937,856)
proportionate share of contributions:	2016	4.54	1,350		1,350	-
	2017	4.54	70,603	-	45,847	24,756
	2018	4.37	28,569	-	12,054	16,515
	2019	5.26	(63,762)		(14,968)	(48,794)
	2020	5.00		(25,856)	(5,171)	(20,685)
Total Deferred (Inflows) of Resources			14,528,657	(19,948,176)	414,415	(5,833,934)
Total Collective Deferred			. —		. –	. —
Outflows (Inflows) of Resources			\$ 31,267,415	\$ (14,402,620)	\$ 8,312,553	\$ 8,552,242

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

	<u>Total</u>
\$	5,563,785
	3,364,652
	3,083,774
	(3,459,969)
\$_	8,552,242
	, 

### Subsequent Event

The COVID-19 outbreak in the United States (and across the globe) has resulted in economic uncertainties. The disruption is expected to be temporary, but there is considerable uncertainty around the duration and scope. The extent of the impact of COVID-19 on our operational and financial performance will depend on certain developments, including the duration and spread of the outbreak, impact on our members, employees, and vendors, all of which are uncertain and cannot be predicted. At this point, the extent to which COVID-19 may impact our financial condition or results of operations is uncertain.

#### (A Component Unit of the Town of Watertown, Massachusetts) Required Supplementary Information 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	\$	3,628,350	\$	3,305,996	\$ 3,338,850	\$	3,895,597	\$ 3,895,599	\$	3,745,767
Interest on unfunded liability - time value of money		17,119,562		15,945,986	15,3 <b>30,990</b>		14,442,636	14,615,997		14,213,781
Changes in plan provisions		-		-	-		778,002	-		-
Experience (gain)/loss		5,519,700		(506,412)	4,034,420		11,104,982	-		-
Changes of assumptions				14,139,836			(1,926,591)			
Benefit payments, including refunds of member contributions	-	(15,773,758)	-	(15,378,326)	(14,413,329)	-	(14,006,492)	(13,810,095)		(13,081,678)
Net Change in Total Pension Liability		10,493,854		17,507,080	8,290,941		14,288,134	4,701,501		4,877,870
Total Pension Liability - Beginning	-	223,592,023	_	206,084,943	197,794,002	_	183,505,868	178,804,367	-	173,926,497
Total Pension Liability - Ending (a)		234,085,877		223,592,023	206,084,943		197,794,002	183,505,868		178,804,367
Plan Fiduciary Net Position										
Contributions - employer		13,300,956		18,698,742	17,173,496		15,598,496	14,023,496		12,465,133
Contríbutions - member		3,986,192		4,369,364	3,400,281		3,465,100	3,193,042		3,186,332
Net investment income		34,298,396		(9,967,302)	24,612,432		<b>8,827,36</b> 6	<b>1,842</b> ,184		7,674,151
Benefit payments, including refunds of member contributions		(15,773,758)		(15,378,326)	(14,413,329)		(14,006,492)	(13 <b>,288</b> ,770)		(12,587,850)
Administrative expense		(320,979)		(339,624)	(309,692)		(27 <b>9,4</b> 47)	(300,358)		(279,447)
Other	-	462,057	_	456,764	481,871	_	480,658	537,085	-	487,925
Net Change in Plan Fiduciary Net Position		35,952,864		(2,160,382)	30,945,059		14,085,681	6,006,679		10,946,244
Plan Fiduciary Net Position - Beginning	-	183,496,969	_	185,657,351	154,712,292	_	140,626,611	134,619,932	-	123,673,688
Plan Fiduciary Net Position - Ending (b)	-	219,449,833	_	183,496,969	185,657,351	-	154,712,292	140,626,611	-	134,619,932
Net Pension Liability - Ending (a-b)	\$_	14,636,044	\$_	40,095,054	\$ 20,427,592	\$	43,081,710	\$ 42,879,257	\$	44,184,435

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

See Independent Auditors' Report.

#### (A Component Unit of the Town of Watertown, Massachusetts) Required Supplementary Information 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 Plan fiduciary net position	\$	234,085,877 (219,449,833)	\$ _	223,592,023 (183,496,969)	\$ 206,0 <b>84,943</b> (185,657,351)	\$	197,794,002 (154,712,292)	\$	183,505,868 (140,626,611)	\$ 178,804,367 (134,619,930)
Net pension liability	\$_	14,636,044	\$_	40,095,054	\$ 20,427,592	\$_	43,081,710	\$_	42,879,257	\$ 44,184,437
Plan fiduciary net position as a percentage of the total pension liability		93.7%		82.1%	90.1%		78.2%		76.6%	75.3%
Covered payroll	\$	35,322,996	\$	33,927,238	\$ 33,501,993	\$	35,192,067	\$	31,539,610	\$ 30,326,548
Participating employer net pension liability as a percentage of covered payroll		41.4%		118.2%	61.0%		122.4%		136.0%	145.7%
Schedule of Contributions		<u>2019</u>		<u>2018</u>	<u>2017</u>		<u>2016</u>		2015	<u>2014</u>
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$	13,300,956 (13,300,956)	\$	18,698,742 (18,698,742)	\$ 17,173,496 (17,173,496)	\$	15,598,496 (15,598,496)	\$	14,023,496 (14,023,496)	\$ 12,448,496 (12,448,496)
Contribution deficiency (excess)	\$_	-	\$_	-	\$ -	\$	-	\$_	-	\$ -
Covered payroll	\$	35,322,996	\$	33,927,238	\$ 33,501,993	\$	35,192,067	\$	31,539,610	\$ 30,326,548
Contributions as a percentage of covered payroll		37.7%		55.1%	51.3%		44.3%		44.5%	41.0%
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		unavailable		unavailable	14.44%		6. <b>68%</b>		0.78%	6.42%

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

See Independent Auditors' Report.



#### **INDEPENDENT AUDITORS' REPORT**

To the Retirement Board Watertown Contributory Retirement System Town of Watertown, Massachusetts

#### **Report on Schedules**

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

#### **Management's Responsibility for the Schedules**

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

#### Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts 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

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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 Watertown 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 Watertown 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.

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Molanson

Greenfield, Massachusetts August 3, 2021

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(A Component Unit of the Town of Watertown, Massachusetts) Schedule of Employer Allocations

	FY2020					
	Actual					
	<b>Employ</b> er	Allocation				
<u>Employer</u>	<b>Contributions</b>	<b>Percentage</b>				
Town of Watertown	\$    13,093,393	<b>98.4</b> 395%				
Housing Authority	207,563	1.5605%				
Total	\$ 13,300,956	1 <b>00</b> .0000%				

See actuarial assumptions in the Town of Watertown, Massachusetts Contributory Retirement System audited financial statements.

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#### (A Component Unit of the Town of Watertown, Massachusetts) Schedule of Pension Amounts by Employer As of and for the Year Ended December 31, 2019

				Housing		<b></b>
		Town		Authority		Total
Net Pension Liability	\$	14,407,649	\$	228,395	\$	14,636,044
Deferred Outflows of Resources						
Differences between expected and actual experience	\$	6,749,556	\$	106,996	\$	6,856,552
Changes of assumptions		<b>7,384,3</b> 57		11 <b>7,059</b>		7,501,416
Changes in proportion and differences between employer contributions and proportionate share of contributions		<b>25,96</b> 1		2,247		28,208
Total Deferred Outflows of Resources	\$	14,159,874	\$	226,302	\$	14,386,176
Deferred Inflows of Resources	-					
Differences between expected and actual experience	\$	264,468	\$	4,192	\$	268,660
Changes of assumptions		225,579		3,576	-	229,155
Net difference between projected and actual						
investment earnings on pension plan investments		5,225,082		82,829		5,307,911
Changes in proportion and differences between employer						
contributions and proportionate share of contributions	_	2,247	_	25,961	-	28,208
Total Deferred Inflows of Resources	\$_	5,717,376	\$_	116,558	\$	5,833,934
Pension Expense						
Proportionate share of pension expense	\$	10,847,222	\$	171,954	\$	11,019,176
Net amortization of deferred amounts from changes in proportion and differences between employer						
contributions and proportionate share of contributions	_	9,943	-	(9,942)	-	1
Total Pension Expense	\$_	10,857,165	\$_	162,012	\$_	11,019,177
Contributions						
Actuarially determined contribution	\$	13,093,393	\$	207,563	\$	13,300,956
Contributions made	-	(13,093,393)	-	(207,563)	-	(13,300,956)
Contribution deficiency/(excess)	\$_	-	\$_	-	\$_	-
Contributions as a percentage of covered payroll		38%		38%		38%
Deferred Outflows/(Inflows) Recognized In Future Pension Expense						
June 30, 2021	\$	5,476,962	\$	86,823	\$	5,563,785
June 30, 2022		3,312,147		52,505		3,364,652
June 30, 2023		3,035,652		48,122		3,083,774
June 30, 2024		(3,405,976)		(5 <b>3,993)</b>		(3,459,969)
Total Deferred Outflows/(Inflows) Recognized in			_		-	
Future Pension Expense	\$_	8,418,785	\$_	133,457	\$_	8,552,242
Discount Rate Sensitivity						
1% decrease (6.80%)	\$	38,317,733	\$	607,427	\$	38,925,160
Current discount rate (7.80%)	\$	14,407,549	\$	228,395	\$	14,536,044
1% increase (8.80%)	\$	(5,954,189)	\$	(94,388 <b>)</b>	\$	(6,048,577)
Covered Payroll	\$	34,771,781	\$	551,215	\$	35,322,996

See actuarial assumptions in the Town of Watertown, Massachusetts Contributory Retirement System audited financial statements.



A Component Unit of the Town of Watertown, Massachusetts

Financial Statements, Required Supplementary Information, and Other Information

For the Year Ended December 31, 2018

(With Independent Auditors' Report Thereon)

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#### **INDEPENDENT AUDITORS' REPORT**

To the Contributory Retirement Board Watertown Contributory Retirement System Town of Watertown, Massachusetts

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

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

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

#### Auditors' Responsibility

Our responsibility is to express 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

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

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

#### Opinion

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

#### **Other Matters**

#### **Required Supplementary Information**

Accounting principles generally accepted in the United 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. 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.

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Melanson

Andover, Massachusetts December 10, 2020

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Watertown 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, 2018.

#### A. 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.

<u>Fund financial statements</u>. 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, other assets, 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, 2018. It reflects contributions by members and participating employers, investment activity, along with deductions for retirement benefits, refunds, transfers, and administrative expenses.

<u>Notes to financial statements.</u> 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.

#### **B. FINANCIAL HIGHLIGHTS**

- The System's total net position restricted for pensions was \$183,496,969 at December 31, 2018.
- The System's net position (decreased) by \$(2,160,382), which is primarily due to investment performance.
- Employer and employee contributions to the plan were \$23,068,105, which represents a \$2,491,238 increase over the prior year. The employer share of contributions represents 79.34% of the total contributions made to the System.
- Benefits paid to plan participants increased by \$768,019 or 5.60%, totaling \$14,499,388. At December 31, 2018, there were 426 retirees and beneficiaries in receipt of pension benefits, as further discussed on page 9.
- The System's December 31, 2018 funded ratio based on the GASB 68 report (Accounting) was 82.1%. The Systems January 1, 2019 funded ratio based on the actuarial valuation (Funding) was 89.0%.

## C. FINANCIAL STATEMENT ANALYSIS

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

FIDUCIARY NET POSITION							
	<u>2018</u>	<u>2017</u>					
Assets							
Cash and receivables	\$ 1,622	\$ 1,455					
Investments	181,936	184,250					
Total assets	183,558	185,705					
Liabilities							
Accounts payable	14	48					
Other	47	-					
Total liabilities	61	48					
Net Position							
Restricted for pensions	\$ 183,497	\$ <u>185,657</u>					

The System's total assets as of December 31, 2018 were \$183,558,205 and mostly comprise cash and investments. Total assets decreased (\$2,146,675) or (1.16)%, from the prior year primarily due to investment performance. Total liabilities increased by \$13,707 or 28.84% over the prior year.

## **CHANGES IN FIDUCIARY NET POSITION**

	<u>2018</u>	<u>2017</u>
Additions		
Contributions	\$ 23,568	\$ 21,059
Investment income, net	(10,011)	24,571
Total additions	13,557	45,630
Deductions		
Benefit payments	14,499	13,731
Other	1,218	954
Total deductions	15,717	14,685
Changes in net position	(2,160)	30,945
Net Position Restricted for Pensions		
Beginning of year	185,657	154,712
End of year	\$ 183,497	\$ 185,657

The amount needed to finance benefits is accumulated through the collection of employers' and employee's contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA and through earnings on investments. Contributions and net investment loss for calendar year 2018 resulted in a net loss of (\$2,160,382). Employers' contributions increased by \$2,509,066, or 11.91% in calendar year 2018. The System had a net investment loss of (\$10,011,238) versus income of \$24,570,843 in 2017, primarily due to investment performance.

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 2018 were \$15,716,947, which represents an increase of \$1,032,423, or 7.03%, over deductions of \$14,684,524 in calendar year 2017. The payment of pension benefits increased by \$768,019 or 5.6% over the previous year. The increase in these expenses resulted from cost-of-living adjustments (COLA) and higher pensions earned by new retirees.

## **REQUESTS FOR INFORMATION**

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

Watertown Contributory Retirement System

149 Main Street

Watertown, Massachusetts 02472

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

Statement of Fiduciary Net Position

# December 31, 2018

Assets		
Cash and short-term investments	\$	1 <b>,085,2</b> 15
Investments:		
Domestic stock fund		16,083,872
Equity mutual funds		62,619,892
External investment pool		<b>51,407,2</b> 55
Fixed income mutual funds		<b>32,000</b> ,107
Limited partnership		19 <b>,824</b> ,766
Accounts receivable	_	537,098
⊤otal assets	\$_	183,558,205
Liabilities		
Accounts payable	\$	13,511
Other	_	<b>47,72</b> 5
⊤otal liabilities		61,236
Net Position		
Restricted for pensions	-	183,496,969
Total liabilities and net position	\$	1 <b>83,558,2</b> 05

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

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

Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2018

# Additions

Contributions:		
Employers	\$	18,698,742
Plan members		4,369,363
Other systems and Commonwealth of Massachusetts		443,596
Other	_	56,101
Total contributions		23,567 <b>,802</b>
Investment income (loss):		
Appreciation (depreciation) in fair value of investments		(8,726,066)
Less: management fees	_	(1,285,171)
Net investment gain (loss)	_	(10,011,237)
Total additions		13,556,565
Deductions		
Benefit payments to plan members and beneficiaries		14,499,388
Refunds to plan members		336,003
Transfers to other systems		585,877
Administrative expenses	_	295,679
Total deductions	_	15,716,947
Net (decrease)		(2,160,382)
Net Position Restricted for Pensions		
Beginning of year	_	185,657,351
End of year	\$_	183,496,969

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

### WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM

#### **Notes to Financial Statements**

#### 1. Description of Plan

Substantially all employees of the Town of Watertown (except teachers and administrators under contract employed by the School Department) and Watertown Housing Authority are members of the Watertown 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 allow-ances, and death and disability benefits. Chapter 32 of the Massachusetts General Laws establishes the authority of the System, contribution percentages, and benefits paid. The Watertown Contributory Retirement Board does not have the authority to amend benefit provisions.

Membership of the plan consisted of the following at January 1, 2019 (the latest actuarial valuation):

Retirees and beneficiaries receiving benefits	426
Terminated plan members entitled to but not yet	
receiving benefits	183
Active plan members	512
Total	1,121
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% 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

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

The System provides for retirement allowance benefits up to a maximum of 80% of a member's highest 3-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest 5-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100%, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation, and group classification.

There are four 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 of Watertown 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 terminating 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 to accidental disability retirees on November 7, 1996.

## Participant Refunds

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

## 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, 2018 conform to generally accepted accounting principles for public employee retirement systems (PERS). The more significant accounting policies of the System are summarized below:

#### **Basis of Accounting**

The System follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the Town of Watertown and Watertown 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, 2018, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was unavailable. 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 System's deposits may not be returned. Massachusetts General Law Chapter 32, Section 23, limits the System's deposits "in a bank or trust company to an amount not exceeding ten percent of the capital and surplus of such bank or trust company." The System does not have a deposit policy for custodial credit risk

As of December 31, 2018, \$838,666 of the System's bank balance(s) of \$1,171,439 were exposed to custodial credit risk as uninsured or uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

#### 4. Investments

The following is a summary of the System's investments as of December 31, 2018:

Investment Type	<u>Amount</u>
Domestic stock fund	\$ 16,083,872
Equity mutual funds	62,619,892
External investment pool*	51,407,255
Fixed income mutual funds	32,000,107
Limited partnership	<b>19,82</b> 4,766
Total investments	\$ 181,935,892

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

## A. Credit Risk

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

					Average Rating <u>a</u>		
				Exempt	of Year End		
				From			
Investment Type		<u>Amount</u>		<u>Disclosure</u>		<u>AA2</u>	
Domestic stock fund	\$	16 <b>,08</b> 3,872	\$	16 <b>,08</b> 3,872	\$	-	
Equity mutual funds		62,619,892		62,619,892		-	
External investment pool		51 <b>,40</b> 7,255		51,407,255		-	
Fixed income mutual funds		32,000,107		-		32,000,107	
Limited partnership	_	19 <b>,8</b> 24,766		19 <b>,82</b> 4,766		-	
Total	\$_	181,935,892	\$_	149,935,785	\$	32,000,107	

## B. Custodial Credit Risk

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

The System's investments of \$130,528,637 were exposed to custodial credit risk as uninsured and uncollateralized. However, \$51,407,255 of the System's investments were held in the State investment pool (PRIT).

Investments in external/State investment pools and in open-end mutual funds are not exposed to custodial credit risk because their existence is not evidenced by securities that exist in physical or book entry form.

## C. Concentration of Credit Risk

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

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**, **2018**, investments in any one issuer that represent 5% or more of total investments are as follows:

		76 OI LOLAI
Investment Issuer	<u>Amount</u>	<u>Investments</u>
Earnest Partners International	\$	8%
Total	\$ 14,306,827	

0/ of total

#### D. Interest Rate Risk

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

Information about the sensitivity of the fair values of the System's investments to market interest rate fluctuations is as follows:

		Investment
		<b>Maturities</b>
		<u>(in Years)</u>
		Less
Investment Type	<u>Amount</u>	<u>Than 1</u>
Fixed income mutual funds	\$ 32,000,107	\$32,000,107
Total	\$	\$32,000,107

# E. Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment. The System does not have a formal investment policy related to foreign currency risk.

#### F. Fair Value

The System categorizes its fair value measurements within the fair value hierarchy established by Governmental Accounting Standards Board Statement No. 72 *Fair Value Measurement and Application* (GASB 72).

The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy categorizes the inputs to valuation techniques used for fair value measurement into three levels as follows:

 Level 1 – Inputs that reflect quoted prices (unadjusted) in active markets for identical assets or liabilities that the fund has the ability to access at the measurement date.

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

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

The System has the following fair value measurements as of December 31, 2018:

			_	Fair Value Measurements Using:				Jsing:
Description		<u>Amount</u>		Quoted prices in active markets for dentical assets <u>(Level 1)</u>		Significant observable inputs <u>(Level 2)</u>		Significant unobservable inputs <u>(Level 3)</u>
investments by fair value level:								
Domestic stock funds	\$	16,083,872	\$	16,083,872	\$	-	\$	-
Equity mutual funds		<b>62,619,8</b> 92		62,619,892		-		-
Fixed income mutual funds		<b>32,000,1</b> 07		-		32,000,107		-
investments measured at the net asset value (NAV):								
External investment pools		51,407,255						
Limited partnerships	_	19,824,766						
Total	\$_	181,935,892						

Description		<u>Value</u>	<u>c</u>	Unfunded ommitments	Redemption Frequency (If currently <u>eligible)</u>	Redemption Notice <u>Period</u>
External investment pools:						
PRIM alternative investments - 2011	\$	1,251,168	\$	294,120	Illiquid	N/A
PRIM alternative investments - 2013		989,208		530,677	Illiquid	N/A
PRIM alternative investments - 2014		1,190,710		502,045	Illiquid	N/A
Hedge funds		13,877,573		-	Quarterly	30 Days
Domestic equity fund		14,129,810		-	Monthly	5 Days
Core real estate fund		16,070,051		-	Monthly	5 Days
PRIM alternative investments -2015		1,432,571		942,386	Illiquid	N/A
PRIM alternative investments - 2016		631,233		1,391,340	Illiquid	N/A
PRIM alternative investments - 2017		489,479		2,397,268	Illiquid	N/A
PRIM alternative investments - 2012		1,136,477		668,172	Illiquid	N/A
PRIM alternative investments - 2018	_	208,975		2,744,889	Illiquid	N/A
Total external investment pool	\$	51,407,255				
Limited Partnerships:						
Arsenal Real Estate Fund LP	\$	<b>69,1</b> 57		-	Illíquid	N/A
Auda Partners		153,394		95,686	Illiquid	N/A
Earnest Partners International		14,306,827		-	Monthly	5 days
RCP Fund IV LP		867,655		-	Illiquid	N/A
Terracap Partners IV Insti LP		1,043,817		-	Illiquid	N/A
TA Realty Core Property FD LP		3,007,031		718,584	Quarterly	45 days
American Strat Val Rity FD LP	_	376,885		1,634,000	Quarterly	30 days
Total limited partnerships	\$_	19,824,766				

## 5. Accounts Receivable

Annually the Public Employee Retirement Administration (PERAC) determines the amount of employer contributions (pension appropriations) to be made to the System. The accounts receivable balance primarily represents legal amounts due from employers for pension appropriation not received until after December 31, 2018.

## 6. Accounts Payable

This balance represents payment for salaries paid by the Town on behalf of the System.

## 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, 2019 and rolled back to December 31, 2018.

## A. Net Pension Liability of Employers

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

Total pension liability	\$	223,592,023
Plan fiduciary net position	_	(183,496, <b>969</b> )
Employers' net pension liability	\$_	40,095,054
Plan fiduciary net position as a percentage		
of total pension liability		82.1%

#### B. Actuarial Assumptions

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

Valuation date	<b>1/1/2</b> 019
Actuarial cost method	Entry Age
Remaining amortization period	4
Actuarial assumptions:	
Investment rate of return	7.80%
Projected salary increases	<b>3</b> .5 <b>0%</b>
Post-retirement cost-of-living adjustment	3.00%

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 represented by the various SOA Pub-2010 Public Retirement Plan Mortality Tables specific to the Group, Pre-retirement versus Post, Disabled and Beneficiaries, with Scale MP-2018 improvements until 2025.

## **Changes of Assumptions**

Change in mortality table and the change in the discount rate from 7.9% in 2017 to 7.8% in 2018 caused an increase of Net Pension Liability, Deferred Outflows, and Deferred Inflows.

## C. Target Allocations

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric real rates of return for each major asset class included in the System's targeted asset allocation as of December 31, 2018, are summarized in the following table.

		Long-Term
	Target	Expected
	Asset	Real Rate
Asset Class	<u>Allocation</u>	<u>of Return</u>
Core bonds	1 <b>9.00%</b>	1.60%
High yield fixed income	2.50%	3.00%
Global fixed income	4.00%	1.75%
Domestic large cap	25.00%	5.00%
Domestic small cap	5.00%	5.55%
International equity	22.00%	5.35%
Real estate	10.00%	3.90%
Hedge funds	7.50%	3.25%
Private equity	5.00%	7.25%
Total	100.00%	

# D. Discount Rate

The discount rate used to measure the total pension liability was 7.8%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

# E. Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 7.8%, as well as what the participating employers' net pension liability would be if it were calculated using a discount rate that is one percentage-point lower or one percentage-point higher than the current rate:

	Current	
1%	Discount	1%
Decrease	Rate	Increase
<u>(6.8%)</u>	<u>(7.8%)</u>	<u>(8.8%)</u>
\$ 63,262,824	\$ 40,095, <b>054</b>	\$ 20,353,747

## F. Deferred Outflows/(Inflows) of Resources

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

		Deferred		Deferred
	Outflows of			(Inflows) of
		<b>Resources</b>		<b>Resources</b>
Differences between expected and actual experience	\$	5 <b>,9</b> 54, <b>89</b> 2	\$	(387,536)
Changes of assumptions		10 <b>,82</b> 0,626		(653,514)
Net difference between projected and actual				
investment earnings on pension plan investments	-	15,532,947	-	-
Total	\$_	32,308,465	\$	(1,041,050)

\*These amounts must be calculated separately by each member employer.

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

	Measurement <u>Year</u>	Amortization <u>Period</u>	Beginning Balance on Prior Measurement <u>Period Deferrals</u>	Current Measurement Períod <u>Additions</u>	Amortization of Amounts Recognized in Current Period <u>Pension Expense</u>	End of Year <u>Balance</u>
Deferred Outflows of Resources:						
Differences between expected and actual experience	2017	4.54	\$ 6,212,920	s -	\$ 2,446,031	\$ 3,766,889
Differences between expected and actual experience	2018	4.37	3,111,211	-	923,208	2,188,003
Change in assumptions	2018	4.26	-	14,139,836	3,319,210	10,820,626
Net difference between projected and actual investment earnings on pension plan investments	2015	5.00	470,124		470,124	-
Net difference between projected and actual investment earnings on pension plan investments	2016	5.00	3,637,596	-	1,818,798	1,818,798
Net difference between projected and actual investment earnings on pension plan investments	2017	5.00	1,577,429	-	525,810	1,051,619
Net difference between projected and actual investment earnings on pension plan investments	2018	5.00	( <b>9,715,8</b> 21)		(2,428,955)	(7,286,866)
Net difference between projected and actual investment earnings on pension plan						
investments	2019	5.00		24,936,745	4,987,349	19,949,396
Total Deferred Outflows of Resources <u>Deferred (Inflows) of Resources</u> : Differences between expected and actual			5,293,459	39,076,581	12,061,575	32,308,465
experience:	2018	4.26	-	(506,412)	(118, <b>875)</b>	(387,536)
Change in assumptions	2017	4.54	(1,077,873)		(424,359)	(653,514)
Total Deferred (inflows) of Resources			(1,077,873)	(506,412)	(543,235)	(1,041,050)
Total Collective Deferred Outflows (Inflows) of Resources			\$	\$	\$	\$31,267,415

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

Fiscal		
<u>Year*</u>		<u>Total</u>
2019	\$	11,048,216
2020		8,299,448
2021		6,100,315
2022	_	5,819,436
	\$	31,267,415

\*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.

#### (A Component Unit of the Town of Watertown, Massachusetts)

#### Schedule of Changes in the Net Pension Liability

#### Required Supplementary Information

For the Year Ended December 31, 2018

(Unaudited)

		<u>2018</u>		<u>2017</u>		<u>2016</u>		<u>2015</u>		<u>2014</u>
Total Pension Liability										
Service cost	\$	3,305,996	\$	3,338,860	\$	3,895,597	\$	3,895,599	\$	3,745,767
Interest on unfunded liability - time value of money		15,9 <b>4</b> 5,986		15,330,990		14,442,636		14,615,997		14,213,781
Changes in plan provisions		-		-		778,002		-		-
Experience (gain)/loss		(506,412)		4,034,420		11,104,982		-		-
Changes of assumptions		14,139,836		-		(1,926,591)		-		-
Benefit payments, including refunds of member contributions	-	(15,378,326)	-	(14,413,329)	-	(14,006,492)	-	(13,810,095)	_	(13,081,678)
Net change in total pension liability		17,507,080		8,290,941		14,288,134		4,701,501		4,877,870
Total pension liability - beginning	_	206,084,943	_	197,794,002		183,505,868		178,804,367	-	173,926,497
Total pension liability - ending (a)		223,592,023		<b>206,084,94</b> 3		197,794,002		183,505,868		178,804,367
Plan Fiduciary Net Position										
Contributions - employer		18,698,742		17,173,496		15,598,496		14,023,496		12,465,133
Contributions - member		4,369,364		3,400,281		3,465,100		3,193,042		3,186,332
Net investment income		(9,967,302)		24,612,432		8,827,366		1,842,184		7,674,151
Benefit payments, including refunds of member contributions		(15,378,326)		(14,413,329)		(14,006,492)		(13,288,770)		(12,587,850)
Administrative expense		(339,624)		(309,692)		(279,447)		(300,358)		(279,447)
Other	-	456,764	-	481,871	-	480,658		537,085	-	487,925
Net change in plan fiduciary net position		(2,160,382)		30,945,059		14,085,681		6,006,679		10,946,244
Plan fiduciary net position - beginning	-	185,657,351	_	154,712,292	-	140,626,611	-	134,619,932	_	123,673,688
Plan fiduciary net position - ending (b)	_	183,496,969	_	185,657,351	-	154,712,292	-	140,626,611	-	134,619,932
Net pension liability (asset) - ending (a-b)	\$_	40,095,054	\$_	20,427,592	\$_	4 <b>3,081,7</b> 10	\$_	42,879,257	\$_	44,184,435

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See Independent Auditors' Report.

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

#### Schedules of Net Pension Liability, Contributions, and Investment Returns

Required Supplementary Information

For the Year Ended December 31, 2018

(Unaudited)

Schedule of Net Pension Liability		<u>2018</u>		<u>2017</u>		<u>2016</u>		2015		<u>2014</u>
Total pension liability Plan fiduciary net position	\$ -	223,592,023 (183,496,969)	\$	206,0 <b>84,943</b> (185,657,351)	\$ -	197,794,002 (154,712,292)	\$	183,505,868 (140,626,611)	\$	17 <b>8,8</b> 04,367 (134,619,930)
Net pension liability (asset)	\$_	40,095,054	\$_	20,427,592	\$_	<b>43,081,710</b>	\$_	<b>42,87</b> 9,257	\$_	44,184,437
Plan fiduciary net position as a percentage of the total pension liability		82.1%		90.1%		78.2%		76.6%		75.3%
Covered payroll	\$	33,927,238	\$	33,501,993	\$	35,192,067	\$	31,539,610	\$	30,326,548
Participating employer net pension liability (asset) as a percentage of covered payroll		118%		61.0%		122.4%		136.0%		145.7%
Schedule of Contributions		<u>2018</u>		<u>2017</u>		<u>2016</u>		<u>2015</u>		<u>2014</u>
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$	18,698,742 (18,698,742)	\$	17,173,496 (17,173,496)	\$	15,598,496 (15,598,496)	\$	14,023,496 (14,023,496)	\$	12,448,496 (12,448,496)
Contribution deficiency (excess)	\$_	-	\$_	-	\$_	-	\$_		\$_	-
Covered payroll	\$	33,927,238	ş	33,501,993	\$	35,192,067	\$	31,539,610	\$	30,326,548
Contributions as a percentage of covered payroll		55.1%		51.3%		44.3%		44.5%		41.0%
Schedule of Investment Returns										
Year Ended December 31		<u>2018</u>		<u>2017</u>		<u>2016</u>		<u>2015</u>		<u>2014</u>
Annual money weighted rate of return, net of investment expense		unavailable		14.44%		6.68%		0. <b>78%</b>		6.42%

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

See Independent Auditors' Report.



#### **INDEPENDENT AUDITORS' REPORT**

To the Contributory Retirement Board Watertown Contributory Retirement System Town of Watertown, Massachusetts

#### **Report on Schedules**

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

#### **Management's Responsibility for the Schedules**

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

## Auditors' Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including

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the assessment of the risks of material misstatement of the schedule of employer allocations and specified totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the 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 employer allocations and specified totals included in the schedule of employer allocations and specified totals are appropriate.

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 Watertown Contributory Retirement System as of and for the year ended December 31, 2018, in accordance with accounting principles generally accepted in the United States of America.

#### **Restriction on Use**

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

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Melanson

Andover, Massachusetts December 10, 2020

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

Schedule of Employer Allocations

	FY 2018 Actual	
	Employer	<b>Alloc</b> ation
<b>Employer</b>	<b>Contributions</b>	Percentage
Town	\$ 1 <b>8,</b> 398,742	98.3956%
Housing	300,000	1.6044%
Total	\$ <u>18,698,742</u>	100.0000%

See actuarial assumptions in the Town of Watertown, Massachusetts Contributory Retirement System audited financial statements.

## (A Component Unit of the Town of Watertown, Massachusetts)

Schedule of Pension Amounts by Employer

As of and for the Year Ended December 31, 2018

		Town		Housing		Total
Net Pension Liability	\$	39,451,769	\$	643,285	\$	40,095,054
Deferred Outflows of Resources						
Differences between expected and actual experience	\$	5,859,352	\$	95,540	\$	5,954,892
Changes of assumptions		10,647,020		173,606		1 <b>0,82</b> 0,626
Net difference between projected and actual investment earnings on pension plan investments		15,283,736		249,211		15,532,947
Changes in proportion and differences between employer contributions and proportionate share of contributions		29,782		(29,782)		-
Total Deferred Outflows of Resources	s	31,819,890	s -	488,575	s	32,308,465
Deferred inflows of Resources	-	01/010/000	-		-	02,000,100
Differences between expected and actual experience	s	381,318	Ś	6,218	Ś	387,536
Changes of assumptions	4	643,029	•	10,485	Ŷ	653,514
Total Deferred Inflows of Resources	\$	1,024,347	\$	16,703	\$ 	1,041,050
	°=	1,024,347	°=	10,703	°=	1,041,050
Pension Expense	s	44 500 000	s	188.856	s	
Proportionate share of pension expense	Ş	11,582,282	Ş	100,000	Ş	11,771,138
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions		10,178		(10,178)		-
Total Pension Expense	\$	11,592,460	\$	178,678	\$ 	11,771,138
Contributions	-				-	
Actuarially determined contribution	\$	18,398,742	\$	300,000	\$	18,698,742
Contributions made		(18,398,742)		(300,000)		(18,698,742)
Contribution deficiency/(excess)	\$	•	\$	-	\$	-
Contributions as a percentage of covered payroll	-	55%	-	55%	-	55%
Deferred Outflows/(Inflows) Recognized in Future Pension Expense						
June 30, 2019 June 30, 2020 June 30, 2021 June 30, 2022 Total Deferred Outflows/(Inflows) Recognized in Future Pension Expense	\$ _ \$_	10,870,958 8,166,292 6,002,442 5,755,851 30,795,543	\$ _ \$_	177,258 133,156 97,873 63,585 471,872	\$ 	11,048,216 8,299,448 6,100,315 5,819,436 31,267,415
Discount Rate Sensitivity	-		-		=	
1% decrease (6.8%)	\$	62,247,835	\$	1,014,989	\$	63,262,824
Current discount rate (7.8%)	\$	39,451,769	\$	643,285	\$	40,095,054
1% increase (8.8%)	\$	20,027,191	\$	326,556	\$	20,353,747
Covered Payroli	\$	33,382,909	\$	544,329	\$	33,927,238

See actuarial assumptions in the Watertown Contributory Retirement System's audited financial statements.

## WATERTOWN, MASSACHUSETTS CONTRIBUTORY RETIREMENT SYSTEM (A Component Unit of the Town of

Watertown, Massachusetts)

Financial Statements, Required Supplementary Information, and Other Information

For the Year Ended December 31, 2017

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## **INDEPENDENT AUDITORS' REPORT**

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

To the Retirement System Board Town of Watertown, Massachusetts

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

## Management's Responsibility for the Financial Statements

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

## Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of December 31, 2017, and the respective changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## **Other Matters**

## Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and the Schedules of Changes in the Net Pension Liability, of Net Pension Liability, of Contributions, and of Investment Returns, listed in the foregoing table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance,

Melanson Heath

February 5, 2019

## MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Watertown Contributory Retirement System, we offer readers this narrative overview and analysis of the financial activities of the System for the year ended December 31, 2017. Unless otherwise noted, all amounts in the Management's Discussion and Analysis are expressed in thousands.

## A. 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 comprise 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.

<u>Fund financial statements</u>. 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 for pension benefits. This statement reflects the System's investments at fair value, as well as cash, receivables and other assets and liabilities.

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

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

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

## B. FINANCIAL HIGHLIGHTS

- The System's total net position available for benefits was \$185,657,351 at December 31, 2017.
- The System's net position increased by \$30,945,059 which is primarily due to increased employer contributions and investment performance.

- Employer and employee contributions (including transfers from other systems) • to the plan were \$20,576,867 which represents a \$1,513,271 increase over the preceding year. The employer share of contributions represents 82% of the total contributions.
- Benefits paid to plan participants were \$13,731,369. At December 31, 2017, • there were 425 retirees and beneficiaries in receipt of pension benefits.
- The System's December 31, 2017 funded ratio based on the GASB 68 actuarial • valuation report (Accounting) was 90.1%. The System's January 1, 2018 funded ratio based on the actuarial valuation (Funding) was 88.2%.

## C. FINANCIAL STATEMENT ANALYSIS

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

FIDUCIARY NET POSITION		
	<u>2017</u>	<u>2016</u>
Assets		
Cash and receivables	\$ 1,455	\$ 1,695
Investments	184,250	153,050
Total assets	1 <b>85,7</b> 05	1 <b>54</b> ,745
Liabilities		
Accrued payroll and other	48	33
Net Position	\$ <u>185,657</u>	\$ <u>154,712</u>
CHANGES IN FIDUC	CIARY NET POSITION	
	<u>2017</u>	<u>2016</u>
Additions		
Contributions	<b>\$ 21,059</b>	\$ 19,544
Investment Income, net	24,571	9,116
Total Additions	45,630	28,660
Deductions		
Benefit payments	13,731	13,657
Other	954	918
Total Deductions	14,685	14,575
Changes in net position	30,945	14,085
Net position - beginning of year	1 <b>54,712</b>	140,627
Net position - end of year	\$ 185,657	\$ <u>154,712</u>

# 

The System's total assets as of December 31, 2017 were \$185,704,880 and mostly comprised of cash and investments. Total assets increased \$30,959,276 or 20% from the prior year primarily due to investment performance. Total liabilities as of December 31, 2017 were \$47,529. Total liabilities increased by \$14,217 or 43% over the prior year.

The System was 88.2% funded based on its actuarial valuation of January 1, 2018 with three years remaining in its amortization period.

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. The System received \$246,331 for reimbursements from the Commonwealth of Massachusetts for pre-1998 COLA in calendar year 2017. Contributions and net investment gain for calendar year 2017 resulted in a net gain of \$45,629,580. Employer's contributions increased by \$1,575,000. The System had net investment gain of \$24,570,842 in 2017 versus a gain of \$9,115,979 in 2016.

The primary deductions of the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions, and the costs of administering the System. Total deductions for 2016 were \$14,684,521, which represents an increase of 0.8% over deductions of \$14,574,548 in 2016. The payment of pension benefits increased by \$74,254 or 0.6% over the previous year. The increase in these expenses resulted primarily from the annual COLA increases received by retirees and their beneficiaries as well as additional retirees.

## REQUESTS FOR INFORMATION

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

Watertown Contributory Retirement System

149 Main Street

Watertown, Massachusetts 02472

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

Statement of Fiduciary Net Position

December 31, 2017

# ASSETS

Cash and short-term investments	\$	941,511
Investments		184,249,602
Accounts receivable	_	513,767
Total Assets	\$_	185,704,880
LIABILITIES AND NET POSITION		
Accrued payroll	\$	13,511
Other liabilities	_	34,018
Total Liabilities		47,529
Net position restricted for pensions	_	185,657,351
Total Liabilities and Net Position	\$_	185,704,880

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

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

Statement of Changes in Fiduciary Net Position

For the Year Ended December 31, 2017

Additions: Contributions: Employers Plan members Other systems and Commonwealth of Massachusetts Other	\$ 17,173,496 3,403,371 464,834 17,037
Total contributions	21,058,738
Investment income: Appreciation in fair value of investments Less: management fees	25,718,882 (1,148,040)
Net investment gain	<b>24</b> ,570,842
Total additions	45,629,580
Deductions: Benefit payments to plan members and beneficiaries Refunds to plan members Transfers to other systems Administrative expenses	13,731,369 293,943 388,015 271,194
Total deductions	<b>14,68</b> 4,521
Net increase	30,945,059
Net position restricted for pensions: Beginning of year	154,712,292
End of year	\$ <u>185,657,351</u>

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

# WATERTOWN CONTRIBUTORY RETIREMENT SYSTEM

## **Notes to Financial Statements**

## 1. Description of Plan

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

Membership of the plan consisted of the following at January 1, 2018 (the latest actuarial valuation):

Retirees and beneficiaries receiving benefits	425
Terminated plan members entitled to but not yet	
receiving benefits	165
Active plan members	523
Total	1,113
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%
Beginning July 1, 1996	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% 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 three-year average annual rate of regular compensation for those hired prior to April 2, 2012 and the highest five-year average annual rate of regular compensation for those first becoming members of the Massachusetts System on or after that date. However, per Chapter 176 of the Acts of 2011, for members who retire on or after April 2, 2012, if in the 5 years of creditable service immediately preceding retirement, the difference in the annual rate of regular compensation between any 2 consecutive years exceeds 100 percent, the normal yearly amount of the retirement allowance shall be based on the average annual rate of regular compensation received by the member during the period of 5 consecutive years preceding retirement. Benefit payments are based upon a member's age, length of creditable service, level of compensation and group classification.

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

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

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

# Participant Refunds

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

# 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 systems. The system is governed by a five-member board. The five members include two appointed by the town, two elected by the members and retirees, and a fifth member chosen by the other four members with the approval of the Public Employee Retirement Administration Commission.

## Summary of Significant Accounting Policies

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

#### **Basis of Accounting**

The System follows accounting policies mandated by the Commonwealth of Massachusetts. The accounting records are maintained on the accrual basis of accounting. Contributions from the Town's employees are recognized as revenue in the period in which employees provide services to the Town.

#### **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, 2017, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 14.44%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

## 3. Cash and Short-Term Investments

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

As of December 31, 2017, \$676,868 of the System's bank balance of \$1,182,543 was exposed to custodial credit risk as uninsured, uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

The System's investments are exposed to custodial credit risk because the related securities are uninsured, unregistered and held by the System's brokerage firm, which is also the counterparty to these securities. This risk is managed by the custodian's errors and omissions policy and securities are reported as separately identifiable securities with individual CUSIP numbers.

### 4. Investments

### A. Credit Risk

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

As of December 31, 2017, \$113,182,123 of the System's investment balance of \$184,249,602 was exposed to custodial credit risk as uninsured, uncollateralized, and collateral held by pledging bank's trust department not in the System's name.

The total value of investments of \$184,249,602 is held in debt and equity mutual funds which are exempt from rating disclosure. However, \$22,709,877 is held in a corporate bond fund with an average S&P rating of AA.

B. Custodial Credit Risk

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

The System manages this risk by investing in Pension Reserves Investment Trust (PRIT), having Securities Investor Protection Corporation (SIPC) coverage, excess SIPC coverage, and by holding assets in separately identifiable trusts.

C. Concentration of Credit Risk

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

The System has multiple investments in one issuer greater than 5% of total investments.

R + M Core Bond Fund	\$ 30,5	14,039
Earnest Partners International	\$ 16,9	59,123

D. Interest Rate Risk

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

E. Foreign Currency Risk

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

F. Fair Value

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

Out of the \$184,249,602 of total investments, \$75,092,431 are measured based on net asset value.

			Fair Value Measurements Using:							
			C	uoted prices						
				in active		Significant	Significant			
				markets for		observable	unobservable	<b>;</b>		
			id	entical assets		inputs	inputs			
Description		<u>Value</u>		<u>(Level 1)</u>		(Level 2)	<u>(Level 3)</u>			
Investments by fair value level:										
Debt securities										
Corporate bonds	\$	30,514,039	\$	-	\$	30,514,039	\$-			
Equity securities										
Equity mutual funds		67,700,768		67,700,768		-	-			
Domestic stock funds	_	10,942,364	–	10,942,364	-	-	-	_		
Subtotal		109,157,171	\$_	78,643,132	\$	30,514,039	\$	_		
						Redemption				
Investments measured at				Unfunded		Frequency (If	Redemption			
the net asset value (NAV):			ł	Commitments		Currently Eligible	) Notice Period	_		
External Investment Pools:										
PRIT		52,153,372	\$	8,225,466		Monthly	30 days			
						Vintage Year:	N/A			
						Illiquid				
Limited Partnerships										
Arsenal real estate fund		281,996		-		llliquid	N/A			
Auda partners		292,253	\$	795,000		Illiquid	N/A			
Earnest partners international		16,959,123		-		Monthly	5 days			
Guggenheim high yield fund		4,524,953		-		Monthly	30 days			
RCP Fund	_	880,734		-		Illiquid	N/A			
Subtotal	_	<b>75,092,43</b> 1								
Total	\$_	184,249,602	1							

# 5. Accounts Receivable

Annually, the Public Employee Retirement Administration (PERAC) approves the amount of employer contributions (pension appropriations) to be made to the System. The accounts receivable balance represents primarily legal amounts due from employers for pension appropriation not received until after December 31, 2017.

## 6. Accrued Payroll/Other Liabilities

This balance represents payment for salaries paid by the Town of Watertown on behalf of the System.

## 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, 2018 for December 31, 2017.

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

A. Net Pension Liability of Employers

Total pension liability	\$	206,084,943
Plan fiduciary net position	-	(185,657,351)
Employers' net pension liability	\$_	20,427,592
Plan fiduciary net position as a percentage of		
total pension liability		<b>90.1%</b>

## B. Actuarial Assumptions

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

Valuation Date	1/1/2018
Actuarial cost method	Entry Age
Actuarial assumptions:	
Investment rate of return	7.90%
Projected salary increases	3,50%
Post-retirement cost-of-living adjustment	3.00%

Actuarial valuation of the ongoing Systems involves estimates of the reported amounts and assumptions about probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. Mortality rates were based on both pre-retirement and beneficiary RP-2014 Blue Collar Mortality Table for males and females, adjusted to Scale MP-2016. Mortality for disabled members is represented by the RP-2000 Mortality Table set forward two years for all disabled members. Generational adjusting is based on Scale MP-2016.

C. Target Allocations

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of geometric average real rates of return for each major asset class included in the System's targeted asset allocation as of December 31, 2017, are summarized in the following table.

Asset Class	Target Asset <u>Allocation</u>	Long-term Expected Real Rate <u>of Return</u>
Core Fixed Income	19.00%	1.65%
High Yield Fixed Income	2.50%	3.05%
Global Fixed Income	4.00%	1.85%
Domestic Large Cap	25.00%	5.55%
Domestic Small Cap	5.00%	6.00%
International Equity	22.00%	5.55%
Real Estate	10.00%	4.20%
Hedge Funds	7.50%	3.45%
Private Equity	5.00%	7.05%
Total	100.00%	

D. Discount Rate

The discount rate used to measure the total pension liability was 7.90%. The projection of cash flows used to determine the discount rate assumed that contributions from participating employers will be made based on the actuarially determined rates based on the Board's funding policy, which establishes the contractually required rates by Statute. Based on those assumptions, the System's fiduciary net position was projected to be available to make all the projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

## E. Sensitivity of Discount Rate

The following presents the net pension liability of the participating employers calculated using the discount rate of 7.90%, as well as what the participating employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (6.90%) or 1 percentage-point higher (8.90%) than the current rate:

		Current	
	1%	Discount	1%
	Decrease	Rate	Discount
Year Ended	<u>(6.90%)</u>	<u>(7.90%)</u>	<u>(8.90%)</u>
December 31, 2017	\$ <b>41,201,80</b> 2	\$ 20,427,592	\$ 2,710,262

## F. Deferred Outflows/Inflows of Resources

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	<b>\$ 9,324,131</b>	\$-
Changes of assumptions	-	1,077,873
Difference between projected and actual investment earnings	-	4,030,673
Changes in proportion and differences between contributions and proportionate	400.000	400.000
share of contributions	160,923	160,923
Total	\$ <u>9,485,054</u>	\$

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

	Measurement <u>Year</u>	Amortization <u>Period</u>	-	Beginning Balance on Prior Measurement ariod Deferrals		Current Neasurement Period <u>Additions</u>	-	Amortization of Amounts Recognized in Current Period ension Expense	End of Year <u>Balance</u>
Deferred Outflows of Resources:									
Changes in experience	2017	4.54	\$	8,658,951	\$	-	\$	(2,446,032) \$	6,212,919
	2018	4.37		-		4,034,420		(923,208)	3,111,212
Changes in proportion and differences between contributions and proportionate share of									
contributions	2016	4.54		6,350		-		(2,500)	3,850
	2017	4.54		162,297		-		(45,847)	116,450
	2018	4.37	_	-	_	52,677		(12,054)	40,623
Total Deferred Outflows of Resource	\$		\$_	8,827,598	\$_	4,087,097	\$	(3,429,641) \$	9,485,054
Deferred (Inflows) of Resources:			-						
Changes in assumptions	2017	4.54	\$	(1,502,232) \$	\$	-	\$	424,359 \$	(1,077, <b>873)</b>
Net difference between projected and actual earnings on pension plan	d								
investments	2015	5		940,251		-		(470,126)	470,125
	2016	5		5,456,393		-		(1 <b>,818</b> ,799)	3,637,594
	2017	5		2,103,239		-		(525,810)	1, <b>577,429</b>
	2018	5		-		(12,144,776)		2,428,955	(9,715,821)
Changes in proportion and differences between contributions and proportionate share of									
contributions	2016	4.54		(6,350)		-		2,500	(3,850)
	2017	4.54		(162,297)		-		45,847	(116,450)
	2018	4.37	-	-	_	(52,677)		12,054	(40,623)
Total Deferred (Inflows) of Resource	5		\$	6,829,004	\$_	(12,197,453)	\$	98,980 \$	(5,269,469)

The following schedule reflects the amortization of the balance of deferred outflows/inflows of resources, excluding employer-specific amounts, for the net difference between projected and actual investment earnings:

Year	ended	June	30:
------	-------	------	-----

2018		\$ 3,330,657
2019		2,860,533
2020		1 <b>11,765</b>
2021		(2,087,370)
	Total	\$ <u>4,215,585</u>

#### Schedule of Changes in the Net Pension Liability

(Unaudited)

		<u>2017</u>	<u>2016</u>	<u>2015</u>		<u>2014</u>
Total pension liability						
Service cost	\$	3,338,860	\$ 3,895,597	\$ 3,895,599	\$	3,745,767
Interest on unfunded liability - time value of \$		15,330,990	14,442,636	14,615,997		14,213,781
Changes in plan provisions		-	77 <b>8</b> ,0 <b>02</b>	-		-
Experience loss		4,034,420	11,104,982	-		-
Changes of assumptions		-	(1, <b>926,59</b> 1)	-		-
Benefit payments, including refunds						
of member contributions	-	(14,413,329)	(14,006,492)	(13,810,095)	-	(13,081,678)
Net change in total pension liability		8,290,941	14,288,134	4,701,501		4,877,870
Total pension liability - beginning	_	197,794,002	183,505,868	178,804,367	_	173,926,497
Total pension liability - ending (a)		206,084,943	197,794,002	183,505,868		178,804,367
Plan fiduciary net position						
Contributions - employer		17,173,496	15,598,496	14,023,496		12,465,133
Contributions - member		3,400,281	3,465,100	3,193,042		3,186,332
Net investment income		24,612,432	8,827,366	1,842,184		7, <b>674,15</b> 1
Benefit payments, including						
refunds of member contributions		(14,413,329)	(14,006,492)	(13,288,770)		(12,587,850)
Administrative expense		(309,692)	(279,447)	(300,358)		(279,447)
Other	_	481,871	480,658	537,085	_	487,925
Net change in plan fiduciary net position		30,945,059	14,085,681	6,006,679		10,946,244
Plan fiduciary net position - beginning	_	154,712,292	140,626,611	134,619,932	_	123,673,688
Plan fiduciary net position - ending (b)	_	185,657,351	154,712,292	140,626,611	_	134,619,932
Net pension liability (asset) - ending (a-b)	\$_	20,427,592	\$ 43,081,710	\$ 42,879,257	\$_	44,184,435

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

#### Schedules of Net Pension Liability, Contributions, and Investment Returns

(Unaudited)

Schedule of Net Pension Liability					
	<u>2017</u>	<u>2016</u>	<u>2015</u>		<u>2014</u>
Total pension liability Plan fiduciary net position	\$ 206,084,943 185,657,351	\$ 197,794,002 154,712,292	\$ 183,505,868 140,626,611	\$	178,804,367 134,619,930
Net pension liability (asset)	\$ 20,427,592	\$ 43,081,710	\$ 42,879,257	\$_	44,184,437
Plan fiduciary net position as a percentage of the total pension liability	90.1%	78.2%	76.6%		75 <b>.3%</b>
Covered payroll	\$ 33,501,993	\$ 35,192,067	\$ 31,539,610	\$	30,326,548
Participating employer net pension liability (asset) as a percentage of covered payroll	61.0%	122.4%	136.0%		145.7%
Schedule of Contributions	<u>2017</u>	<u>2016</u>	<u>2015</u>		<u>2014</u>
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$ 17,173,496 17,173,496	\$ 15,598,496 15,598,496	\$ 14,023,496 14,023,496	\$	12,448,496 12,448,496
Contribution deficiency (excess)	\$ _	\$ -	\$ _	\$	-
Covered payroll	\$ 33,501,993	\$ 35,192,067	\$ 31,539,610	\$	30,326,548
Contributions as a percentage of covered payroll	51.3%	44.3%	44.5%		41.0%
Schedule of Investment Returns Year Ended December 31					
	<u>2017</u>	<u>2016</u>	<u>2015</u>		<u>2014</u>
Annual money weighted rate of return, net of investment expense	14.44%	6.68%	0.78%		6.42%

Schedules are intended to show information for 10 years.



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Manchester, NH

Greenfield, MA Ellsworth, ME

#### Independent Auditors' Report

To the Retirement System Board Town of Watertown, Massachusetts

#### **Report on Schedules**

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

#### Management's Responsibility for the Schedules

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

#### Auditors' Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of 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 Watertown Contributory Retirement System as of and for the year ended December 31, 2017, in accordance with accounting principles generally accepted in the United States of America.

## **Restriction on Use**

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

Melanson Heath

February 5, 2019

## SCHEDULE OF EMPLOYER ALLOCATIONS

Employer	FY 2018 Required Employer <u>Contributions</u>	Employer Allocation <u>Percentage*</u>
Town Housing	\$ 16,853,521 <u>319,975</u>	98.14% <b>1.86%</b>
Total	\$ <u>17,173,496</u>	100.00%

\*Calculated percentages differ from amounts shown by immaterial amounts.

See actuarial assumptions in the Town of Watertown, Massachusetts (Contributory Retirement System) audited financial statements.

## SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

## As of and for the year ended December 31, 2017

			Deferred Outflows of Resources							Deforred inflows of Resources									Pension Expense					
				Changes in Proportion and differences						Net Difference Between Projected				Changes in Proportion nd differences										
	Net Pension Ity Liability		-	Differences between Between contributions and l			Total and Actual Deferred Investment				between contributions and			Total Deferred		roportionate Share of	Change in			Total				
Entity			ł	Expected and Actual Experience		proportionate shares of Contributions		Outilows of <u>Resources</u>		Earnings on Pension Plan Investments		Changes in Assumptions		proportionate shares of Contributions		inflows of Resources		Plan Pension <u>Expanse</u>	Proportional Share of <u>Contributions</u>		Employer Pension <u>Expense</u>			
Tawn Housing	\$	20,046,985 380,607	\$	9,150,405 173,726	\$	157,434 3,489	\$	9,307,839 177,215	\$	3,955,574 75,099	\$	1,057,789 20,084	\$	3,489 157,434	\$	5,016,852 252,617	\$	6,322,233 120,032	\$	(689) 689	\$	6,321,544 120,721		
Total for All Entities	\$	20,427,592	\$	9,324,131	\$	160,923	\$	9,485,054	\$	4,030,673	\$	1,077,873	\$	160,923	\$	5,269,469	\$	6,442,265	\$		\$	6,442,265		

See actuarial assumptions in the Town of Watertown, Massachusetts (Contributory Retirement System) audited financial statements.

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COMMONWEALTH OF MASSACHUSETTS

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