

TOWN OF LITTLETON, MASSACHUSETTS
LITTLETON MUNICIPAL WATER
DEPARTMENT

Financial Statements

June 30, 2019

(With Accountants' Report Thereon)

Giusti, Hingston and Company
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Town of Littleton, Massachusetts
Littleton Municipal Water Department
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INDEPENDENT AUDITORS' REPORT ON BASIC FINANCIAL STATEMENTS

Board of Water Commissioners
Town of Littleton, Massachusetts
Littleton Municipal Water Department
39 Ayer Road
P.O. Box 2406
Littleton, Massachusetts 01460

Report on the Financial Statements

We have audited the accompanying basic financial statements and the related notes to the financial statements of the Littleton Municipal Water Department, an enterprise fund of the Town of Littleton, Massachusetts, as of and for the year ended June 30, 2019.

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.

Auditor's Responsibility

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

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

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 financial position of the Littleton Municipal Water Department, an enterprise fund of the Town of Littleton, Massachusetts, as of June 30, 2019, and the respective changes in financial position and cash flows thereof 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 retirement system schedules and the other post employment benefit schedules listed in the 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.

Emphasis of Matter

The financial statements present only the Littleton Municipal Water Department and do not purport to, and do not present fairly the financial position of the Town of Littleton, Massachusetts, as of June 30, 2019, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Giusti, Hingston and Company

Giusti, Hingston and Company

Certified Public Accountants

January 6, 2020

***Town of Littleton, Massachusetts Municipal Water Department
Management's Discussion and Analysis
Required Supplementary Information
June 30, 2019***

As management of the Littleton, Massachusetts Municipal Water Department, we offer readers of these financial statements this narrative overview and analysis of the financial activities of the Town of Littleton, Massachusetts Municipal Water Department for the fiscal year ended June 30, 2019.

Financial Highlights

- The assets and deferred outflows of resources of the Littleton, Massachusetts Municipal Water Department exceeded its liabilities and deferred inflows of resources at the close of the most recent fiscal year by \$9,026,696 (*net position*).
- The Department's total net position increased by \$1,315,043 or 17.05%. The primary reason for the increase was the billing of an \$870,000 betterment. The betterment related debt was issued in the prior fiscal year.
- At the end of the current fiscal year, the balance in the unrestricted net position account was \$504,622 which is 15.9% of total expenses of the Department. The significant increase relates to the \$870,000 betterment billed in fiscal year 2019.

Overview of the Financial Statements

The discussion and analysis is intended to serve as an introduction to the Littleton Water Department's basic financial statements.

Proprietary fund. The Town of Littleton, Massachusetts Municipal Water Department maintains one proprietary fund type. The Department uses an enterprise fund to account for its water operations.

Water rates are structured to cover most of the operating costs related to the Department.

Financial Analysis

Net Position

Net position may serve over time as a useful indicator of a government's financial position. The following table reflects the condensed net position for the past two fiscal years.

	<u>2019</u>	<u>2018</u>
Current Assets	\$ 3,159,205	\$ 1,600,726
Non-Current and Capital Assets	14,697,303	13,367,481
Total Assets	<u>17,856,508</u>	<u>14,968,207</u>
Deferred Outflows of Resources	<u>444,298</u>	<u>247,568</u>
Current Liabilities	2,485,770	461,023
Long Term Liabilities	6,636,283	6,911,552
Total Liabilities	<u>9,122,053</u>	<u>7,372,575</u>
Deferred Inflows of Resources	<u>152,057</u>	<u>131,547</u>
Net Position:		
Net Investment in Capital Assets	8,522,074	8,155,242
Unrestricted	504,622	(443,589)
Total Net Position	<u><u>\$ 9,026,696</u></u>	<u><u>\$ 7,711,653</u></u>

Changes in Net Position

The following condensed financial information was derived from the Department's Statement of Revenues, Expenses and Changes in Net Position. It reflects how the Department's Net Position has changed during the last two fiscal years.

Revenues	<u>2019</u>	<u>2018</u>
Operating:		
Metered Sales	\$ 2,003,916	\$ 1,843,356
Debt Service Fee	508,762	454,503
Non-Operating:		
Merchandising and Jobbing Revenue	578,552	589,069
Intergovernmental	73,658	-
Contribution of Services by Light Department	302,371	300,555
Miscellaneous	16,270	11,733
Rental Revenue	129,122	133,682
Capital Contributions:		
Betterments	870,000	-
Total Revenues	<u><u>4,482,651</u></u>	<u><u>3,332,898</u></u>

Changes in Net Position (Continued)

	Business-Type Activities	
	<u>2019</u>	<u>2018</u>
Expenses		
Operating Expenses:		
Operating	279,249	187,154
Maintenance	1,158,614	950,865
General and Administrative	893,593	1,099,194
Depreciation	626,427	579,440
Non-Operating:		
Sustainable Water Management Initiative Grant	73,658	-
Interest Expense	136,067	138,837
Total Expenses	<u>3,167,608</u>	<u>2,955,490</u>
Increase (Decrease) in Net Position	<u>\$ 1,315,043</u>	<u>\$ 377,408</u>

Financial Analysis of the Department's Funds

Components of Net Position

The following table reflects the trend in all components of net position for the past ten years (after adjusting for prior period adjustments).

<u>Fiscal Year</u>	Invested in Capital Assets Net of Related	<u>Unrestricted</u>	<u>Total Net Position</u>
	<u>Debt</u>		
2010	\$ 6,062,417	\$ 442,798	\$ 6,505,215
2011	7,247,071	385,482	7,632,553
2012	7,277,850	371,684	7,649,534
2013	7,191,497	599,907	7,791,404
2014	7,161,139	(461,403)	6,699,736
2015	6,930,804	3,562	6,934,366
2016	7,124,501	307,715	7,432,216
2017	7,671,686	(337,441)	7,334,245
2018	8,155,242	(443,589)	7,711,653
2019	8,522,074	504,622	9,026,696

Capital Asset and Debt Administration

Capital assets. The Town of Littleton, Massachusetts Municipal Water Department's investment in capital assets (net of accumulated depreciation) as of June 30, 2019, amounts to \$13,870,803. This investment in capital assets includes land, buildings and improvements, infrastructure and machinery and equipment.

Major capital asset acquisitions during the year included the following:

Treatment Facilities	\$620,414
Wells	\$282,942
Customer Meters	\$102,917
Vehicles	\$77,098

Capital Assets at June 30, 2019 and June 30, 2018
(Net of Accumulated Depreciation)

	Business-Type Activities	
	<u>2019</u>	<u>2018</u>
Land	\$ 934,228	\$ 934,228
Maintenance Facilities	14,329	16,166
Pump Facilities	173,509	181,007
Treatment Facilities	4,898,064	4,459,201
Standpipes	867,615	933,685
Pumping Plant	613,069	648,107
Wells	1,164,754	927,851
Water Quality Equipment	496,974	552,937
Transmission and Distribution	3,156,504	3,300,292
Services	272,243	285,230
Customer Meters	854,724	781,719
Hydrants and Gates	113,824	117,464
SCADA & Communication Equipment	14,852	16,502
Vehicles	225,666	158,965
Laboratory Equipment	8,671	9,127
Miscellaneous Equipment	61,777	45,000
Total Capital Assets	<u>\$ 13,870,803</u>	<u>\$ 13,367,481</u>

Debt

The Department's long term debt decreased by (\$378,467) or (7.26%). The Department paid long term debt principal of \$370,900. In addition, during fiscal year 2019, the Department received \$7,175 in new premiums and amortized \$14,742 of premiums. The outstanding balances for the past two years are noted below:

	<u>2019</u>	<u>2018</u>	<u>Change</u>
General Obligation Bonds	\$ 4,695,000	\$ 5,065,900	\$ (370,900)
Premiums	138,772	146,339	(7,567)
Total Bonds Payable	<u>\$ 4,833,772</u>	<u>\$ 5,212,239</u>	<u>\$ (378,467)</u>

Fiscal Year 2020 Budget

For the fiscal year 2020, the Water Department has a total budget of \$4,080,936 consisting of:

Salaries and Wages	\$1,023,200
General Operating Expenses	1,474,053
Debt-Principal and Interest	779,683
Reserve	200,000
Capital	<u>604,000</u>
Total	<u>\$4,080,936</u>

Request for Information

This financial report is designed to provide a general overview of the Littleton Municipal Water Department's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Accounting/Business Manager
Littleton Municipal Water Department
39 Ayer Road
Littleton, Massachusetts 01460-3406

Littleton Municipal Water Department
Statement of Net Position
Proprietary Fund Type
June 30, 2019

	Proprietary Fund Type <u>Enterprise</u>
Assets	
Current:	
Cash and Cash Investments	\$ 2,441,326
Accounts Receivable:	
User Charges (Net of Allowance for Uncollectable)	341,216
Unbilled User Charges	244,742
Merchandising and Jobbing	11,607
Intergovernmental	37,539
Inventory	82,775
Noncurrent:	
Accounts Receivable:	
Betterments Not Yet Due	826,500
Capital Assets Not Being Depreciated	934,228
Capital Assets Being Depreciated, Net	12,936,575
Total Assets	<u>17,856,508</u>
Deferred Outflows of Resources	
Other Post Employment Benefits	116,075
Pensions	328,223
Total Deferred Outflows of Resources	<u>444,298</u>
Liabilities	
Current:	
Accounts Payable	29,695
Accrued Interest Payable	47,045
Bond Anticipation Notes Payable	1,994,000
Compensated Absences Payable	40,288
Bonds Payable	374,742
Noncurrent:	
Compensated Absences Payable	60,433
Other Post Employment Benefits Payable	710,120
Net Pension Liability	1,406,700
Bonds Payable	4,459,030
Total Liabilities	<u>9,122,053</u>
Deferred Inflows of Resources	
Other Post Employment Benefits	70,397
Pensions	81,660
Total Deferred Inflows of Resources	<u>152,057</u>
Net Position	
Net Investment in Capital Assets	8,522,074
Unrestricted	504,622
Total Net Position	<u><u>\$ 9,026,696</u></u>

Littleton Municipal Water Department
 Statement of Revenues, Expenses and
 Changes in Net Position
 Proprietary Fund Type
 For the Year Ended June 30, 2019

	Proprietary Fund Type <u>Enterprise</u>
Operating Revenues:	
Metered Sales	\$ 2,003,916
Debt Service Fee	508,762
Total Operating Revenues	<u>2,512,678</u>
Operating Expenses:	
Operating	279,249
Maintenance	1,158,614
General and Administrative	893,593
Depreciation	626,427
Total Operating Expenses	<u>2,957,883</u>
Operating Income	<u>(445,205)</u>
Non-operating Revenues (Expenses):	
Merchandising and Jobbing Revenue	578,552
Intergovernmental	73,658
Cell Tower Leasing	129,122
Contribution of Services by Light Department	302,371
Miscellaneous	16,270
Sustainable Water Management Initiative Grant	(73,658)
Interest Expense	(136,067)
Total Non-Operating Revenues (Expenses)	<u>890,248</u>
Income (Loss) Before Capital Contributions	<u>445,043</u>
Capital Contributions:	
Betterments	<u>870,000</u>
Change in Net Position	<u>1,315,043</u>
Total Net Position July 1, 2018	<u>7,711,653</u>
Total Net Position June 30, 2019	<u><u>\$ 9,026,696</u></u>

Littleton Municipal Water Department
Statement of Cash Flows
Proprietary Fund Type
For the Year Ended June 30, 2019

	Proprietary Fund Type <u>Enterprise</u>
Cash Flows from Operating Activities:	
Receipts from Customers	\$ 2,418,119
Payments to Vendors and Employees	(2,083,721)
Net Cash Flow from Operating Activities	<u>334,398</u>
Cash Flows from Non Capital Related Financing Activities:	
Merchandising and Jobbing	571,349
Grant	36,119
Rental Income	129,122
Sustainable Water Management Initiative Grant Projects	(73,658)
Miscellaneous	10,770
Net Cash Flow from Non Capital Related Financing Activities	<u>673,702</u>
Cash Flows from Capital and Related Financing Activities:	
Betterments	43,500
Acquisition of Fixed Assets	(1,124,249)
Interest Expense	(146,977)
Proceeds from Bond Anticipation Notes	1,994,000
Principal Payments on Long Term Debt	(370,900)
Net Cash Flow from Capital and Related Financing Activities	<u>395,374</u>
Cash Flows from Investing Activities	-
Net Cash Flows from Investing Activities	<u>-</u>
Net Increase (Decrease) in Cash and Cash Equivalents	1,403,474
Cash and Cash Equivalents, July 1, 2018	<u>1,037,852</u>
Cash and Cash Equivalents, June 30, 2019	<u><u>\$ 2,441,326</u></u>
Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities:	
Operating Income (Loss)	\$ (445,205)
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:	
Depreciation Expense	626,427
Contribution of Services by Light Department	302,371
(Increase) Decrease in Assets:	
Accounts Receivable	(94,559)
Deferred Outflows of Resources	(196,730)
Increase (Decrease) in Liabilities:	
Payroll and Vendor Payables	13,991
Other Post Employment Benefits Payable	(126,265)
Compensated Absences Payable	17,410
Net Pension Liability	216,448
Deferred Inflows of Resources	20,510
Net Cash Provided by Operating Activities	<u><u>\$ 334,398</u></u>
Schedule of Noncash Capital and Related Financing Activities	
Purchase of Assets on Account	<u><u>\$ 21,277</u></u>

Town of Littleton, Massachusetts Municipal Water Department
Notes to Financial Statements
June 30, 2019

I. **Summary of Significant Accounting Policies**

The accounting policies for financial reporting purposes of the Town of Littleton, Massachusetts Municipal Water Department conform to accounting principles generally accepted in the United States of America for local governmental units. The Department applies all relevant Governmental Accounting Standards Board (GASB) pronouncements.

The following is a summary of the more significant accounting policies:

A. **Reporting Entity**

The Department's financial statements include the operations of the Water Department only. The Water Department is an enterprise fund of the Town of Littleton, Massachusetts.

B. **Measurement Focus and Basis of Accounting**

i. **Fund Accounting**

The Department reports its financial activities in one proprietary fund type in order to comply with the limitations and restrictions placed on both the resources available and the services provided.

This fund is used to account for water operations that are financed and operated in a manner similar to private business enterprises where the costs of providing goods or services to the general public on a continuing basis are financed or recovered primarily through user charges.

ii. **Basis of Accounting**

The accompanying financial statements have been prepared and presented on the accrual basis of accounting. Under this method, revenues are recognized in the accounting period in which they are earned and expenses are recognized when the related liability is incurred.

Revenue Recognition

Water user charges as presented are considered as revenue when they are committed for collection. Recognition has also been applied to used, but unbilled usage.

Expenses

Expenses are recorded during the year on an accrual basis.

C. Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources and Net Position

i. Deposits and Investments

The Department's cash and cash equivalents are considered to be demand deposits and short term investments with original maturities of three months or less from the date of acquisition.

State and local statutes place certain limitations on the nature of deposits and investments available to the Department. Deposits allowed include demand deposits, term deposits and certificates of deposit. Investments can also be made in securities issued by or unconditionally guaranteed by the U.S. government or agencies that have a maturity of less than one year from the date of purchase, repurchase agreements guaranteed by such securities with maturity dates or no more than 90 days from the date of purchase, and units in the Massachusetts Municipal Depository Trust ("MMDT").

ii. Capital Assets

Capital assets including land, treatment facilities, transmission and distribution systems, standpipes and wells are reported. Capital assets are currently defined by the Department as assets that have an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated acquisition value at the date of the donation.

The cost of normal maintenance and repairs that does not add to the value of the asset or materially extend assets lives is not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed.

iii. Compensated Absences

Vacation Leave

All permanent full time employees are granted vacation leave based on years of employment. Vacation leave may only be carried forward to the subsequent fiscal year with the approval of the Supervisor and if appropriate within the terms of the employee's contract. The accumulated vacation leave benefit liability as of June 30, 2019 is reflected in the financial statements.

Sick Leave

All permanent full time employees are granted sick leave based on length of service. Employees with five or more years of service for the Department and five or fewer sick days used in the immediate prior year must elect to either accumulate unused sick time for future use or have any portion of the immediate prior year's unused sick days redeemed at the rate of one day's salary for every two days redeemed. The accumulated sick leave benefit liability as of June 30, 2019 is reflected in the financial statements.

iv. Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/ expenditure) until then. The Department's financial statements include deferred outflows of resources related to pensions and to other post employment benefits.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Department's financial statements include deferred inflows of resources related to pensions and to other post employment benefits.

v. Net Position

Net position is reported in two accounts. "Net Investment in Capital Assets" is used as an offset account to capital assets net of accumulated depreciation and any related outstanding debt (unspent debt proceeds are not considered "related" debt). Unrestricted net position is used to account for the residual portion of net position that is not externally restricted.

v. Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles 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. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

vi. Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Middlesex County Retirement System and additions to/deductions from the System's fiduciary net position have been determined on the same basis as they are reported by the System. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

II. Stewardship, Compliance and Accountability

A. Budgetary Information

i. General Budget Policies

Budget requests are submitted to the Commissioners for review during January, February and March of each year. The Commissioners have until May (which is when the annual Town meeting is held) to make any changes to the budget. The Water Department's budget must be approved at the annual Town meeting.

III. Detailed Notes

A. Deposits

Custodial Credit Risk

Custodial credit risk is the risk that in the event of a bank failure, the Department's deposits may not be returned. The Department's deposits are pooled with the deposits of the Town of Littleton, Massachusetts. As a result, the custodial credit risk of the Department is intermingled with the custodial credit risk of the Town. The Town has a formal deposit policy that addresses custodial credit risk.

Key sections of the policy are detailed below:

- Bank accounts or Certificate of Deposit accounts (CD's) with no limit to the length of maturity from the date of purchase may be made for unlimited amounts if the depository institution is a member of the Depository Insurance Fund (DIF) or the Share Insurance Fund (SIF). These funds insure all deposits held at a member Massachusetts state chartered savings bank or co-operative bank, respectively.
- Bank accounts, Certificate of Deposit accounts (CD's) and/or brokered CD's with no limit to the length of maturity from the date of purchase up to the FDIC coverage limits. All account balances in a single depository institution are considered in the aggregate to determine FDIC coverage limits.
- Bank accounts or Certificate of Deposit accounts (CD's) with no limit to the length of maturity from the date of purchase may be made for unlimited amounts if the deposit is fully collateralized by a third party agreement or securities owned by a depository institution that have been segregated from the day-to-day assets of the institution in order to provide collateralization.

- Uninsured or unsecured bank accounts or Certificate of Deposit accounts (CD's) with a final maturity no greater than one year from the date of purchase are allowed to be held by the Town subject to the following limitations:
 - The aggregate uninsured portion of deposits held at any one institution cannot exceed 5% of the institutions total deposits reflected on the bank's last filed FDIC Call Report.
 - No more than 10% of the Town's funds, applicable to this section, may be held in uninsured accounts.
 - The credit worthiness of the depository will be tracked by Treasurer utilizing the Veribanc rating report.

B. Investments

i) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Town's policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates is as follows:

- Short-term investments for funds covered in Section I are by statute limited to one year or less in maturity with all securities held to maturity.
- Longer term investments, other than trust funds under the direction of the Commissioners of Trust Funds, will be made for periods not longer than five years, maintaining an average maturity no greater than three years for the portfolio.

ii) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Town's policy relating to credit risk is as follows.

- Longer term investments in fixed income securities, other than trust funds under the direction of the Commissioners of Trust Funds, will be made principally for capital preservation and income potential. Corporate debt must be rated "A" or better by either S&P or Moody's rating services. If a security falls below the "A" rating, the security will be monitored by the Treasurer and advisor, if applicable. The security will be noted as an exception to policy if held in the portfolio. The Treasurer and/or advisor may sell the security if a further decline in value is expected.

iii) Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. The Town's policy relating to concentration of credit risk is as follows:

- The Town will minimize any concentration of credit risk by diversifying the investment portfolio so that the impact of potential losses from any one type of security or issuer will be minimized. Specific investment amounts and/or issuer limitations are addressed in the policy.

iv) Foreign Currency Risk

Foreign currency risk is the risk that changes in foreign exchange rates will adversely affect the fair value of an investment or deposit. The Town's policy states that it will not invest in any instrument exposed to foreign currency risk.

Fair Value Measurement

Statement #72 of the Government Accounting Standards Board ("GASB") *Fair Value Measurements and Application*, sets forth the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under GASB 72 are described as follows:

Level 1 - Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Department has the ability to access.

Level 2 - Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Unobservable inputs reflect the Departments' own assumptions about the inputs market participants would use in pricing the asset or liability (including assumptions about risk). Unobservable inputs are developed based on the best information available in the circumstances and may include the Department's own data.

The Department holds investments that are measured at fair value on a recurring basis. Since the Department's investments are pooled with the Town and Light Department's investments, the exact amount of each type of investment cannot be determined. However, all of the Town's (and therefore the Department's) investments are considered Level 1.

The investments classified in Level 1 of the fair value hierarchy were valued using prices active markets for those securities.

C. Capital Assets

Capital asset activity for the year ended June 30, 2019 was as follows:

Capital asset activity for the year ended June 30, 2019 is as follows:

<u>Assets</u>	<u>Cost</u> <u>July 1, 2018</u>	<u>Additions</u>	<u>Dispositions</u>	<u>Cost</u> <u>June 30, 2019</u>	<u>Accumulated</u> <u>Depreciation</u> <u>July 1, 2018</u>	<u>Depreciation</u>	<u>Depreciation on</u> <u>Contributed Assets</u> <u>or (Reversed</u> <u>Depreciation)</u>	<u>Accumulated</u> <u>Depreciation</u> <u>June 30, 2019</u>	<u>Net Book</u> <u>Value</u>
Capital Assets Not Being Depreciated:									
Land	\$ 934,228	\$ -	\$ -	\$ 934,228	\$ -	\$ -	\$ -	\$ -	\$ 934,228
Total Capital Assets Not Being Depreciated:	934,228	-	-	934,228	-	-	-	-	934,228
Capital Assets Being Depreciated:									
Maintenance Facilities	60,896	-	-	60,896	44,730	1,837	-	46,567	14,329
Pump Facilities	248,549	-	-	248,549	67,542	7,498	-	75,040	173,509
Treatment Facilities	6,018,484	620,414	-	6,638,898	1,559,283	181,551	-	1,740,834	4,898,064
Standpipes	2,371,906	5,480	-	2,377,386	1,438,221	71,550	-	1,509,771	867,615
Pumping Plant	1,161,528	-	-	1,161,528	513,421	35,038	-	548,459	613,069
Wells	1,526,200	282,942	-	1,809,142	598,349	46,039	-	644,388	1,164,754
Water Quality Equipment	1,855,185	-	-	1,855,185	1,302,248	55,963	-	1,358,211	496,974
Transmission and Distribution	5,072,238	9,219	-	5,081,457	1,771,946	153,007	-	1,924,953	3,156,504
Services	478,768	1,455	-	480,223	193,538	14,442	-	207,980	272,243
Customer Meters	991,588	102,917	-	1,094,505	209,869	29,912	-	239,781	854,724
Hydrants and Gates	234,935	3,447	-	238,382	117,471	7,087	-	124,558	113,824
Office Equipment	17,907	-	-	17,907	17,907	-	-	17,907	-
SCADA & Communication Equipment	86,684	-	-	86,684	70,182	1,650	-	71,832	14,852
Tools	63,782	-	-	63,782	63,782	-	-	63,782	-
Vehicles	377,002	77,098	(14,500)	439,600	218,037	15,897	(20,000)	213,934	225,666
Laboratory Equipment	140,516	-	-	140,516	131,389	456	-	131,845	8,671
Miscellaneous Equipment	174,740	21,277	-	196,017	129,740	4,500	-	134,240	61,777
Total Capital Assets Being Depreciated:	20,880,908	1,124,249	(14,500)	21,990,657	8,447,655	626,427	(20,000)	9,054,082	12,936,575
Total Capital Assets	\$ 21,815,136	\$ 1,124,249	\$ (14,500)	\$ 22,924,885	\$ 8,447,655	\$ 626,427	\$ (20,000)	\$ 9,054,082	\$ 13,870,803

D. Accounts Receivable

The accounts receivable on the balance sheet are listed below:

User Charges:

Water Rates	\$ 341,216
Unbilled Water Rates	\$ 244,742
Merchandising and Jobbing	\$ 11,607
Intergovernmental	
Due from Commonwealth of Massachusetts	\$ 37,539
Betterments Not Yet Due	\$ 826,500

E. Debt

i Bond Anticipation Notes Payable

The Department's short term borrowing activity for the year ended June 30, 2019, is as follows:

<u>Purpose</u>	Balance Beginning <u>of Year</u>	<u>Issued</u>	<u>Redeemed</u>	Balance End <u>of Year</u>
<u>Bond Anticipation Notes</u>				
Whitcomb Avenue Wells	\$ -	\$ 1,994,000	\$ -	\$ 1,994,000

E. Debt (Continued)

ii Long Term Debt

General obligation bonds outstanding at June 30, 2019, bear interest at various rates.

(a) Changes in Long Term Debt - the following is a summary of bond transactions for the year ended June 30, 2019:

<u>General Obligation Bond</u>	<u>Sale Date</u>	<u>Original Borrowing</u>	<u>Interest Rates to Maturities</u>	<u>Final Maturity</u>	<u>Balance Beginning of Year</u>		<u>Balance End of Year</u>	
					<u>Issued</u>	<u>Redeemed</u>		
Water Mains - Capital	2010	191,088	3.49%	2029	\$ 110,000	\$ -	\$ (10,000)	\$ 100,000
Water Tank-Refunding - Oak Hill	2013	652,000	1.31%	2023	295,000	-	(65,000)	230,000
Water Capital Improvement	2015	274,200	3.00%-3.25%	2035	230,000	-	(15,000)	215,000
Well Redevelopment	2015	3,720,000	3.00%-3.25%	2035	3,150,000	-	(190,000)	2,960,000
Water Cobbs Well	2015	178,800	3.00%	2032	140,000	-	(10,000)	130,000
Water Capital Improvement Well #2	2015	118,300	3.00%	2027	90,000	-	(10,000)	80,000
Well #2 Design	2015	194,700	3.00%-3.25%	2034	160,000	-	(10,000)	150,000
Land Acquisition - Nashoba Rd - Water	2018	87,000	2.00% - 4.00%	2023	87,000	-	(17,000)	70,000
Route 119 Bond	2018	803,900	3.00% - 5.00%	2038	803,900	-	(43,900)	760,000
				Total	<u>\$ 5,065,900</u>	<u>\$ -</u>	<u>\$ (370,900)</u>	<u>4,695,000</u>

E. Debt (Continued)

(b) Summary of Debt Service Requirements to Maturity

	<u>Long Term Debt</u>	
	<u>Principal</u>	<u>Interest</u>
2020	\$360,000	\$144,682
2021	360,000	134,483
2022	350,000	123,182
2023	350,000	112,183
2024	280,000	101,332
2025	280,000	92,033
2026	280,000	82,732
2027	280,000	73,433
2028	270,000	64,282
2029	270,000	55,283
2030	260,000	47,082
2031	255,000	39,358
2032	255,000	31,707
2033	245,000	23,951
2034	245,000	16,069
2035	235,000	8,329
2036	40,000	3,900
2037	40,000	2,620
2038	<u>40,000</u>	<u>1,320</u>
Total	<u>\$4,695,000</u>	<u>\$1,157,961</u>

(c) Bond Authorizations

The Water Department's loan authorizations that remained unissued as of June 30, 2019 are as follows:

	<u>Date</u>	
<u>Purpose</u>	<u>Authorized</u>	<u>Amount</u>
Whitcomb Ave Wells	5/7/2018	<u>\$ 7,000,000</u>

iii Prior Year Defeased Debt

In prior years, the government defeased general obligation bonds by placing the proceeds of the new bonds into an irrevocable trust account to provide for all future debt service payments on the old bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the government's financial statements. At June 30, 2019, \$330,000 of defeased bonds remain outstanding.

E. Debt (Continued)

iv Changes in Long Term Debt

Changes in the government's long-term liabilities for the year ended June 30, 2019 are as follows:

	Balance Beginning of Year	Additions	Reductions	Balance End of Year	Current Portion
<u>Long Term Obligations</u>					
General Obligation Bonds	\$ 5,065,900	\$ -	\$ (370,900)	\$4,695,000	\$360,000
Premium	146,339	7,175	(14,742)	138,772	14,742
Total Bonds Payable	5,212,239	7,175	(385,642)	4,833,772	374,742
Compensated Absences	83,311	50,734	(33,324)	100,721	40,288
Other Post Employment Benefits	836,385	-	(126,265)	710,120	-
Net Pension Liability	1,190,252	102,008	114,440	1,406,700	-
Total Long Term Obligations	<u>\$ 7,322,187</u>	<u>\$ 159,917</u>	<u>\$ (430,791)</u>	<u>\$ 7,051,313</u>	<u>\$ 415,030</u>

IV. Other Information

A. Pension Plans

a. General Information about the Pension Plan

The Department provides pension benefits to eligible employees by contributing to the Middlesex County Retirement System, a cost sharing multiple-employer defined benefit pension plan administered by the Middlesex County Retirement System. The System is administered by a five member board on behalf of all eligible current employees and retirees. The system provides retirement benefits, cost of living adjustments, disability benefits and death benefits.

The system is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of the Massachusetts General Laws (M.G.L.). The authority to establish and amend benefit provisions requires a statutory change to Chapter 32. The Middlesex County Retirement System issues a stand-alone financial report that is available to the public at: <https://middlesexretirement.org/wp-content/uploads/2019/07/FINAL-MCRS-Audit-Report-of-Financial-Statements-12-31-18.pdf> or by writing to the Middlesex County Retirement System, 25 Linnell Circle, P.O. Box 160, Billerica, Massachusetts 01865.

Benefits Provided

The Middlesex County Retirement System provides retirement, disability and death benefits as detailed below:

Retirement Benefits

Employees covered by the Contributory Retirement Law are classified into one of four groups depending on job classification. Group 1 comprises most positions in state and local government. It is the general category of public employees. Group 4 comprises mainly police and firefighters. Group 2 is for other specified hazardous occupations.

(Officers and inspectors of the State Police are classified as Group 3).

For employees hired prior to April 2, 2012, the annual amount of the retirement allowance is based on the member's final three-year average salary multiplied by the number of years and according to the table below based on the age of the member at retirement.

<u>Benefit %</u>	<u>Group 1</u>	<u>Group 2</u>	<u>Group 4</u>
	<u>Hired on or before April 1 2012</u>		
2.50%	65+	60+	55+
2.40%	64	59	54
2.30%	63	58	53
2.20%	62	57	52
2.10%	61	56	51
2.00%	60	55	50
1.90%	59	N/A	49
1.80%	58	N/A	48
1.70%	57	N/A	47
1.60%	56	N/A	46
1.50%	55	N/A	45

For employees hired on April 2, 2012 or later, the annual amount of the retirement allowance is based on the member's final five-year average salary multiplied by the number of years and full months of creditable service at the time of retirement and multiplied by a percentage according to the tables below based on the age and years of creditable service of the member at retirement:

<u>Benefit %</u>	<u>Group 1</u>	<u>Group 2</u>	<u>Group 4</u>
	<u>Hired on after April 1 2012</u>		
2.50%	67+	62+	57+
2.35%	66	61	56
2.20%	65	60	55
2.05%	64	59	54
1.90%	63	58	53
1.75%	62	57	52
1.60%	61	56	51
1.45%	60	55	50

For all employees, the maximum annual amount of the retirement allowance is 80 percent of the member's final average salary. Any member who is a veteran also receives an additional yearly retirement allowance of \$15 per year of creditable service, not exceeding \$300. The veteran allowance is paid in addition to the 80 percent maximum.

Retirement Benefits - Superannuation

Members of Group 1, 2 or 4 hired prior to April 2, 2012 may retire upon the attainment of age 55. For retirement at ages below 55, twenty years of creditable service is required.

Members hired prior to April 2, 2012 who terminate before age 55 with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the System).

Members of Group 1 hired April 2, 2012 or later may retire upon the attainment of age 60. Members of Group 2 or 4 hired April 2, 2012 or later may retire upon the attainment of age 55. Members of Group 4 may retire upon attainment of age 50 with ten years of creditable service.

Members hired April 2, 2012 or later who terminate before age 55 (60 for members of Group 1) with ten or more years of creditable service are eligible for a retirement allowance upon the attainment of age 55 (60 for members of Group 1) provided they have not withdrawn their accumulated deductions from the Annuity Savings Fund of the System.

Ordinary Disability Benefits

A member who is unable to perform his or her job due to a non-occupational disability will receive a retirement allowance if he or she has ten or more years of creditable service and has not reached age 55. The annual amount of such allowance shall be determined as if the member retired for superannuation at age 55 (age 60 for Group 1 members hired on or after April 2, 2012), based on the amount of creditable service at the date of disability. For veterans, there is a minimum benefit of 50 percent of the member's most recent year's pay plus an annuity based on his or her own contributions.

Accidental Disability Benefit

For a job-connected disability, the benefit is 72 percent of the member's most recent annual pay plus an annuity based on his or her own contributions, plus additional amounts for surviving children. Benefits are capped at 75 percent of annual rate of regular compensation for employees who become members after January 1, 1988.

Death Benefits

In general, the beneficiary of an employee who dies in active service will receive a refund of the employee's own contributions. Alternatively, if the employee were eligible to retire on the date of death, a spouse's benefit will be paid equal to the amount the employee would have received under Option C. The surviving spouse of a member who dies with two or more years of credited service has the option of a refund of the employee's contributions or a monthly benefit regardless of eligibility to retire, if

they were married for at least one year. There is also a minimum widow's pension of \$500 per month, and there are additional amounts for surviving children.

If an employee's death is job-connected, the spouse will receive 72 percent of the member's most recent annual pay, in addition to a refund of the member's accumulated deductions, plus additional amounts for surviving children. However, in accordance with Section 100 of Chapter 32, the surviving spouse of a police officer, firefighter or corrections officer who is killed in the line of duty will be eligible to receive an annual benefit equal to the maximum salary held by the member at the time of death. Upon the death of a job-connected disability retiree who retired prior to November 7, 1996 and could not elect an Option C benefit, a surviving spouse will receive an allowance of \$9,000 per year if the member dies for a reason unrelated to cause of disability.

Contributions

Active members of the Middlesex County Retirement System contribute either 5%, 7%, 8% or 9% of their gross regular compensation depending on the date upon which their membership began. An additional 2% is required from employees for earnings in excess of \$30,000. The Department is required to pay an actuarially determined rate. The contribution requirement of plan members is determined by M.G.L. Chapter 32. The contribution requirements are established by and may be amended by the Middlesex County Retirement System with the approval of the Public Employee Retirement Administration Commission.

The Town's contractually required contribution rate for the year ended June 30, 2019 was 17.93% of covered payroll, actuarially determined as an amount that, when combined with employee contributions, is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Town were \$2,185,944 (the Water Department contributed \$114,440) for the year ending June 30, 2019.

b. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2019, the Town reported a liability of \$25,332,249 for its proportionate share of the net pension liability (**the Water Department's share was \$1,406,700**). The net pension liability was measured as of December 31, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. Accordingly, update procedures were utilized to roll forward the liability to the measurement date. The Town's proportion of the net pension liability was based on a projection of the Town's long-term share of contributions to the pension plan relative to the projected contributions of all participating members, actuarially determined. At December 31, 2018, the Town's proportion was 1.624418% (the Water Department is 5.533% of that percentage).

For the year ended June 30, 2019, the Town recognized pension expense of \$3,790,009 (the Water Department recognized \$210,459). At June 30, 2019, the Town and Department reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Town of Littleton, Massachusetts

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 51,828	\$ 88,297
Change in assumptions	1,574,350	-
Net differences between projected and actual earnings on pension plan investments	1,129,151	-
Changes in proportion and differences between contributions and proportionate share of contribut	3,155,407	1,382,261
Contributions subsequent to the measurement date	-	-
	<u>\$ 5,910,736</u>	<u>\$ 1,470,558</u>

Littleton Water Department

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 2,878	\$ 4,903
Change in assumptions	87,424	-
Net differences between projected and actual earnings on pension plan investments	62,702	-
Changes in proportion and differences between contributions and proportionate share of contribut	175,219	76,757
Contributions subsequent to the measurement date	-	-
	<u>\$ 328,223</u>	<u>\$ 81,660</u>

Contributions made subsequent to the measurement date (deferred outflows of resources) are recognized as a reduction of the net pension liability in the next fiscal year. The Town/Department did not have any deferred outflows of resources for

contributions made subsequent to the measurement date. Other amounts reported as deferred outflows and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Town of Littleton, Massachusetts	Year ended June 30:		Amount
	2020	\$	1,726,999
	2021		1,269,588
	2022		657,433
	2023		786,158
	Total	\$	<u>4,440,178</u>

Littleton Water Department	Year ended June 30:		Amount
	2020	\$	95,900
	2021		70,500
	2022		36,507
	2023		43,656
	Total	\$	<u>246,563</u>

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of January 1, 2018, using the following actuarial assumptions, applied to all periods included in the measurement that was updated to December 31, 2018:

Valuation date	January 1, 2018
Actuarial Cost Method	Entry age normal cost method
Amortization Method	Prior year's total contribution increased by 6.5% for fiscal year 2018 through fiscal year 2024, and thereafter the remaining unfunded liability will be amortized on a 4.0% annual increasing basis; ERI Liability amortized in level payments.
Remaining Amortization Period	As of July 1, 2018, 1 year remaining for the 2002 ERI liability; 2 years remaining for the 2003 ERI liability; 4 years remaining for the 2010 ERI liability and 17 years for the remaining unfunded liability.
Asset Valuation Method	The difference between the expected return and the actual investment return on a market value basis is recognized over a five-year period. Asset value is adjusted, as necessary, to be within 20% of market value.
Investment Rate of Return/Discount Rate	7.5% net of pension plan investment expense, including inflation (7.75% in previous valuation)
Inflation Rate	3.25% (3.5% in previous valuation)
Projected Salary Increases	Varies by length of service with ultimate rates of 4.00% for Group 1, 4.25% for Group 2 and 4.50% for Group 4
Cost of Living Adjustments	3.00% of first \$14,000
Rates of Retirement	Varies based upon age for general employees, police and fire employees.
Rates of Disability	For general employees, it was assumed that 45% of all disabilities are ordinary (55% are service connected). For police and fire employees, 10% of all disabilities are assumed to be ordinary (90% are service connected).
Mortality Rates were based on the tables noted below:	
Pre-Retirement	The RP-2014 Blue Collar Mortality Table projected generationally with Scale MP-2017 (previously RP-2000 Employee Mortality Table projected generationally from 2009 with Scale BB2D)
Healthy Retiree	The RP-2014 Blue Collar Health Annuitant Mortality Table projected generationally with Scale MP-2017 (previously RP-2000 Health Annuitant Mortality Table projected generationally from 2009 with Scale BB2D)
Disabled	The RP-2014 Blue Collar Health Annuitant Mortality Table set forward one year and projected generationally with Scale MP-2017 (previously RP-2000 Health Annuitant Mortality Table projected generationally from 2015 using Scale BB2D)

In performing the actuarial valuation, various assumptions are made regarding mortality, retirement, disability and withdrawal rates as well as salary increases and investment returns. The mortality tables listed in the assumption table were determined to contain provisions appropriate to reasonably reflect future mortality improvement, based on a review of the mortality experience of the plan.

Changes in Assumptions

The following assumption changes were reflected in the January 1, 2018 actuarial valuation:

- The mortality tables for healthy participants were changed from the RP-2000 Employee and Healthy Annuitant Mortality Tables projected generationally using Scale BB2D from 2009 to the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2017.
- The mortality tables for disabled participants were changed from the RP-2000 Healthy Annuitant Mortality Table projected generationally using Scale BB2D from 2015 to the RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward 1 year projected generationally using Scale MP-2017.
- The long-term salary increase assumption was lowered by 0.25%, to 4.00% for Group 1 participants, 4.25% for Group 2 participants, and 4.50% for Group 4 participants.
- The investment rate of return assumption was reduced from 7.75% to 7.50%. The inflation rate was reduced to 3.25% from the previous rate of 3.50%.

Changes in Plan Provisions

There were not any changes in the Plan provisions.

Investment Policy

The pension plan's policy in regard to the allocation of invested assets is established by PRIT. Plan assets are managed on a total return basis with a long-term objective of achieving a fully funded status for the benefits provided through the pension plan.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate 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. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	Target Allocation	Long Term Expected Rate of Return
Domestic Equity	17.00%	7.62%
International Developed Markets Equity	14.90%	7.80%
International Emerging Markets Equity	6.00%	9.31%
Core Fixed Income	13.00%	4.00%
Value-added Fixed Income	8.10%	7.58%
Private Equity	12.10%	11.15%
Real Estate	9.40%	6.59%
Timberland	4.10%	7.00%
Hedge Funds / PCS	14.20%	6.83%
Liquidating Portfolios	0.30%	0.00%
Overlay	0.90%	0.00%
	<u>100.00%</u>	

Rate of Return

The annual money-weighted rate of return on pension plan investments for December 31, 2018 (net of investment expenses) was negative 2.52% (positive 17.25% for December 31, 2017). The money-weighted rate of return expresses investment performance, net of pension plan investment expense, is adjusted for the changing amounts actually invested, measured monthly.

Discount Rate

The discount rate used to measure the total pension liability was 7.50% (7.75% in the previous valuation). The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that the Middlesex County Retirement System contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan'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.

Sensitivity of the Department's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Middlesex County Retirement System, calculated using the discount rate of 7.5%, as well as what the Middlesex County System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.5%) or 1-percentage-point higher (8.5%) than the current rate:

	1% Decrease (6.5%)	Discount Rate (7.5%)	1% Increase (8.5%)
Town's proportionate share of the Net Pension Liability	<u>\$30,729,154</u>	<u>\$25,332,249</u>	<u>\$20,781,867</u>
Department's proportionate share of the Town's Net Pension Liability (5.553%)	<u>\$1,706,390</u>	<u>\$1,406,700</u>	<u>\$1,154,017</u>

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued Middlesex County Retirement System financial report. The System issues a stand-alone financial report is available that can be obtained through the System's website at: <https://middlesexretirement.org/wp-content/uploads/2019/07/FINAL-MCRS-Audit-Report-of-Financial-Statements-12-31-18.pdf>.

B. Other Postemployment Benefits (OPEB) Disclosures

Summary of Significant Accounting Policies (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Department's Plan and additions to/deductions from Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

General Information About the Plan

Plan Description

Plan Administration: The Town administers all activity related to the other post-employment benefits plan - a single employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all eligible employees of the Department. Management of the plan is vested in the Town's Board of Selectmen and the Town's Treasurer. The Town's Board of Selectmen has the authority to establish and amend benefit terms.

Plan Membership: At June 30, 2019, the plans membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	7
Inactive plan members entitled to, but, not yet receiving benefit payments	-
Active Plan Members	<u>10</u>
Total	17

Benefits Provided: The Department provides retired employees and their spouses and dependents with payments for a portion of their health care and life insurance benefits. Benefits are provided through a third-party insurer.

Contributions. For employees hired prior to July 1, 2010, the Department will contribute 70% of the premiums. The retiree or surviving spouse will be responsible for the remaining 30%. For employees hired after July 1, 2010, the Department will contribute 50% of the premium. The retiree or surviving spouse will be responsible for the remaining 50%. Benefits paid by the Department are on a pay-as-you-go basis. However, contributions are made to an OPEB Trust. The contribution requirements of plan members and the Department are established by contractual negotiations and may be amended from time to time.

Net OPEB Liability

The Department's net OPEB liability was measured as of June 30, 2019, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date.

Total OPEB Liability	\$1,192,253
Plan Fiduciary Net Position	(482,133)
Net OPEB Liability	<u><u>\$710,120</u></u>

Plan fiduciary net position as a percentage of the total OPEB liability	40.44%
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Actuarial assumptions. The total OPEB liability was determined by an actuarial valuation as of June 30, 2019, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.6% (previously 3.0%)
Investment Rate of Return	7.50%
Health Cost Trend Rates	8.0%, decreasing by 1% per year to an ultimate rate of 3.9%. (previously 8.0%, decreasing by 1% per year to an ultimate rate of 5.0%)

Mortality Rates were based on the tables noted below:

Healthy:

Pre-Retirement

RP-2000 Employees Mortality Table, base year 2009, projected with generational mortality improvement using scale BB2D.

Post-Retirement

RP-2000 Healthy Annuitant Mortality Table, base year 2009, projected with generational mortality improvement using scale BB2D.

Investments

Investment Policy: The plan's policy in regard to the allocation of invested assets is approved and may be amended by the Treasurer with the approval of the Selectmen. The policy pursues an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of 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. The target allocations and best estimates of arithmetic real rates of return for each major asset class summarized in the target asset allocation as of June 30, 2019, are summarized in the table below:

	Target <u>Allocation</u>	Long Term Expected <u>Rate of Return</u>
Domestic Equity	35%	5.92%
International Equity	20%	2.73%
Domestic Bond	20%	3.69%
Alternative	20%	3.50%
International Bond	5%	3.80%
	<u>100.00%</u>	

Concentrations

The OPEB plan did not hold investments in any one organization that represent 5% or more of the OPEB plan's fiduciary net position.

Rate of Return

For the year ended June 30, 2019, the annual money-weighted rate of return on investments, net of investment expense, was 6.73% (5.90% in the prior year). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount rate: The discount rate used to measure the total OPEB liability was 7.5% (7.5% in the prior measurement). The projection of cash flows used to determine the discount rate assumed that Department contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan'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 OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Changes in Net OPEB Liability

	Increase (Decrease)		
	Plan		
	Total OPEB Liability	Fiduciary Net Position	Net OPEB Liability
	(a)	(b)	(a) - (b)
<u>Town</u>			
Balances 6/30/18	\$ 25,609,877	\$ 9,003,920	\$ 16,605,957
Service cost	923,015	-	923,015
Interest	1,949,574	-	1,949,574
Changes of benefit terms	-	-	-
Difference between expected and actual experience	(1,661,369)	-	(1,661,369)
Changes in assumptions	2,595,779	-	2,595,779
Contributions - employer	-	3,498,393	(3,498,393)
Net investment income	-	664,043	(664,043)
Benefit payments	(1,077,132)	(1,077,132)	-
Net changes	2,729,867	3,085,304	(355,437)
Balances 6/30/19	\$ 28,339,744	\$ 12,089,224	\$ 16,250,520
<u>Water Department</u>			
Balances 6/30/19	\$ 1,192,253	\$ 482,133	\$ 710,120

Benefit changes:

None

Changes in assumptions:

The health cost trend rates, inflation assumption, and the teacher mortality table and improvement scale have been updated since the prior measurement.

Sensitivity of the net OPEB liability to changes in the discount rate: The following presents the net OPEB liability of the Department, as well as what the Department's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	1% Decrease	Discount Rate	1% Increase
	<u>6.50%</u>	<u>7.50%</u>	<u>8.50%</u>
Net OPEB Liability (asset)	\$890,243	\$710,120	\$563,700

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates: The following presents the net OPEB liability of the Department, as well as what the Department's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1 percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	1% Decrease	Healthcare Cost Trend	1% Increase
	decreasing to <u>2.9%</u>	8% decreasing to 3.9%	9% decreasing to 4.9%
Net OPEB Liability (asset)	\$531,397	\$710,120	\$948,967

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2019, the Department recognized OPEB expense of negative \$75,273. At June 30, 2019, the Department reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ 70,397
Change in assumptions	109,990	-
Net differences between projected and actual earnings on OPEB plan investments	6,085	-
	<u>\$ 116,075</u>	<u>\$ 70,397</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year ended June 30:	Amount
2020	\$ 7,553
2021	7,553
2022	7,553
2023	6,354
2024	5,630
Thereafter	11,035
Total	<u>\$ 45,678</u>

OPEB plan fiduciary net position. Detailed information about the OPEB plan's fiduciary net position is available in the Town of Littleton's financial statements.

C. **Subsequent Year's Authorization**

At the May 6, 2019 annual Town meeting, the Town adopted the fiscal year 2020 budget for the Water Department. The \$4,080,936 budget will be funded by water user charges and other revenues generated by the Department (\$3,696,465) and by other available funds – free cash (\$384,471).

D. Implementation of New GASB Pronouncements

During fiscal year 2019, the following GASB pronouncements were implemented:

- The GASB issued Statement No. 83, *Certain Asset Retirement Obligations* which is required to be implemented for reporting periods beginning after June 15, 2018. The implementation of this statement did not impact the financial statements.
- The GASB issued Statement No. 84, *Fiduciary Activities* which is required to be implemented in reporting periods beginning after December 15, 2018. The implementation of this statement did not impact the financial statements.
- The GASB issued Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* which is required to be implemented in reporting periods beginning after June 15, 2018. The implementation of this statement did not impact the financial statements.

The following GASB pronouncements will be implemented in future fiscal years:

- The GASB issued Statement No. 87, *Leases* which is required to be implemented in reporting periods beginning after December 15, 2019.
- The GASB issued Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* which is required to be implemented in reporting periods beginning after December 15, 2019.
- The GASB issued Statement No. 90 *Majority Equity Interests—an amendment of GASB Statements No. 14 and No. 61* which is required to be implemented in reporting periods beginning after December 15, 2018.
- The GASB issued Statement No. 91, *Conduit Debt Obligations* which is required to be implemented in reporting periods beginning after December 15, 2020.

Management is currently assessing the impact that the implementation of these pronouncements will have on the basic financial statements.

Required Supplementary Information

Required Supplementary Information
Schedule of the Town of Littleton Massachusetts' Proportionate Share of the Net Pension Liability
Middlesex County Retirement System
Last Ten Fiscal Years

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Town's proportionate share of net pension liability (asset) (%)	1.624418%	1.510218%	1.690981%	1.658682%	1.583397%	<i>This schedule is intended to show information for 10 years. Additional years' information will be displayed as it becomes available.</i>				
Town's proportionate share of net pension liability (asset) (\$)	\$25,332,249	\$21,432,789	\$23,959,114	\$21,397,309	\$19,021,595					
Town's covered payroll	\$12,191,742	\$11,686,136	\$11,081,928	\$10,782,598	\$10,367,883					
Town's proportionate share of net pension liability (asset) as a percentage of its covered payroll	207.78%	183.40%	216.20%	198.44%	183.47%					
Plan fiduciary net position as a percentage of the pension liability	46.40%	49.27%	45.49%	46.13%	47.65%					
Littleton Water Department's proportionate share of net pension liability (asset) (\$)	\$1,406,700	\$1,190,252	\$1,243,478	1,031,350	\$913,744					

** The amounts presented for each fiscal year were determined as of December 31.

See Notes to the Required Supplementary Information

Required Supplementary Information
Schedule of the Town of Littleton, Massachusetts' Contributions
Middlesex County Retirement System
Last Ten Fiscal Years

	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>
Contractually required contribution	\$ 2,185,944	\$ 2,054,283	\$ 1,875,271	\$ 1,762,316	\$ 1,711,410	<i>This schedule is intended to show information for 10 years. Additional years' information will be displayed as it becomes available.</i>				
Contributions in relation to the contractually required contribution	<u>(2,185,944)</u>	<u>(3,555,064)</u>	<u>(2,575,271)</u>	<u>(1,762,316)</u>	<u>(1,711,410)</u>					
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ (1,500,781)</u>	<u>\$ (700,000)</u>	<u>\$ -</u>	<u>\$ -</u>					
Town's covered payroll	12,191,742	11,686,136	11,081,928	10,782,598	10,367,883					
Contributions as a percentage of covered payroll	17.93%	30.42%	23.24%	16.34%	16.51%					
Littleton Water Department's Contributions	<u>\$ 114,440</u>	<u>\$ 106,617</u>	<u>\$ 133,657</u>	<u>\$ 84,751</u>	<u>\$ 101,662</u>					

See Notes to the Required Supplementary Information

Littleton Municipal Water Department
Required Supplementary Information
Schedule of Changes in the Net OPEB Liability and Related Ratios (GASB 75 - Employer Reporting)
June 30, 2019
Last 10 Fiscal Years

<u>Town of Littleton</u>	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total OPEB liability										
Service cost	\$ 923,015	\$ 887,514	<i>This Schedule is intended to be a ten year schedule. Additional years' information will be displayed as it becomes available</i>							
Interest	1,949,574	1,818,827								
Changes of benefit terms	-	-								
Difference between expected and actual experience	(1,661,369)	-								
Changes in assumptions	2,595,779	-								
Benefit payments	(1,077,132)	(919,952)								
Net change in total OPEB liability	<u>2,729,867</u>	<u>1,786,389</u>								
Total OPEB liability - beginning	<u>25,609,877</u>	<u>23,823,488</u>								
Total OPEB liability - ending (a)	<u><u>\$ 28,339,744</u></u>	<u><u>\$ 25,609,877</u></u>								
Plan Fiduciary net position										
Contributions - employer	\$ 3,498,393	\$ 2,352,890								
Net investment income	664,043	461,845								
Benefit payments	(1,077,132)	(919,952)								
Administrative expense	-	-								
Net change in plan fiduciary net position	<u>3,085,304</u>	<u>1,894,783</u>								
Plan fiduciary net position - beginning	<u>9,003,920</u>	<u>7,109,137</u>								
Plan fiduciary net position - ending (b)	<u><u>\$ 12,089,224</u></u>	<u><u>\$ 9,003,920</u></u>								
Town's net OPEB liability - ending (a) - (b)	<u><u>\$ 16,250,520</u></u>	<u><u>\$ 16,605,957</u></u>								
Plan fiduciary net position as a percentage of the total OPEB liability	42.66%	35.16%								
Covered payroll	\$ 21,401,305	\$ 19,528,449								
Town's net OPEB liability as a percentage of covered payroll	75.93%	85.03%								
<u>Water Department</u>										
Department's Total OPEB Liability June 30, 2019	\$ 1,192,253	\$ 1,241,074								
Department's Plan Fiduciary Net Position June 30, 2019	482,133	404,689								
Department's Total OPEB Liability June 30, 2019	<u><u>\$ 710,120</u></u>	<u><u>\$ 836,385</u></u>								

Benefit changes:

None

Changes in assumptions:

The health cost trend rates, inflation assumption, and the teacher mortality table and improvement scale have been updated since the prior measurement.

See Notes to the Required Supplementary Information

Littleton Municipal Water Department
Required Supplementary Information
Schedule of Contributions - Other Post Employment Benefits (GASB 75 - Employer Reporting)
June 30, 2019

Last 10 Fiscal Years

Town of Littleton

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarial determined contribution	\$ 2,657,431	\$ 2,383,507	<i>(This Schedule is intended to be a ten year schedule. Additional years' information will be displayed as it becomes available)</i>							
Contributions in relation to the actuarially determined contribution	3,498,393	2,352,890								
Contribution deficiency (excess)	<u>\$ (840,962)</u>	<u>\$ 30,617</u>								
Covered payroll	\$ 21,401,305	\$ 19,528,449								
Contributions as a percentage of covered payroll	16.35%	12.05%								

Water Department

Contributions in relation to the actuarially determined contribution	<u>\$ 91,964</u>	<u>\$ 108,584</u>
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Notes to Schedule

Valuation date:	7/1/2018	7/1/2016
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Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry Age Normal Cost
Amortization method	Level Dollar
Amortization period	28 years closed
Asset valuation method	Market Value
Inflation	2.6% per year (3.0% per year in previous report)
Healthcare cost trend rates	8.0%, decreasing by 1% per year to an ultimate rate of 3.9%, utilizing the Society of Actuaries Getzen Medical Trend Model. The ultimate medical inflation rate is reached in 2075 (The healthcare cost trend rate in the prior valuation was 8.0%, decreasing by 1% per year to an ultimate rate of 5%)

Investment rate of return	7.50%
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Mortality

Healthy:

Pre-Retirement	RP-2000 Employees Mortality Table, base year 2009, projected with generational mortality improvement using scale BB2D.
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Post-Retirement	RP-2000 Healthy Annuitant Mortality Table, base year 2009, projected with generational mortality improvement using scale BB2D.
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See Notes to the Required Supplementary Information

Littleton Municipal Water Department
Notes to the Required Supplementary Information
June 30, 2019

I Pension Plans

a. Plan Description

The Department provides pension benefits to eligible employees by contributing to the Middlesex County Retirement System, a cost sharing multiple-employer defined benefit pension plan administered by the Middlesex County Retirement System. The System is administered by a five member board on behalf of all eligible current employees and retirees. The system provides retirement benefits, cost of living adjustments, disability benefits and death benefits.

The Department is a member of the Massachusetts Contributory Retirement System and is governed by Chapter 32 of the Massachusetts General Laws (MGL). The authority to establish and amend benefit provisions requires a statutory change to Chapter 32. The Middlesex County Retirement System issues a stand-alone financial report that is available to the public at <https://middlesexretirement.org/wp-content/uploads/2019/07/FINAL-MCRS-Audit-Report-of-Financial-Statements-12-31-18.pdf> or by writing to the Middlesex County Retirement System, 25 Linnell Circle, P.O. Box 160, Billerica, Massachusetts 01865.

b. Funding Plan

Active members of the Middlesex County Retirement System contribute either 5%, 7%, 8% or 9% of their gross regular compensation depending on the date upon which their membership began. An additional 2% is required from employees for earnings in excess of \$30,000. The Department is required to pay an actuarially determined rate. The contribution requirements of plan members are determined by M.G.L. Chapter 32. The Department's contribution requirement is established and may be amended by the Middlesex County Retirement System with the approval of the Public Employee Retirement Administration Commission.

c. Change in Assumptions

The following assumption changes were reflected in the January 1, 2018 actuarial valuation:

- The mortality tables for healthy participants were changed from the RP-2000 Employee and Healthy Annuitant Mortality Tables projected generationally using Scale BB2D from 2009 to the RP-2014 Blue Collar Employee and Healthy Annuitant Mortality Tables projected generationally using Scale MP-2017.
- The mortality tables for disabled participants were changed from the RP-2000 Healthy Annuitant Mortality Table projected generationally using Scale BB2D from 2015 to the RP-2014 Blue Collar Healthy Annuitant Mortality Table set forward 1 year projected generationally using Scale MP-2017.

- The long-term salary increase assumption was lowered by 0.25%, to 4.00% for Group 1 participants, 4.25% for Group 2 participants, and 4.50% for Group 4 participants.
- The investment rate of return assumption was reduced from 7.75% to 7.50%. The inflation rate was reduced to 3.25% from the previous rate of 3.50%.

Changes in Plan Provisions

There were not any changes in the Plan provisions.

d. Schedule of Town's Proportionate Share of the Net Pension Liability - Middlesex County Retirement System

The schedule details the Town's percentage of the collective net pension liability, the proportionate amount of the collective net pension liability, the Town's covered payroll, the Town's proportionate share of the collective net pension liability as a percentage of the Town's covered payroll and the fiduciary net position of the plan as a percentage of the total pension liability. The schedule, also, displays the Water Department's proportionate share of the Net pension liability. As more information becomes available, this will be a ten year schedule.

e. Schedule of the Town's Contributions - Middlesex County Retirement System

The schedule details the Town's contractually required contributions, the contributions made by the Town, the deficiency/(excess) of contributions made by the Town, the Town's covered payroll and the Town's contributions as a percentage of covered payroll. The schedule, also, displays Water Department's contributions. As more information becomes available, this will be a ten year schedule.

II Other Postemployment Benefits (OPEB) Disclosures

Plan Description

Plan Administration: The Town administers all activity related to the other post-employment benefits plan - a single employer defined benefit plan that is used to provide postemployment benefits other than pensions (OPEB) for all eligible employees of the Department. Management of the plan is vested in the Town's Board of Selectmen and the Town's Treasurer. The Town's Board of Selectmen has the authority to establish and amend benefit terms.

Benefits Provided: The Department provides retired employees and their spouses and dependents with payments for a portion of their health care and life insurance benefits. Benefits are provided through a third-party insurer.

Contributions. For employees hired prior to July 1, 2010, the Department will contribute 70% of the premiums. The retiree or surviving spouse will be responsible for the remaining 30%. For employees hired after July 1, 2010, the Department will contribute 50% of the premium. The retiree or surviving spouse will be responsible for the remaining

50%. Benefits paid by the Department are on a pay-as-you-go basis. However, contributions are made to an OPEB Trust. The contribution requirements of plan members and the Department are established by contractual negotiations and may be amended from time to time.

a. Schedule of Net OPEB Liability and Related Ratios

The schedule provides information about the changes in the Town's OPEB liability and the changes in the fiduciary net position of the plan. The schedule, also, provides the plan fiduciary net position as a percentage of the total OPEB liability, the covered payroll and the Town's net OPEB liability as a percentage of covered payroll. The schedule, also, displays the Water Department's total OPEB liability, plan fiduciary net position and net OPEB liability as of June 30, 2019.

b. The Schedule of Contributions - Other Post Employment Benefits

The schedule details the Town's actuarially required contributions, the contributions made by the Town, the deficiency/(excess) of contributions made by the Town, the Town's covered payroll and the Town's contributions as a percentage of covered payroll. The schedule, also, displays the Water Department's contributions in relation to the actuarially determined contribution.