

**MALDEN CONTRIBUTORY  
RETIREMENT SYSTEM  
(a Component Unit of the  
City of Malden, Massachusetts)**

Report on Examination of Basic Financial  
Statements and Additional Information

Year Ended December 31, 2018

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



**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the City of Malden, Massachusetts)**

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**DECEMBER 31, 2018**

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**INDEPENDENT AUDITORS' REPORT**

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

**Report on the Financial Statements**

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

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

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

**Auditors' Responsibility**

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

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

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

## Opinions

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

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules listed under the required supplementary information section in the accompanying table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

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

In accordance with *Government Auditing Standards*, we have also issued a report dated June 14, 2019 on our consideration of the System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

*Roselli, Clark & Associates*

Roselli, Clark & Associates  
Certified Public Accountants  
Woburn, Massachusetts  
June 14, 2019

## MANAGEMENT'S DISCUSSION AND ANALYSIS

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

### Financial Highlights

The System's funding objective is to meet long-term benefit obligations through contributions and investment income. The System's actuary estimates that the System is nearly 73% funded at December 31, 2018.

The System's investment performance outpaced the major U.S. stock and bond indices and benchmarks, most of which reported negative returns in 2018. The System's investment portfolio returned over 5% in 2018, net of investment management fees. The majority of Massachusetts public pension plans reported negative investment returns in 2018.

The System's fiduciary net position increased nearly \$5.9 million in 2018.

### Overview of the Financial Statements

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

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

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

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

***Required Supplementary Information*** – includes this management's discussion and analysis and various unaudited schedules.

## Financial Analysis

### Fiduciary Net Position

The System's total assets as of December 31, 2018 approximated \$262.7 million and principally consisted of investments recorded at fair value. Total asset increased by approximately \$10.9 million in 2018, due primarily to a positive investment portfolio performance. Receivables and liabilities increased approximately \$4.3 million and \$5.0 million, respectively, in 2018 due to the timing of investment purchases and sales.

	December 31,	
	2018	2017
Assets:		
Cash and cash equivalents	\$ 3,884,340	\$ 1,980,267
Investments, at fair value	253,730,060	249,022,939
Receivables and other assets	5,054,624	756,460
Total Assets	262,669,024	251,759,666
Liabilities	5,084,919	72,677
Fiduciary Net Position	<u>\$ 257,584,105</u>	<u>\$ 251,686,989</u>

### Change in Fiduciary Net Position

Fiduciary net position increased nearly \$5.9 million in 2018, primarily as a result of net investment earnings of over \$10.9 million for the year.

	Year Ended December 31,	
	2018	2017
Additions:		
Contributions	\$ 16,918,342	\$ 16,368,713
Investment income, net	10,901,569	42,294,081
Total Additions	27,819,911	58,662,794
Deductions:		
Benefits and refunds to Plan members	21,576,579	21,256,259
Administrative and other expenses	346,216	332,176
Total Deductions	21,922,795	21,588,435
Change in Fiduciary Net Position	<u>\$ 5,897,116</u>	<u>\$ 37,074,359</u>

**Additions** – The amount needed to finance pension benefits is accumulated through the collection of employer and employees contributions, reimbursements from the Commonwealth of Massachusetts for pre-1998 Cost of Living Adjustments and through earnings on investments. Contributions increased nearly \$550,000 year-over-year. Employer contributions represent nearly \$12.1 million, or approximately 71%, of total contributions. Employer contributions are determined by actuarial valuation.

The System's investment portfolio produced a 2018 return of 5.7%, net of investment management fees. This return was among the highest for public pension plans in the Commonwealth of Massachusetts and one of the few that reported positive investment returns. The System shifted its investment composition from domestic equities (particularly technology) and towards fixed income securities in the fourth calendar quarter. This shift contributed greatly towards the positive investment performance in 2018; the S&P 500 composite and Dow Jones Industrial Average returned -6.2% and -5.6%, respectively, for 2018.

**Deductions** – The primary deductions for the System include the payment of pension benefits to participants and beneficiaries, refunds of contributions and the costs of administering the system. Benefit payments represented over 98% of total 2018 deductions and were approximately \$320,000 higher than 2017 benefit payments.

The remaining 2018 administrative and other expenses approximated \$346,000, which was consistent with the prior year.

### **Overall Financial Position**

The System's positive investment performance in 2018 permitted it to maintain an approximate 73% funded ratio at December 31, 2018. The System's 30-year investment return as published by PERAC significantly exceeds the discount rate used by the System in its actuarial studies. Provided the System continues to garner strong investment performances, it is possible that the System will achieve fully funded status on or before the expected date included in latest actuarial valuation of 2030.

Although the System has been successful in garnering the yields necessary to achieve fully funded status in the required time frame, the System (like so many other institutional investors) has experienced a great deal of volatility in its investments. Management believes that the volatility in the worldwide markets may continue for the foreseeable future. Accordingly, management intends to actively monitor the System's investment positions to best maximize returns while mitigating risk as best as it can.

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

Our discussion and analysis is designed to provide the Malden Retirement Board, our membership, taxpayers, investors and creditors with a general overview of the System's financial results and to demonstrate the System's accountability for the funding it receives. If you have any questions about this report or need additional financial information, contact the Retirement Board at 17 Pleasant Street, Malden, Massachusetts 02148.

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the Town of Malden, Massachusetts)**

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

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Assets:	
Cash and cash equivalents	\$ 3,884,340
Investments, at fair value:	
Fixed income securities	141,356,606
Equity securities	112,373,454
Receivables:	
Contributions	101,589
Interest income	651,504
Open trades	4,286,968
Other	<u>14,563</u>
Total Assets	<u>262,669,024</u>
Liabilities:	
Accounts payable and accrued expenses	92,889
Open trades	<u>4,992,030</u>
Total Liabilities	<u>5,084,919</u>
Net Position Restricted for Pensions	<u>\$ 257,584,105</u>

See accompanying notes to basic financial statements.



**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the Town of Malden, Massachusetts)**

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

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Additions:

Employer contributions	\$ 12,071,787
Employee contributions	4,251,358
Other contributions	<u>577,040</u>
Total contributions	<u>16,900,185</u>

Investment income:

Interest and dividends	3,914,241
Net appreciation in fair value of investments	7,747,365
Less investment management fees	<u>(760,037)</u>

Total net investment income	<u>10,901,569</u>
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Other income	<u>18,157</u>
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Total Additions	<u>27,819,911</u>
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Deductions:

Benefits and refunds to Plan members:

Benefits to retirees and survivors	20,493,216
Member refunds	335,583
Transfers and reimbursements to other systems	747,780

Administrative expenses:

Operations payroll and related personnel costs	233,555
Other	<u>112,661</u>

Total Deductions	<u>21,922,795</u>
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Net Change in Net Position	5,897,116
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Net Position Restricted for Pensions:

Beginning of the year	<u>251,686,989</u>
End of the year	<u><u>\$ 257,584,105</u></u>

See accompanying notes to basic financial statements.

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM  
(A Component Unit of the City of Malden, Massachusetts)**

**NOTES TO THE FINANCIAL STATEMENTS  
AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2018**

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**1. DESCRIPTION OF THE PLAN**

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

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

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

Retirees and beneficiaries currently receiving benefits	666
Active plan members	816
Inactive plan members	<u>189</u>
Total	<u>1,671</u>

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

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

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

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

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

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

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

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

***Public Availability of Financial Statements*** – The Malden Retirement Board issues a publicly available financial report that includes financial statements and required supplementary information for the System. That report may be obtained by writing to the Malden Retirement Board, 17 Pleasant Street, Malden, Massachusetts 02148.

## **2. SIGNIFICANT ACCOUNTING POLICIES**

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

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

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

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

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

- *Level 1* – Inputs are quoted prices in active markets for identical investments at the measurement date.
- *Level 2* – Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the investment through correlation with market data at the measurement date and for the duration of the instrument’s anticipated life.
- *Level 3* – Inputs reflect the System’s best estimate of what market participants would use in pricing the investment at the measurement date.

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

	December 31, 2018	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
<b>Investments by fair value level</b>				
Debt securities:				
U.S. Treasury notes	\$ 76,122,989	\$ 76,122,989	\$ -	\$ -
Corporate bond obligations	38,433,862	38,433,862	-	-
Asset-backed securities	26,799,755	-	26,799,755	-
Equity securities	112,373,454	112,373,454	-	-
Total investments by fair value level	<u>\$ 253,730,060</u>	<u>\$ 226,930,305</u>	<u>\$ 26,799,755</u>	<u>\$ -</u>

Debt and equity securities classified in Level 1 are values using prices quoted in active markets for those securities. Debt securities classified in Level 2 were valued using observable inputs from similar securities, including basing value on yield currently available on comparable securities of issued with similar credit ratings.

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

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

**Derivatives** – The System may invest in derivative products, mainly currency hedges, to minimize the currency risk on international investments. The System had no derivative securities at December 31, 2018.

### 3. SYSTEM ADMINISTRATION

The System is administered by a five-person Board consisting of the City Controller (ex-officio member), two members elected by the participants in or retired from the service of the System, one member appointed by the City's Mayor and one member appointed by the other members of the Board.

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

		<b><u>Term Expires</u></b>
Ex-Officio Member:	Mr. Charles Ranaghan	No Specified Date
Appointed Member:	Mr. Gregory Lucey	June 11, 2022
Elected Member:	Mr. Warren Atkinson Jr. (Chair)	November 30, 2020
Elected Member:	Mr. Douglas Eisnor	November 30, 2020
Member Appointed by Other Members:	Mr. Domenic Fermano	No Specified Date

The Board is required to meet at least once a month and keep a record of its proceedings. The Board annually submits a financial statement of condition for the System with the Commissioner of PERAC. All retirement allowances are approved by the Board and submitted to a PERAC actuary for verification prior to payments being made. Expenses incurred by the System must be approved by at least two members of the Board.

### 4. DEPOSITS AND INVESTMENTS

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

***Investment Policy*** – The investment of the System's funds is the responsibility of the Board. The Board manages its investments using a January 2016 investment policy. The System's investment objective is to invest assets in a prudent and cost-effective manner seeking a total return greater than or equal to the actuarial investment rate of return adopted by the Board (currently 7.35%) while maintaining an appropriate level of risk for a pension fund.

The System's investment policy seeks to manage risk through diversification both across and within investment asset classes with a long-term bias towards equities. The Board, together with its external investment manager, determines the appropriate investment mix at its regular face-to-face meetings.

The System's investment policy seeks to invest no more than 75% of its investments in equities. No more than 60% of the System's investments can be invested in fixed income securities.

***Rate of Return*** – The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. The 2018 money-weighted rate of return was approximately 5.7%.

***Custody of Investments*** – State Street Bank and Trust ("SSBT") is the custodian of the System's investment portfolio. SSBT held all System investment securities at December 31, 2018 and provided investment transaction and reporting services throughout all of 2018. SSBT is engaged to provide these services through December 31, 2023.

**Investment Management** – The deBurlo Group provided investment advisory services to the System throughout all of 2018 under a service agreement that is set to expire on February 1, 2026. The System may terminate this service agreement for various reasons including, but not limited to, certain breaches of contract.

**Custodial Credit Risk: Deposits** – Deposits are subject to the risk of bank failure. The System may be unable to recover the full amount of its deposits in any one bank institution in the event of a bank failure. The System’s policy for custodial credit risk of deposits is to rely on Federal Deposit Insurance Corporation (“FDIC”) insurance coverage for the first \$250,000 of deposits held at each financial institution. At December 31, 2018, the System had bank deposits of \$1,888,134 exposed to custodial credit risk because it was uninsured and uncollateralized.

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

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

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

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

**Securities Credit Risk: Investments** – In the case of investments, there is the risk that in the event of an invested party will be unable to fulfill its obligations, such as to provide required payments to investors, to meet current or future performance expectations, to abide by industry regulations and proper operational practices, ceasing to exist, or filing for bankruptcy. In those instances, the System may not be able to recover the full amount of its principal investment and/or investment earnings. As previously noted, PERAC and Massachusetts statutory regulations have been enacted to reduce this risk. In evaluating its credit risk, the System relies on credit ratings assigned by Moody’s Investors Services and Standard and Poor’s Financial Services LLC. The System does voluntarily self-impose certain investment restrictions; however, those can be changed at the Board’s discretion. The System does maintain a significant portion (approximately 97%) of its monetary assets as investment holdings.

Credit quality ratings of investments at December 31, 2018 were as follows:

Quality Rating (Moody's)	Corporate Bonds	U.S. Government Treasury & Agencies	Asset-Backed Securities	Total
Aaa	\$ 3,469,320	\$ 76,122,989	\$ 4,106,204	\$ 83,698,513
Aa1	3,474,288	-	-	3,474,288
Aa3	3,151,264	-	-	3,151,264
A1	5,176,530	-	-	5,176,530
A2	6,943,726	-	-	6,943,726
A3	10,778,999	-	-	10,778,999
Baa2	2,638,440	-	-	2,638,440
Baa3	2,801,295	-	-	2,801,295
Not Rated	-	-	22,693,551	22,693,551
	<u>\$ 38,433,862</u>	<u>\$ 76,122,989</u>	<u>\$ 26,799,755</u>	<u>\$ 141,356,606</u>

At December 31, 2018, the System had the following investments and maturities:

Investment Type	Fair Value	Investment Maturities		
		Less than 1 year	1 to 5 years	6 to 10 years
U.S. Treasury notes	\$ 76,122,989	\$ -	\$ 13,548,384	\$ 62,574,605
Corporate bond obligations	38,433,862	10,551,375	24,820,561	3,061,926
Asset-backed securities	26,799,755	-	19,608,508	7,191,247
Investments with maturities	<u>141,356,606</u>	<u>\$ 10,551,375</u>	<u>\$ 57,977,453</u>	<u>\$ 72,827,778</u>
Equity securities	<u>112,373,454</u>			
Investments without maturities	<u>112,373,454</u>			
Total investments	<u>\$ 253,730,060</u>			

**Concentration of Credit Risk: Investments** – The System does not maintain any single investment that represents more than 5% of the System's total investments at December 31, 2018. However, there are multiple, separate investments in U.S. Treasury notes that, in aggregate, represent approximately 54% of fixed income securities and 30% of total investments held at December 31, 2018.

## 5. FUNDING POLICY

GAAP requires that the annual minimum provision for pension costs should include normal cost, interest on unfunded past service cost liability, and amortization of unfunded vested benefits, based on an acceptable actuarial cost method.

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

**Employer Contributions (Funding)** – Under the provisions of Chapter 32 of Massachusetts General Law, participating employers are assessed their share of the total retirement cost based on independent actuarial study.

Employer contributions of \$12,071,787 were made in 2018 in accordance with the funding policy. Employer contributions as a percentage of covered payroll was approximately 29% in 2018.

**Cost of Living Adjustment (COLA)** – Through 1998, the Massachusetts Legislature was able to grant cost-of-living increases to benefits being paid to retirees. These increases were expressed as a percentage of the retiree's allowance subject to a maximum dollar increase. All COLA's granted from 1982 through June 30, 1998, are reimbursed to the System by the Commonwealth of Massachusetts since the Commonwealth was financially responsible for COLA adjustments during this time frame; any COLA's granted thereafter by the Board are required to be funded by the System directly. A COLA may be approved in excess of the Consumer Price Index, or CPI, but for 2018 is not to exceed 3% annually on the first \$14,000 of a retirement allowance. The System has historically approved a COLA annually, usually at the maximum 3% rate.

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

## 6. ACTUARIAL VALUATION

The System is statutorily required to adopt the funding schedule that will fully amortize the unfunded actuarial accrued liability by June 30, 2040. As of the latest actuarial valuation, the System has selected a funding schedule that amortizes the unfunded actuarial accrued liability completely by June 30, 2030.

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

Total pension liability	\$ 353,794
Plan fiduciary net position	<u>257,584</u>
Net pension liability	<u>\$ 96,210</u>
Plan fiduciary net position as a percentage of total pension liability	72.8%



The total pension liability was determined by an actuarial valuation as of December 31, 2017. The significant actuarial assumptions used in the December 31, 2017 report were as follows:

Actuarial cost method:	Entry age normal
Amortization method:	7.5% increasing appropriation through fiscal year 2029 with final amortization payment in 2030
Remaining amortization period:	12 years from July 1, 2018
Asset valuation method:	Market value
Investment rate of return:	7.35% per annum
Projected salary increases:	Service based table with ultimate ranges of 4.25% for group 1 and 4.75% for group 4
Cost of living adjustments:	3% on the first \$14,000 of benefits
Mortality rates:	Pre-retirement rates reflect the RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct). Post-retirement rates reflect the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct).
Disabled life mortality:	For disabled members, the table is assumed to be in accordance with the RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year of 2012 (gender distinct). It is assumed that 55% of pre-retirement deaths are job-related for group 1 and 2 members and 90% are job-related for group 4 members. For members retired under an Accidental Disability, 40% of deaths are assumed to be from the same cause as the disability.

**Discount Rate** – The discount rate used to measure the total pension liability in the December 31, 2018 actuarial valuation report was 7.35%. The projection of cash flows used to determine the discount rate assumed plan member contributions were made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially-determined contribution rates and the member rate. Based on those assumptions, the System’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Expected Rate of Return** – The System’s investment policy targets an investment return that meets or exceeds the actuarial investment rate of return (currently 7.35%). This long-term expected rate of return is presented neither as an arithmetic or geometric means.

**Sensitivity Analysis** – The following illustrates the net position liability at December 31, 2018 calculated using the current discount rate of 7.35%, as well as the projection of what the net position liability would be if it were calculated using a discount rate that is 1.0% lower (6.35%) and 1.0% higher (8.35%) than the current rate (dollar amounts in thousands):

	1% Decrease <u>(6.35%)</u>	Current Discount <u>(7.35%)</u>	1% Increase <u>(8.35%)</u>
Net pension liability	\$ 135,100	\$ 96,210	\$ 63,185

## 7. NET POSITION RESTRICTED FOR PENSIONS

Net position restricted for pensions, as of December 31, 2018, were comprised of the following legally required funds:

Description	Amount	Purpose
Annuity Savings Fund	\$ 46,207,897	Active members' contribution balance
Annuity Reserve Fund	14,840,760	Retired members' contribution balance
Military Service Fund	9,841	Members' contributions account while on military leave
Pension Fund	1,111,427	Amounts appropriated to fund future retirement
Pension Reserve Fund	<u>195,414,180</u>	Remaining net assets
Total	<u>\$ 257,584,105</u>	

## 8. COMMITMENTS AND CONTINGENCIES

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

\* \* \* \* \*

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the Town of Malden, Massachusetts)**

**REQUIRED SUPPLEMENTARY INFORMATION - UNAUDITED**

**SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS**

*(dollar amounts are in thousands)*

	2018	2017	2016	2015	2014
Total pension liability:					
Service cost	\$ 6,922	\$ 6,581	\$ 6,298	\$ 6,039	\$ 5,779
Interest	24,944	24,188	22,212	22,252	21,545
Changes in benefit terms	-	-	1,600	-	-
Differences between expected and actual experience	-	(990)	1,636	-	-
Changes in assumptions	-	7,580	14,620	-	-
Benefit payments, including refunds	(21,040)	(20,645)	(19,944)	(19,095)	(17,811)
Net change in total pension liability	10,826	16,714	26,422	9,196	9,513
Total pension liability - beginning of year	342,968	326,254	299,832	290,636	281,123
Total pension liability - end of year (a)	<u>\$ 353,794</u>	<u>\$ 342,968</u>	<u>\$ 326,254</u>	<u>\$ 299,832</u>	<u>\$ 290,636</u>
Plan fiduciary net position:					
Contributions - employer	\$ 12,072	\$ 11,421	\$ 10,819	\$ 10,304	\$ 9,816
Contributions - employee	4,251	4,147	3,936	3,774	3,861
Contributions - nonemployer contributing entities	577	799	598	686	475
Net investment income	10,902	42,294	(1,965)	(3,268)	24,824
Benefit payments, including refunds	(21,577)	(21,256)	(20,793)	(19,669)	(18,393)
Administrative expenses	(346)	(332)	(355)	(373)	(318)
Other	18	1	40	16	37
Net change in plan fiduciary net position	5,897	37,074	(7,720)	(8,530)	20,302
Plan fiduciary net position - beginning of year	251,687	214,613	222,333	230,863	210,561
Plan fiduciary net position - end of year (b)	<u>\$ 257,584</u>	<u>\$ 251,687</u>	<u>\$ 214,613</u>	<u>\$ 222,333</u>	<u>\$ 230,863</u>
Net pension liability - end of year (a) - (b)	<u>\$ 96,210</u>	<u>\$ 91,281</u>	<u>\$ 111,641</u>	<u>\$ 77,499</u>	<u>\$ 59,773</u>
Plan fiduciary net position as a percentage of the total pension liability	72.81%	73.38%	65.78%	74.15%	79.43%
Covered payroll	\$ 42,288	\$ 42,288	\$ 39,868	\$ 39,955	\$ 39,955
Net pension liability as a percentage of covered payroll	227.51%	215.86%	280.03%	193.97%	149.60%

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

See accompanying independent auditors' report.

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the Town of Malden, Massachusetts)**

**REQUIRED SUPPLEMENTARY INFORMATION - UNAUDITED**

**SCHEDULE OF CONTRIBUTIONS**

*(dollar amounts are in thousands)*

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Actuarially-determined contribution	\$ 12,072	\$ 11,421	\$ 10,819	\$ 10,304	\$ 9,816
Contributions in relation to the actuarially-determined contribution	<u>12,072</u>	<u>11,421</u>	<u>10,819</u>	<u>10,304</u>	<u>9,816</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 42,288	\$ 42,288	\$ 39,868	\$ 39,955	\$ 39,955
Contribution as a percentage of covered payroll	28.55%	27.01%	27.14%	25.79%	24.57%

**SCHEDULE OF INVESTMENT RETURNS**

	<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	5.70%	20.26%	-0.61%	-1.75%	11.51%

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

See accompanying independent auditors' report.

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM  
(A Component Unit of the City of Malden, Massachusetts)**

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

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**A. CHANGES OF BENEFIT TERMS**

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

**B. SIGNIFICANT ACTUARIAL ASSUMPTIONS AND METHODS**

The significant actuarial assumptions used in the December 31, 2017 report were as follows:

Actuarial cost method:	Entry age normal
Amortization method:	7.5% increasing appropriation through fiscal year 2029 with final amortization payment in 2030
Remaining amortization period:	12 years from July 1, 2018
Asset valuation method:	Market value
Investment rate of return:	7.35% per annum
Projected salary increases:	Service based table with ultimate ranges of 4.25% for group 1 and 4.75% for group 4
Cost of living adjustments:	3% on the first \$14,000 of benefits
Mortality rates:	Pre-retirement rates reflect the RP-2000 Employees table projected generationally with Scale BB and a base year of 2009 (gender distinct). Post-retirement rates reflect the RP-2000 Healthy Annuitant table projected generationally with Scale BB and a base year of 2009 (gender distinct).
Disabled life mortality:	For disabled members, the table is assumed to be in accordance with the RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year of 2012 (gender distinct). It is assumed that 55% of pre-retirement deaths are job-related for group 1 and 2 members and 90% are job-related for group 4 members. For members retired under an Accidental Disability, 40% of deaths are assumed to be from the same cause as the disability.



**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL  
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF  
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH  
GOVERNMENT AUDITING STANDARDS**

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

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Malden Contributory Retirement System (the "System"), a component unit of the City of Malden, Massachusetts, as of and for the year ended December 31, 2018, and the related notes to the financial statements, which collectively comprise the System's basic financial statements and have issued our report thereon dated June 14, 2019.

**Internal Control Over Financial Reporting**

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

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

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

## **Compliance and Other Matters**

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

## **Purpose of this Report**

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

*Roselli, Clark & Associates*

Roselli, Clark & Associates  
Certified Public Accountants  
Woburn, Massachusetts  
June 14, 2019



**ROSELLI, CLARK & ASSOCIATES**  
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**INDEPENDENT AUDITORS' REPORT ON AUDIT OF SPECIFIC ELEMENTS, ACCOUNTS  
AND ITEMS OF FINANCIAL STATEMENTS**

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

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

**Management's Responsibility for the Schedules**

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

**Auditors' Responsibility**

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

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



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

### **Opinions**

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

### **Other Matters**

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the System as of and for the year ended December 31, 2018, and our report thereon, dated June 14, 2019, expressed an unmodified opinion on those financial statements.

*Roselli, Clark & Associates*

Roselli, Clark & Associates  
Certified Public Accountants  
Woburn, Massachusetts  
June 14, 2019

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the Town of Malden, Massachusetts)**

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

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*Dollar amounts are in thousands*

<u>Employer</u>	<u>Actual Employer Contributions</u>	<u>Employer Allocation Percentage</u>
City of Malden	\$ 10,653	88.2%
Malden Housing Authority	1,216	10.1%
Malden Redevelopment Authority	203	1.7%
Total	<u>\$ 12,072</u>	<u>100.0%</u>

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

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the Town of Malden, Massachusetts)**

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

	City of Malden	Malden Housing Authority	Malden Redevelopment Authority	Total
Net pension liability	<u>\$ 84,857,220</u>	<u>\$ 9,717,210</u>	<u>\$ 1,635,570</u>	<u>\$ 96,210,000</u>
Deferred outflows of resources:				
Differences between actual and expected experience	\$ 42,336	\$ 4,848	\$ 816	\$ 48,000
Net difference between projected and actual investment earnings on pension plan investments	1,459,710	167,155	28,135	1,655,000
Changes of assumptions	8,956,710	1,025,655	172,635	10,155,000
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>914,000</u>	<u>-</u>	<u>-</u>	<u>914,000</u>
Total deferred outflows of resources	<u>\$ 11,372,756</u>	<u>\$ 1,197,658</u>	<u>\$ 201,586</u>	<u>\$ 12,772,000</u>
Deferred inflows of resources:				
Differences between actual and expected experience	\$ -	\$ -	\$ -	\$ -
Changes of assumptions	-	-	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	<u>-</u>	<u>496,000</u>	<u>418,000</u>	<u>914,000</u>
Total deferred inflows of resources	<u>\$ -</u>	<u>\$ 496,000</u>	<u>\$ 418,000</u>	<u>\$ 914,000</u>
Pension expense (income):				
Proportionate share of plan pension expense	\$ 14,636,602	\$ 1,676,073	\$ 282,111	\$ 16,594,786
Net amortization of deferred amounts from changes in proportion and differences between employer contributions and proportionate share of contributions	<u>476,678</u>	<u>(282,807)</u>	<u>(193,871)</u>	<u>-</u>
Total employer pension expense (income)	<u>\$ 15,113,280</u>	<u>\$ 1,393,266</u>	<u>\$ 88,240</u>	<u>\$ 16,594,786</u>

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

**MALDEN CONTRIBUTORY RETIREMENT SYSTEM**  
**(A Component Unit of the City of Malden, Massachusetts)**

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

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**A. INTRODUCTION**

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

**B. METHOD OF PROPORTIONATE SHARE ALLOCATION**

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

**C. EXPECTED FUTURE AMORTIZATION OF DEFERRED BALANCES**

The following table summarizes the expected amortization of the deferred outflows of resources and inflows of resources into pension expense (benefit):

Measurement Period Ended December 31:	City of Malden	Malden Housing Authority	Malden Redevelopment Authority	Total
2019	\$ 8,161,444	\$ 615,942	\$ (35,386)	\$ 8,742,000
2020	4,023,158	238,119	(42,277)	4,219,000
2021	(2,162,852)	(276,186)	(146,962)	(2,586,000)
2022	1,351,006	123,783	8,211	1,483,000
	<u>\$ 11,372,756</u>	<u>\$ 701,658</u>	<u>\$ (216,414)</u>	<u>\$ 11,858,000</u>