



Board of Water and Light – City of Lansing, Michigan

Financial Report
with Additional Information
As of and for the Years Ended June 30, 2019
and 2018

Board of Water and Light – City of Lansing, Michigan

	Contents
Independent Auditor's Report	1-2
Required Supplemental Information	
Management's Discussion and Analysis	3-5
Basic Financial Statements	
Statements of Net Position	6-7
Statements of Revenues, Expenses, and Changes in Net Position	8
Statements of Cash Flows	9-10
Pension Trust Funds – Statements of Net Position	11
Pension Trust Funds – Statements of Changes in Net Position	12
Notes to Financial Statements	13-68
Required Supplemental Information	69
Schedule of Changes in the Net Pension Asset	70
Schedule of Employer Contributions to the Net Pension Asset	71
Schedule of Changes in the Net OPEB Liability	72
Schedule of Employer Contributions to the Net OPEB Liability	73
Notes to Required Supplemental Information	74-76
Additional Information	77
Income Available for Revenue Bond Debt Retirement	78
Detail of Statements of Revenues and Expenses	79
Detail of Statements of Changes in Net Position	80
Pension Trust Funds – Detail of Statements of Net Position	81

Board of Water and Light – City of Lansing, Michigan

Pension Trust Funds – Detail of Statement of Changes in Net
Position

82-83

INDEPENDENT AUDITORS' REPORT

To the Honorable Mayor, Members of
the City Council, and Commissioners
Lansing Board of Water and Light
City of Lansing, Michigan

We have audited the accompanying financial statements of Lansing Board of Water and Light enterprise fund and its fiduciary funds, as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Lansing Board of Water and Light'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 audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Lansing Board of Water and Light'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 Lansing Board of Water and Light'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 financial position of Lansing Board of Water and Light as of June 30, 2019 and 2018, and the respective changes in financial position and cash flows thereof for the years 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 required supplementary information as 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.

Additional Information

Our audits were conducted for the purpose of forming opinions on the financial statements as a whole. The supplemental information, listed in the table of contents as additional information, is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the additional information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
September 5, 2019

Lansing Board of Water and Light

Management's Discussion and Analysis

This section explains the general financial condition and results of operations for the Lansing Board of Water and Light ("BWL"). The BWL includes the consolidated operations of the electric, water, steam, and chilled water utilities. The notes to financial statements following this section are essential reading for a complete understanding of the financial and operational results for the years ended June 30, 2019 and 2018.

Overview of Business

The BWL owns and operates an electric system which generates, purchases, and distributes electric energy to over 97,000 retail customers in the greater Lansing area, and wholesale customers through participation in the Midcontinent Independent System Operator, Inc. (MISO), which is BWL's regional electric grid. The BWL generated 54 percent of its retail and wholesale sales from existing generation assets. Additional electric generation was supplied through BWL's membership in the Michigan Public Power Agency, which includes BWL's partial ownership of Detroit Edison's Belle River Plant, and through MISO. The BWL maintains a diversified renewable energy portfolio which includes wind, solar, landfill gas, and hydro-electric generation. The combination of renewable energy generation and energy efficiency programs support BWL's adopted plan to provide 30% clean energy in 2020 and 40% in 2030.

The BWL owns and operates water wells, a raw water transmission system, water conditioning facilities, and an extensive water distribution system serving potable water to over 57,000 residential, commercial, and industrial customers in the greater Lansing area.

The BWL owns and operates steam generation boilers, a steam transmission and distribution system serving over 140 customers, and a chilled water facility and distribution piping system serving 19 customers in the City of Lansing.

Capital Expenditures

Capital expenditures are driven by the need to replace, expand, or maintain the generation, transmission, and distribution systems of the BWL to meet customer utility needs and to maintain a high level of service reliability. The BWL invests essentially all revenues not paid out for operations and maintenance expense, nonoperating expenses, or debt service back into capital improvements for its water, electric, steam, and chilled water systems. Gross capital expenditures were \$131.4 and \$92.3 million in fiscal years 2019 and 2018, respectively.

The BWL generally pays the cost of its capital improvements from internally generated funds; however, revenue bonds are issued from time to time to support large projects or special needs such as construction of generation facilities.

Lansing Board of Water and Light

Management's Discussion and Analysis (Continued)

Detailed financial information for the separate utilities of water, electric, steam, and chilled water can be found in the Additional Information section of this financial report.

Condensed Financial Information (dollars in millions)

	As of June 30			% Change	
	2019	2018	Restated 2017	2018 to 2019	
Assets					
Utility plant	\$ 798.7	\$ 719.3	\$ 680.4	%	11.0
Other assets	661.8	296.8	332.8		123.0
Total assets	1,460.5	1,016.1	1,013.2		43.7
Deferred Outflow of Resources	5.2	7.4	6.6		(29.7)
Liabilities					
Long-term liabilities	712.6	355.6	380.0		100.4
Other liabilities	63.3	61.3	56.6		3.3
Total liabilities	775.9	416.9	436.6		86.1
Deferred Inflow of Resources	86.9	36.2	26.9		140.1
Net Position					
Net investment in capital assets	381.0	418.1	369.5		(8.9)
Restricted for debt service	72.1	42.8	38.7		68.5
Unrestricted	149.8	109.6	148.2		36.7
Net position	\$ 602.9	\$ 570.5	\$ 556.4	%	5.7

Capital expenditures in FY2019 exceeded depreciation, impairments and retirements thereby increasing utility plant by \$79.4 million. The \$365 million increase in other assets is offset by a \$356 million increase in long term liabilities due to capital funding for new production facilities.

Fiscal year 2017 balances were restated during FY 2018 due to the implementation of GASB No. 75. The changes in the Deferred Outflow/Inflow of Resources is attributable to GASB No. 75 net OPEB liability. These deferrals reflect differences between projected and actual experience, changes in actuarial assumptions, and differences between projected and actual investment earnings on plan investments. They are amortized through expense as described in Note 8.

Lansing Board of Water and Light

Management's Discussion and Analysis (Continued)

Condensed Financial Information (dollars in millions) (Continued)

	For the Year Ended June 30			% Change 2019 to 2018
	2019	2018	Restated 2017	
Result of Operations				
Operating Revenue	\$ 356.9	\$ 353.1	\$ 371.4	% 1.1
Operating Expense	312.1	325.5	342.4	(4.1)
Nonoperating expense - Net	(12.4)	(13.4)	(22.7)	(7.5)
Changes in Net Position	\$ 32.4	\$ 14.1	\$ 6.4	\$ 129.8

Operating revenue increased by \$3.8 million primarily due to changes in rates. Net Income increased by \$18.3 million primarily due to reduced operating expenses which included a reduction in postemployment benefit expense of \$11.5 million.

Budget – The BWL Commissioners approved a \$266.2 million operating expense budget (excluding depreciation) for fiscal year 2019. Actual expenses (excluding depreciation and impairment) were \$244.5 million. The capital improvement budget, net of customer contributions in aid of construction, was \$189.6 million for FY2019, and actual net capital expenditures were \$129.0 million. The difference between the capital budget and actual spend is due to a change within the project timeline for a new combined cycle natural gas power plant, Delta Energy Park.

Financing Activities – In June of 2018, Revenue Bond Anticipation Notes Series 2018 were issued to fund project start-up costs for a new combined cycle natural gas power plant. The 2018 Note Series will provide funding for up to \$100 million in project costs for a period of up to 18 months. Prior to the end of the 18-month period, Revenue Bonds will be issued to extinguish the outstanding notes and provide additional project funding for the plant and other system improvements. In June of 2019, \$319,875,000 of Utility System Revenue Bonds, Series 2019A were issued for the purposes of paying costs to acquire and construct a natural gas combined cycle facility (Delta Energy Park) and other system improvements, paying a portion of the BWL's outstanding 2018 Note Series, providing for the payment of capitalized interest on the Series 2019 Bonds, and paying costs of issuance of the Series 2019 Bonds. The cost of Delta Energy Park is budgeted at up to \$500 million and is scheduled to begin operation in FY 2021.

Board of Water and Light - City of Lansing, Michigan

Statements of Net Position

	As of June 30	
	2019	2018
Assets		
Current Assets		
Restricted cash and investments (Notes 2 and 3)	\$ 79,607,052	\$ 50,550,600
Cash and investments (Notes 1 and 2)	37,546,971	48,127,904
Designated cash and investments (Notes 1 and 2)	91,631,559	88,774,893
Accounts receivable - Net (Note 1)	24,087,240	24,560,286
Estimated unbilled accounts receivable (Note 1)	18,131,906	19,748,294
Inventories (Note 1)	29,966,809	23,921,728
Other	5,278,743	4,742,077
Total current assets	286,250,280	260,425,782
Other Assets		
Recoverable environmental remediation (Note 6)	2,435,729	2,983,786
Special deposit (Note 1)	34,361,165	41,165
Net pension asset (Note 8)	6,595,727	6,616,482
Net OPEB asset (Note 8)	46,608,898	-
Other (Note 1)	2,590,845	2,593,739
Total other assets	92,592,364	12,235,172
Noncurrent Restricted Assets (Investments) (Notes 2 and 3)	282,919,314	24,151,912
Utility Plant (Notes 1 and 4)		
Water	328,004,577	316,440,019
Electric	795,361,687	730,148,451
Steam	80,233,333	78,115,677
Chilled water	34,083,868	34,078,066
Common facilities	103,276,137	92,072,756
Total	1,340,959,602	1,250,854,969
Less accumulated depreciation	611,749,762	570,038,862
Net	729,209,840	680,816,107
Construction in progress (Note 9)	69,536,946	38,518,401
Total utility plant	798,746,786	719,334,508
Total assets	1,460,508,744	1,016,147,374
Deferred Outflows of Resources -		
Bond refunding loss being amortized	1,699,549	1,859,964
Net pension deferred outflows (Note 8)	337,272	1,932,329
Net OPEB deferred outflows (Note 8)	3,180,635	3,655,764
Total deferred outflows of resources	5,217,456	7,448,057

Board of Water and Light - City of Lansing, Michigan

Statements of Net Position (Continued)

	As of June 30	
	2019	2018
Liabilities and Net Position		
Current Liabilities		
Accounts payable	\$ 38,323,009	\$ 34,829,022
Current portion of long-term debt (Note 5)	7,608,792	9,360,459
Accrued payroll and related taxes	2,415,744	2,311,346
Customer deposits	2,474,310	2,202,779
Accrued compensated absences (Note 1)	4,843,676	4,810,006
Accrued interest	84,772	89,998
Accrued interest (payable from restricted assets)	<u>7,531,375</u>	<u>7,729,600</u>
Total current liabilities	63,281,678	61,333,210
Compensated Absences - Less current portion (Note 1)	7,497,367	7,313,587
Other Long-term Liabilities		
Workers' compensation	2,200,000	2,200,000
Environmental remediation liability (Note 9)	6,902,174	7,321,928
Net OPEB liability (Note 8)	-	19,447,441
Other	<u>1,305,804</u>	<u>1,375,055</u>
Total other long-term liabilities	10,407,978	30,344,424
Long-term Debt - Less current portion (Note 5)	<u>694,699,953</u>	<u>317,880,899</u>
Total liabilities	775,886,976	416,872,120
Deferred Inflows of Resources		
Revenue intended to cover future costs (Note 6)	15,377,770	17,921,615
Recoverable energy asset (Note 6)	8,087,614	4,908,441
Net OPEB deferred inflows (Note 8)	<u>63,472,837</u>	<u>13,395,378</u>
Total deferred inflows of resources	86,938,221	36,225,434
Net Position		
Net investment in capital assets	381,056,904	418,105,026
Restricted for debt service (Note 3)	72,075,677	42,821,000
Unrestricted	<u>149,768,422</u>	<u>109,571,851</u>
Total net position	<u>\$ 602,901,003</u>	<u>\$ 570,497,877</u>

Board of Water and Light - City of Lansing, Michigan

Statements of Revenues, Expenses, and Changes in Net Position

	For the Year Ended June 30	
	2019	2018
Operating Revenues (Note 1)		
Water	\$ 42,851,399	\$ 41,524,143
Electric	294,100,606	293,261,408
Steam	13,740,119	12,072,017
Chilled water	6,192,397	6,225,356
Total operating revenues	356,884,521	353,082,924
Operating Expenses		
Production:		
Fuel, purchased power, and other operating expenses	125,335,173	142,679,119
Maintenance	18,941,418	16,474,970
Transmission and distribution:		
Operating expenses	8,186,690	7,929,917
Maintenance	21,688,566	19,983,487
Administrative and general	70,664,307	73,638,904
Return on equity (Note 7)	21,110,884	20,561,871
Depreciation (Note 1)	46,123,865	44,255,255
Total operating expenses	312,050,903	325,523,523
Operating Income	44,833,618	27,559,401
Nonoperating Income (Expenses)		
Investment income	5,464,438	834,087
Other (expense)	(2,373,022)	(883,318)
Bonded debt interest expense	(15,443,098)	(13,331,897)
Other interest expense	(78,810)	(62,210)
Total nonoperating expenses - Net	(12,430,492)	(13,443,338)
Net Income (Changes in Net Position)	32,403,126	14,116,063
Net Position - Beginning of year	570,497,877	556,381,814
Net Position - End of year	<u>\$ 602,901,003</u>	<u>\$ 570,497,877</u>

Board of Water and Light - City of Lansing, Michigan

Statements of Cash Flows

	For the Year Ended June 30	
	2019	2018
Cash Flows from Operating Activities		
Cash received from customers	359,151,859	358,158,868
Cash paid to suppliers	(240,801,534)	(202,605,345)
Cash paid to employees	(54,272,072)	(58,221,626)
Return on equity (Note 7)	(21,110,884)	(20,561,871)
Cash from customer deposits	271,531	129,975
Interest on customer deposits	(78,810)	(62,210)
Net cash provided by operating activities	43,160,090	76,837,791
Cash Flows from Capital and Related Financing Activities		
Proceeds from new borrowings	450,883,509	50,001
Planned, bonded, and annual construction	(126,190,596)	(77,627,731)
Principal payments on debt	(74,960,459)	(9,883,645)
Bond issuance costs	(1,915,598)	-
Interest on debt	(16,341,797)	(15,952,433)
Net cash used in capital and related financing activities	231,475,059	(103,413,808)
Cash Flows from Investing Activities		
Proceeds from the sale and maturity of investments	150,921,330	76,471,402
Interest received	831,335	639,673
Purchase of investments	(297,210,832)	(75,237,572)
Net cash provided by investing activities	(145,458,167)	1,873,503
Net Increase in Cash and Cash Equivalents	129,176,982	(24,702,514)
Cash and Cash Equivalents - Beginning of year	80,200,915	104,903,429
Cash and Cash Equivalents - End of year	\$ 209,377,897	\$ 80,200,915

Board of Water and Light - City of Lansing, Michigan

Statements of Cash Flows (Continued)

	For the Year Ended June 30	
	2019	2018
Balance Sheet Classifications		
Restricted cash and investments	\$ 79,607,052	\$ 50,550,600
Cash and investments	37,546,971	48,127,904
Designated cash and investments	91,631,559	88,774,893
Noncurrent restricted assets	<u>282,919,314</u>	<u>24,151,912</u>
Total cash and investments	\$ 491,704,896	\$ 211,605,309
Less noncash investments	<u>(282,326,999)</u>	<u>(131,404,394)</u>
Cash and Cash Equivalents - End of year	<u>\$ 209,377,897</u>	<u>\$ 80,200,915</u>
Reconciliation of Operating Income to Net Cash from Operating Activities		
	For the Year Ended June 30	
	2019	2018
Operating income	\$ 44,833,618	\$ 27,559,401
Adjustments to reconcile operating income to net cash from operating activities:		
Other nonoperating	(1,477,359)	(1,846,895)
Depreciation	46,123,865	44,255,255
Sewerage collection fees	1,019,935	963,577
Interest on customer deposits	(78,810)	(62,210)
Decrease (increase) in assets:		
Accounts receivable (Note 1)	473,046	11,701
Unbilled accounts receivable (Note 1)	1,616,388	(2,413,754)
Inventories	(6,045,081)	1,500,175
Special deposit	(34,320,000)	5,648,835
Net pension asset	20,755	2,412,673
Other	14,285	3,126,359
(Decrease) increase in liabilities and deferred outflows/inflows of resources:		
Accounts payable and other accrued expenses	3,809,162	472,056
Customer deposits	271,531	129,975
Net pension asset deferrals	1,595,057	(1,963,534)
Other postemployment benefits liability and deferrals	(15,503,751)	(5,078,911)
Other	<u>807,449</u>	<u>2,123,088</u>
Total adjustments	<u>(1,673,528)</u>	<u>49,278,390</u>
Net cash provided by operating activities	<u>\$ 43,160,090</u>	<u>\$ 76,837,791</u>
Noncash Capital and Financing Activities		
Increase (decrease) in noncash investment valuations	\$ 4,633,103	\$ 194,414

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Statements of Net Position

	As of June 30	
	2019	2018
Assets		
Receivable - investment interest receivable	\$ 346,702	\$ 553,132
Trade receivable - due from broker	1,539	11,853
Investments at fair value:		
Cash and money market trust fund	5,400,601	3,876,413
U.S. government obligations	23,867,491	34,494,449
Fixed income securities	26,488,080	47,121,007
Mutual funds	278,567,529	252,188,400
Stable value	36,352,914	35,135,911
Common stock	77,698,376	62,052,966
Self-directed brokerage account	3,787,956	2,144,556
Participant notes receivable	3,422,076	3,649,872
Total investments	<u>455,585,023</u>	<u>440,663,574</u>
Liabilities		
Trade payable - due to broker	<u>81,828</u>	<u>154,385</u>
Net Position - Held in trust for pension and other employee benefits	<u>\$ 455,851,436</u>	<u>\$ 441,074,174</u>

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Statements of Changes in Net Position

	For the Year Ended June 30	
	2019	2018
Increases		
Investment income (loss):		
Net appreciation (depreciation)		
in fair value of investments	\$ 10,999,681	\$ 17,115,698
Interest and dividend income	<u>16,112,845</u>	<u>14,665,987</u>
Net investment income (loss)	27,112,526	31,781,685
Employer contributions	15,895,922	16,930,215
Participant rollover contributions	1,786,985	1,648,509
Interest from participant notes receivable	<u>210,373</u>	<u>156,090</u>
Total increases	45,005,806	50,516,499
Decreases		
Retiree benefits paid	29,059,604	33,737,868
Loan defaults	247,237	209,514
Participants' note and administrative fees	<u>921,703</u>	<u>993,705</u>
Total decreases	<u>30,228,544</u>	<u>34,941,087</u>
Change in Net Position Held in Trust	14,777,262	15,575,412
Net Position Held in Trust for Pension and Other Employee Benefits		
Beginning of year	<u>441,074,174</u>	<u>425,498,762</u>
End of year	<u>\$ 455,851,436</u>	<u>\$ 441,074,174</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies

The following is a summary of the significant accounting policies used by the Board of Water and Light ("BWL"):

Reporting Entity – The BWL, a related organization of the City of Lansing, Michigan ("City"), is an administrative board established by the City Charter. The City Charter grants the BWL full and exclusive management of the electric, water, steam, and chilled water services of the City. The commissioners of the governing board are appointed by the mayor with approval of the City Council. The BWL provides water, steam, chilled water, and electric services to the City and surrounding townships. The governing board (Board of Commissioners) has the exclusive authority to set rates for the services provided. The financial statements include the financial activities of the electric, water, steam, and chilled water operations of the BWL. The financial statements also include the financial activities of the BWL Pension Trust Funds. The BWL is exempt from taxes on income because it is a municipal entity.

Fund Accounting – The BWL accounts for its activities in two different fund types. In order to demonstrate accountability for how it has spent certain resources, separate funds allow the BWL to show the particular expenditures that specific revenues were used for. The funds are aggregated into two fund types:

Enterprise funds provide goods or services to users in exchange for charges or fees.

Fiduciary funds

1. The Defined Contribution Plan and Defined Benefit Plan, which accumulate resources for benefit payments to retirees.
2. The Voluntary Employees' Beneficiary Association ("VEBA"), which accumulates resources for future retiree health care payments to retirees.

Basis of Accounting – Enterprise funds and fiduciary funds use the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. In addition, the utilities meet the criteria and, accordingly, on July 1, 2012, the BWL adopted the accounting and reporting requirements of GASB 62, paragraphs 476–500.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

The BWL follows the accounting and reporting requirements of GASB 62, paragraphs 476–500, which require that the effects of the ratemaking process be recorded in the financial statements. Such effects primarily concern the time at which various items enter into the determination of net income in order to follow the principle of matching costs and revenues. Accordingly, the BWL records various regulatory assets and liabilities to reflect the regulator's actions (see Note 6). Management believes that the BWL meets the criteria for continued application of GASB 62 paragraphs 476–500, but will continue to evaluate its applicability based on changes in the regulatory and competitive environment.

In June 2018, the GASB issued statement No. 89 – Accounting for Interest Cost Incurred before the End of a Construction Period. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. This standard was implemented effective July 1, 2018 for the enterprise fund.

System of Accounts – The BWL's accounts are maintained substantially in accordance with the Uniform Systems of Accounts of the Federal Energy Regulatory Commission for its electric and steam systems and in accordance with the Uniform Systems of Accounts of the National Association of Regulatory Utility Commissioners for the water and chilled water systems. The chart of accounts dictates how the BWL classifies revenue and expense items in the statement of revenues, expenses, and changes in net position as operating and nonoperating.

Rate Matters – Rates charged to customers are established solely by the governing board. The BWL has agreed to set rates sufficient to meet certain requirements of the bond resolutions for the outstanding revenue bonds.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Operating Classification – Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the principal ongoing operations. The principal operating revenues are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, return on equity, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Report Presentation – This report includes the fund-based statements of the BWL. In accordance with government accounting principles, a government-wide presentation with program and general revenues is not applicable to special purpose governments engaged only in business-type activities.

Specific Balances and Transactions

Cash and Cash Equivalents – The BWL considers demand deposits and current restricted funds, which consist of cash and highly liquid investments with an original maturity of 90 days or less, as cash and cash equivalents for financial statement purposes.

Investments are stated at fair value, which is the amount at which an investment could be exchanged in a current transaction between two willing parties. Fair values are based on methods and inputs as discussed in Note 2. Adjustments necessary to record investments at fair value are recorded in the operating statement as increases or decreases in investment income. Market values may have changed significantly after year end.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Investments – The BWL has established special purpose funds designated to meet anticipated operating requirements. In addition, BWL management has established a future construction fund designated to meet future construction requirements. These funds consist principally of commercial paper and United States government securities and are segregated as follows:

	Carrying Value	
	2019	2018
Designated purpose:		
Coal inventory fluctuation	\$ 4,885,785	\$ 4,667,114
Litigation, environmental, and uninsured losses	19,754,722	18,867,177
Future water facilities	<u>3,982,401</u>	<u>3,802,319</u>
Subtotal	28,622,908	27,336,610
Special purpose – Future construction	<u>63,008,651</u>	<u>61,438,283</u>
Total	<u>\$ 91,631,559</u>	<u>\$ 88,774,893</u>

Accounts Receivable – Accounts receivable are stated at net invoice amounts. A general valuation allowance is established based on an analysis of the aged receivables and historical loss experience. All amounts deemed to be uncollectible are charged to expense in the period that determination is made. Accounts receivable are not deemed uncollectible until they are approximately 270 days past due and have remained completely unpaid throughout the BWL's collection policy. The components of accounts receivable for 2019 and 2018 are as follows:

	2019	2018
Customer receivables	\$ 20,283,557	\$ 20,118,859
Sewerage collections	2,472,766	2,367,863
Miscellaneous	2,830,917	3,573,564
Less allowance for doubtful accounts	<u>(1,500,000)</u>	<u>(1,500,000)</u>
Net	<u>\$ 24,087,240</u>	<u>\$ 24,560,286</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Special Deposit – In 2018, the BWL contracted with Consumer’s Energy to install a new gas pipeline. Under the terms of the contract, the BWL will make installment payments of \$52,000,000 throughout the construction period. Based on usage of the new pipeline, the BWL is eligible to recover all but \$10,000 of the installment payments. As of June 30, 2019, the BWL estimates it will recover at least \$34,320,000 of the installment payments based on expected usage. The long-term other asset for the Consumer’s Energy deposit recorded was \$34,320,000 and \$0 in 2019 and 2018, respectively. The BWL has \$41,165 of miscellaneous other deposits at year end.

Inventories – Inventories are stated at weighted average cost and consist of the following at June 30:

	<u>2019</u>	<u>2018</u>
Coal	\$ 15,002,110	\$ 10,207,127
Gas	663,786	478,312
Materials and supplies	<u>14,300,913</u>	<u>13,236,289</u>
Total	<u>\$ 29,966,809</u>	<u>\$ 23,921,728</u>

Utility Plant – The utility plant is stated on the basis of cost, which includes expenditures for new facilities and those which extend the useful lives of existing facilities and equipment. Expenditures for normal repairs and maintenance are charged to maintenance expense as incurred. Capital assets are generally defined as assets with an initial, individual cost of more than \$5,000 and an estimated life in excess of one year.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Depreciation – Depreciation of the utility plant is computed using the straight-line method based on estimated useful lives. The resulting provisions for depreciation in 2019 and 2018, expressed as a percentage of the average depreciable cost of the related assets, are as follows:

Classification of utility plant	Life (Years)	Average Rate (Percent)	
		2019	2018
Water	4-100	2.1	2.1
Electric	4-50	4.2	4.3
Steam	5-50	3.2	3.2
Chilled water	5-50	3.5	3.5
Common facilities	4-50	5.3	5.2

When units of property are retired, their costs are removed from the utility plant and charged to accumulated depreciation.

Accrued Compensated Absences – The BWL records a liability for estimated compensated absences that are attributable to services already rendered and that are not contingent on a specific event that is outside the control of the BWL and its employees. This liability is accrued as employees earn the rights to such benefits. The BWL estimates the total current and noncurrent portions of the liability to be \$12,341,043 and \$12,123,593 as of June 30, 2019 and 2018, respectively.

Capital Contributions – Capital contributions represent nonrefundable amounts received for the purpose of construction for the utility plant. These contributions are from third parties, including amounts from customers, grant programs, and insurance proceeds from damage. Electric, water, and steam contributions are credited against the related assets or recorded as a separate regulatory liability and will offset the depreciation of the related assets over the estimated useful lives. This treatment is consistent with the BWL's ratemaking policy and is thus permitted under GASB 62 paragraphs 476-500.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Deferred Outflows/Inflows of Resources – In addition to assets, the statement of net position reports 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 and so will not be recognized as an outflow of resources (expense/expenditure) until then. The BWL has three items that qualify for reporting in this category. The deferred outflows of resources relate to deferred losses on refunding, pension related deferrals under GASB 68, and OPEB related deferrals under GASB 75.

In addition to liabilities, the statement of net position reports 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 and so will not be recognized as an inflow of resources (revenue) until that time. The BWL has the following items that qualify for reporting in this category: the deferred inflows of resources related to costs that have been incurred and will be billed to customers in the future related to the renewable energy plan and energy optimization, chiller plant, and Wise Road items described in Note 6, pension related deferrals under GASB 68, and OPEB related deferrals under GASB 75.

Net Position – Equity is classified as net position and displayed in three components:

- **Net Investment in Capital Assets** – Consists of capital assets, net of accumulated depreciation, and reduced by the outstanding balances of any bonds that are attributable to the acquisition, construction, or improvement of those assets.
- **Restricted for Debt Service** – Consists of net position with constraints placed on their use by revenue bond resolution.
- **Unrestricted** – All other net position that does not meet the definition of “restricted” or “net investment in capital assets.”

Net Position Flow Assumption – Sometimes the BWL will fund outlays for a particular purpose from both restricted (e.g., restricted bond) and unrestricted resources. In order to calculate the amounts to report as restricted net position and unrestricted net position in the enterprise fund financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the BWL’s policy to consider restricted net position to have been depleted before unrestricted net position is applied.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Net Pension Asset – A net pension asset is recorded in accordance with GASB Statement No. 68. The asset is the difference between the actuarial total pension liability and the Plan’s fiduciary net position as of the measurement date. See Note 8 for additional information.

Other Assets – Other assets consists of a deposit held with the Michigan Public Power Agency (MPPA) related to the Belle River project.

Long-Term Obligations – Long-term debt and other obligations are reported as liabilities. Bond premiums and discounts are amortized over the life of the bonds using the straight-line method. Gains or losses on prior refundings are amortized over the remaining life of the old debt or the life of the new debt, whichever is shorter. The balance at year end for premiums and discounts is shown as an increase or decrease in the liability section of the statement of net position. The balance at year end for the loss on refunding is shown as a deferred outflow in the balance sheet.

Unbilled Accounts Receivable and Revenue – Unbilled accounts receivable at June 30, 2019 and 2018 represents the estimated amount of accounts receivable for services that have not been billed as of the balance sheet date. The amounts are a result of a timing difference between the end of the financial statement cycle (month end) and the billing cycle (various dates within the month for each billing period). Accordingly, the current year revenue from customers whose billing period ends after June 30 for services rendered prior to July 1 will be recognized in the current period.

Postemployment Benefits Other Than Pensions (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 Post-Retirement Plan and Trust for Eligible Employees of Lansing Board of Water and Light (“Plan”), a trust fund of the BWL, and additions to/deductions from the Plan 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.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 1 – Significant Accounting Policies (Continued)

Inter-utility Transactions – The water, electric, steam, and chilled water operations of the BWL bill each other for services provided and these services are reported as revenue to the generating operation and expense to the consuming operation. Such internal billings aggregated \$9,350,898 and \$8,448,086 in 2019 and 2018, respectively, and are not eliminated in the statement of revenues, expenses, and changes in net position.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 revenue and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications – Certain amounts presented in the prior year data may have been reclassified in order to be consistent with the current year's presentation.

Note 2 – Cash, Investments, and Fair Value Disclosure

Michigan Compiled Laws Section 129.91 (Public Act 20 of 1943, as amended) authorizes local governmental units to make deposits and invest in the accounts of federally insured banks, credit unions, and savings and loan associations that have offices in Michigan. A local unit is allowed to invest in bonds, securities, and other direct obligations of the United States or any agency or instrumentality of the United States; certificates of deposit, savings accounts, deposit accounts, or depository receipts of an eligible financial institution; repurchase agreements; bankers' acceptances of United States banks; commercial paper rated within the two highest classifications, which matures not more than 270 days after the date of purchase; obligations of the State of Michigan or its political subdivisions, which are rated as investment grade; and mutual funds composed of investment vehicles that are legal for direct investment by local units of government in Michigan.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

The operating cash investment policy adopted by the BWL in accordance with Public Act 20, as amended, and the Lansing City Charter has authorized investment in bonds and securities of the United States government, certificates of deposit, time deposits, and bankers' acceptances of qualified financial institutions, commercial paper rated A1 by Standard & Poor's and P1 by Moody's, repurchase agreements using bonds, securities, and other obligations of the United States or an agency or instrumentality of the United States, and liquid asset accounts managed by a qualified financial institution using any of these securities. The BWL's deposits and investment policies are in accordance with statutory authority.

Michigan Cooperative Liquid Assets Securities System (MI CLASS) reports the fair value of its underlying assets annually. Participants in the MI CLASS have the right to withdraw their funds in total on one day's notice. At June 30, 2019 and 2018, the fair value of the MI CLASS' assets were substantially equal to the utility's share. Michigan CLASS is rated AAAM by Standard and Poor's. The BWL also has cash and investments with Governments of Michigan Investing Cooperatively (GovMIC). The GovMIC cash and investments are recorded at amortized cost which approximates fair value.

The BWL's cash and investments are subject to several types of risk, which are examined in more detail below:

BWL's Cash and Investments (exclusive of fiduciary funds)

Custodial Credit Risk of Bank Deposits – Custodial credit risk is the risk that in the event of a bank failure, the BWL's deposits may not be returned to it. The BWL requires that financial institutions must meet minimum criteria to offer adequate safety to the BWL. At June 30, 2019 and 2018, the BWL had \$15,777,227 and \$19,701,949, respectively, of bank deposits that were uninsured and uncollateralized. The BWL evaluates each financial institution with which it deposits funds and only those institutions meeting minimum established criteria are used as depositories.

Custodial Credit Risk of Investments – Custodial credit risk is the risk that, in the event of the failure of the counterparty, the BWL will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The BWL does not have a policy for custodial credit risk.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

At June 30, 2019, the following investment securities were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent, but not in the BWL's name:

Type of Investment	Cost Basis	How Held
U.S. government or agency bond or notes	\$360,476,059	Counterparty

At June 30, 2018, the following investment securities were uninsured and unregistered, with securities held by the counterparty or by its trust department or agent, but not in the BWL's name:

Type of Investment	Cost Basis	How Held
U.S. government or agency bond or notes	\$132,387,636	Counterparty

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of investments. The BWL's investment policy restricts investments to a maximum weighted average life of five years unless matched to a specific cash flow.

At June 30, 2019, the average maturities of investments are as follows:

Investment	Fair Value	Less than		
		1 year	1–5 years	6–10 years
Pooled investment funds	\$ 19,221,298	\$ 19,221,298	\$ –	\$ –
U.S. treasury bonds	324,831,542	223,453,298	101,378,244	–
U.S. agency bonds/notes	29,217,335	7,323,628	15,385,570	6,508,137
Supra national agency bonds	6,427,183	758,658	5,668,525	–
Mutual funds	82,303,978	82,303,978	–	–
Total	<u>\$ 462,001,336</u>	<u>\$ 333,060,860</u>	<u>\$ 122,432,339</u>	<u>\$ 6,508,137</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

At June 30, 2018, the average maturities of investments are as follows:

Investment	Fair Value	Less than 1 year	1–5 years	6–10 years
Pooled investment funds	\$ 20,793,790	\$20,793,790	\$ –	\$ –
U.S. treasury bonds	88,550,287	26,479,857	62,070,430	–
U.S. agency bonds/notes	32,474,931	12,706,097	14,832,980	4,935,854
Commercial paper	4,177,853	4,177,853	–	–
Supra national agency bonds	7,184,565	380,005	6,804,560	–
Mutual funds	22,671,252	22,671,252	–	–
Total	<u>\$ 175,852,678</u>	<u>\$87,208,854</u>	<u>\$ 83,707,970</u>	<u>\$ 4,935,854</u>

Credit Risk – State law limits investments in commercial paper to the top two ratings issued by nationally recognized statistical rating organizations.

As of June 30, 2019, the credit quality ratings of debt securities are as follows:

Investment	Fair Value	Rating	Rating Organization
Pooled investment funds	\$19,221,298	AAAm	S&P
U.S. treasury bonds	324,831,542	AA+ (Aaa)	S&P (Moody's)
U.S. agency bonds/notes	29,217,335	AA+	S&P
Supra national agency bonds	6,427,182	AAA	S&P
Mutual funds	82,303,978	AAAm	S&P

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

As of June 30, 2018, the credit quality ratings of debt securities are as follows:

Investment	Fair Value	Rating	Rating Organization
Pooled investment funds	\$20,793,790	AAA	S&P
U.S. treasury bonds	88,550,287	AA+ (Aaa)	S&P (Moody's)
U.S. agency bonds/notes	32,474,931	AA+	S&P
Commercial paper	4,177,853	A1	S&P
Supra national agency bonds	7,184,565	AAA	S&P
Mutual funds	22,671,252	AAAM	S&P

Concentration of Credit Risk – Concentration of credit risk is the risk of loss attributable to the magnitude of a government's investment in a single issuer. As of June 30, 2019 and 2018, the BWL's investment portfolio was concentrated as follows:

Investment	2019	2018
Fannie Mae	1%	9%
Freddie Mac	2%	8%
GovMIC	4%	13%

Fair Value

The BWL categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

The following investments are recorded at fair value using *the Matrix Pricing Technique*.

Investment	June 30, 2019			
	Level 1	Level 2	Level 3	Total
U.S. Treasury Bonds	\$ -	\$ 324,831,542	\$ -	\$ 324,831,542
Supra National Agency Bonds	-	6,427,183	-	6,427,183
Federal Agency Mortgage-Backed Security	-	7,466,746	-	7,466,746
Federal Agency Collateralized Mortgage Obligation	-	8,878,500	-	8,878,500
Federal Agency Bond/Note	-	12,872,088	-	12,872,088
Total investments at fair value level	<u>\$ -</u>	<u>\$ 360,476,059</u>	<u>\$ -</u>	<u>\$ 360,476,059</u>

Investment	June 30, 2018			
	Level 1	Level 2	Level 3	Total
U.S. Treasury Bonds	\$ -	\$ 88,550,287	\$ -	\$ 88,550,287
Supra National Agency Bonds	-	7,184,565	-	7,184,565
Federal Agency Mortgage-Backed Security	-	2,812,408	-	2,812,408
Federal Agency Collateralized Mortgage Obligation	-	4,058,966	-	4,058,966
Federal Agency Bond/Note	-	25,603,557	-	25,603,557
Commercial Paper	-	4,177,853	-	4,177,853
Total investments at fair value level	<u>\$ -</u>	<u>\$ 132,387,636</u>	<u>\$ -</u>	<u>\$ 132,387,636</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

Fiduciary Fund Investments

Interest Rate Risk – Pension Trust Funds

At June 30, 2019, the average maturities of investments are as follows:

<u>Investment</u>	<u>Fair Value</u>	<u>Weighted Average Maturity (in years)</u>
U.S. government or agency bond	\$ 23,867,491	13.44
Fixed income securities	26,488,080	12.68
Mutual Fund – Bond Funds	17,172,978	4.9
Money market trust funds	5,400,601	Less than 1 year

At June 30, 2018, the average maturities of investments are as follows:

<u>Investment</u>	<u>Fair Value</u>	<u>Weighted Average Maturity (in years)</u>
U.S. government or agency bond	\$ 34,494,449	13.65
Fixed income securities	47,121,007	13.19
Mutual Fund – Bond Funds	18,870,972	4.8
Money market trust funds	3,876,413	Less than 1 year

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

Credit Risk – Pension Trust Funds

As of June 30, 2019, the credit quality ratings of debt securities (other than the U.S. government) are as follows:

Investment	Fair Value	Rating	Rating Organization
Mutual funds	\$ 147,768,040	Not rated	Not rated
U.S. government – implicitly guaranteed	9,377,989	AA+	S&P
U.S. government – implicitly guaranteed	427,308	AA-	S&P
Stable value	36,352,914	AA-	S&P
Fixed income securities	3,152,282	AAA	S&P
Fixed income securities	8,465,822	AA+	S&P
Fixed income securities	1,272,217	AA	S&P
Fixed income securities	573,505	AA-	S&P
Fixed income securities	1,013,214	A+	S&P
Fixed income securities	2,058,948	A	S&P
Fixed income securities	2,648,909	A-	S&P
Fixed income securities	3,955,061	BBB+	S&P
Fixed income securities	2,125,469	BBB	S&P
Fixed income securities	1,135,991	BBB-	S&P
Fixed income securities	8,000	BB+	S&P
Fixed income securities	3,092	B+	S&P
Fixed income securities	75,570	B-	S&P
Money market trust funds	5,400,601	Not rated	Not rated

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

As of June 30, 2018, the credit quality ratings of debt securities (other than the U.S. government) are as follows:

<u>Investment</u>	<u>Fair Value</u>	<u>Rating</u>	<u>Rating Organization</u>
Mutual funds	\$ 145,098,563	Not rated	Not rated
U.S. government – implicitly guaranteed	13,481,910	AA+	S&P
U.S. government – implicitly guaranteed	416,305	AA-	S&P
Stable value	35,135,911	AA	S&P
Fixed income securities	4,234,231	AAA	S&P
Fixed income securities	18,869,605	AA+	S&P
Fixed income securities	2,573,800	AA	S&P
Fixed income securities	576,738	AA-	S&P
Fixed income securities	1,070,268	A+	S&P
Fixed income securities	4,502,135	A	S&P
Fixed income securities	3,680,285	A-	S&P
Fixed income securities	5,862,108	BBB+	S&P
Fixed income securities	3,983,612	BBB	S&P
Fixed income securities	1,663,516	BBB-	S&P
Fixed income securities	8,030	BB+	S&P
Fixed income securities	6,540	B+	S&P
Fixed income securities	90,140	B-	S&P
Money market trust funds	3,876,410	Not rated	Not rated

Fair Value – Pension Trust Funds

The framework for measuring fair value 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) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy under authoritative guidance are described as follows:

Level 1 – Inputs to the valuation methodology are unadjusted quoted market prices for identical assets in active markets that the Plan has the ability to access.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

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.
- > If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observables and minimize the use of unobservable inputs.

The following is a description of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at June 30, 2019 and 2018:

Money market fund, growth funds, and international funds: Valued at the quoted net asset value ("NAV") of shares held by the Plan at year end.

Common stock, corporate bonds and notes, U.S. government obligations, and fixed income securities: Valued at the most recent closing price reported on the market on which individual securities are traded.

Mutual funds: Valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily NAV and to transact at that price. The mutual funds held by the Plan are deemed to be actively traded.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

Stable value fund: The Plus Fund is a collective fund that seeks to maintain a stable net asset value. It invests primarily in a diversified portfolio of stable-value investments, including traditional guaranteed investment contracts (traditional GICs), separate account GICs, synthetic GICs backed by fixed income securities or investments, and short-term investment funds, including money market mutual funds.

Guaranteed Lifetime Income fund: The Retirement Income Advantage Fund seeks both moderate capital growth and current income. It invests in a separate account under a group variable annuity. The separate account, in turn, invests in a mix of registered funds and a collective trust fund with an allocation of approximately 60% domestic and foreign equities and 40% fixed income.

Self-directed brokerage account: The self-directed brokerage account allows participants of the Plan the option of selecting a more personalized and broad range of investment choices. The investments within the account consist of corporate stocks, which are valued at the most recent closing price reported on the market on which individual securities are traded.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of June 30, 2019 and 2018:

Investment Type	June 30, 2019			Total
	Level 1	Level 2	Level 3	
Cash and money market trust fund	\$ -	\$ 5,400,601	\$ -	\$ 5,400,601
U.S. government obligations	-	23,867,491	-	23,867,491
Fixed income securities	-	26,488,080	-	26,488,080
Mutual funds	147,768,040	121,859,463	-	269,627,503
Common stocks	77,698,376	-	-	77,698,376
Self-directed brokerage account	<u>3,787,956</u>	<u>-</u>	<u>-</u>	<u>3,787,956</u>
Total investments by fair value level	<u>\$ 229,254,372</u>	<u>\$ 177,615,635</u>	<u>\$ -</u>	<u>\$ 406,870,007</u>
Investments measured at the net asset value (NAV)				
Stable value				36,352,914
Guaranteed lifetime income				<u>8,940,026</u>
Total investments measured at fair value				<u>\$ 452,162,947</u>
Investment Type	June 30, 2018			Total
	Level 1	Level 2	Level 3	
Cash and money market trust fund	\$ 3	\$ 3,876,410	\$ -	\$ 3,876,413
U.S. government obligations	-	34,494,449	-	34,494,449
Fixed income securities	-	47,121,007	-	47,121,007
Mutual funds	145,098,563	98,451,175	-	243,549,738
Common stocks	62,052,966	-	-	62,052,966
Self-directed brokerage account	<u>2,144,556</u>	<u>-</u>	<u>-</u>	<u>2,144,556</u>
Total investments by fair value level	<u>\$ 209,296,088</u>	<u>\$ 183,943,041</u>	<u>\$ -</u>	<u>\$ 393,239,129</u>
Investments measured at the net asset value (NAV)				
Stable value				35,135,911
Guaranteed lifetime income				<u>8,638,662</u>
Total investments measured at fair value				<u>\$ 437,013,702</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 2 – Cash, Investments, and Fair Value Disclosure (Continued)

Investments Measured Using NAV per Share Practical Expedient: The stable value fund and guaranteed lifetime income fund use NAV per share as a practical expedient to measuring fair value. The stable value fund had a fair value of \$36,352,914 and \$35,135,911 as of June 30, 2019 and 2018, respectively and the guaranteed lifetime income fund had a fair value of \$8,940,026 and \$8,638,662, respectively. These funds have no unfunded commitments, the redemption frequency is daily, and there is no redemption notice period.

Note 3 – Restricted Assets

Restricted assets are required under the 2008A, 2011A, 2012A, 2013A, 2017A, 2018A, and 2019A Revenue Bond resolutions and the related Nonarbitrage and Tax Compliance Certificates. These assets, which consist of cash, commercial paper, and United States government securities, are segregated into the following funds:

	Required at June 30, 2019	Carrying Value	
		2019	2018
Current			
Operations and Maintenance Fund	\$ 33,793,509	\$ 71,340,480	\$ 82,175,293
Bond and Interest Redemption Fund	<u>45,813,543</u>	<u>45,813,543</u>	<u>16,503,211</u>
Total current	<u>79,607,052</u>	<u>117,154,023</u>	<u>98,678,504</u>
Noncurrent			
Bond Reserve Fund	-	-	24,151,912
Construction Fund	<u>282,919,314</u>	<u>282,919,314</u>	<u>-</u>
Total noncurrent	<u>282,919,314</u>	<u>282,919,314</u>	<u>24,151,912</u>
Total	<u>\$ 362,526,366</u>	<u>\$ 400,073,337</u>	<u>\$ 122,830,416</u>

The carrying value in excess of the required value for the current portion is reported as cash and cash equivalents or investments for the years ended 2019 and 2018.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 3 – Restricted Assets (Continued)

The restrictions of the various funds are as follows:

- **Operations and Maintenance Fund** – By the end of each month, this fund shall include sufficient funds to provide for payment of the succeeding month's expenses.
- **Bond and Interest Redemption Fund** – Restricted for payment of the current portion of bond principal and interest on the 2008A, 2009A, 2011A, 2012A, 2013A, 2017A, and 2019A Revenue Bonds.
- **Bond Reserve Fund** – Shall include sufficient funds to cover the maximum annual principal and interest requirements of the 2008A, 2011A, 2012A, 2013A, and 2017A Revenue Bonds. This requirement was removed by the 2019A Revenue bonds. As of June 30, 2019, the cost basis in the fund was \$0.
- **Construction Fund** – Restricted for utility system upgrades as required by the 2019A Revenue Bonds.

Note 4 – Utility Plant

The tables below reflect the capital asset activity of the utility plant categories for the years ended June 30, 2019 and 2018:

Capital Asset Activity for Year Ended June 30, 2019

	<u>Capital Assets</u> <u>FY Start</u>	<u>Transfers</u>	<u>Acquisition</u>	<u>Retirement</u>	<u>Capital Assets</u> <u>FY End</u>
Water	\$ 316,440,019	\$ 1,995,266	\$ 10,247,352	\$ (678,060)	\$ 328,004,577
Electric	730,148,451	25,919,804	44,845,110	(5,551,678)	795,361,687
Steam	78,115,677	197,023	2,024,979	(104,346)	80,233,333
Chilled	34,078,066	-	5,802	-	34,083,868
Common	92,072,756	6,790,434	5,948,456	(1,535,509)	103,276,137
AUC	<u>38,518,401</u>	<u>(97,974,227)</u>	<u>128,992,772</u>	<u>-</u>	<u>69,536,946</u>
Total	<u>\$ 1,289,373,370</u>	<u>\$ (63,071,700)</u>	<u>\$192,064,471</u>	<u>\$ (7,869,593)</u>	<u>\$ 1,410,496,548</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 4 – Utility Plant (Continued)

Accumulated Depreciation for Year Ended June 30, 2019

	<u>Accum. Depr.</u> <u>FY Start</u>	<u>Depreciation</u> <u>Transfer</u>	<u>Depr. / Amort.</u> <u>and Impairment</u> <u>for Year</u>	<u>Depreciation</u> <u>Retirement</u>	<u>Accum. Depr.</u> <u>FY End</u>
Water	\$ (107,665,385)	\$ (19,329)	\$ (6,841,324)	\$ 465,048	\$ (114,060,990)
Electric	(381,167,741)	53,687	(31,412,860)	3,386,820	(409,140,094)
Steam	(21,083,078)	-	(2,528,928)	36,756	(23,575,250)
Chilled	(12,588,805)	-	(1,177,785)	-	(13,766,590)
Common	(47,533,853)	(34,358)	(5,145,595)	1,506,968	(51,206,838)
Total	<u>\$ (570,038,862)</u>	<u>\$ -</u>	<u>\$ (47,106,492)</u>	<u>\$ 5,395,592</u>	<u>\$ (611,749,762)</u>

Non-depreciable assets – Included in the table above are non-depreciable assets of \$1,216,026 for water, \$14,865,816 for electric, \$124,224 for steam, and \$412,339 for common facilities.

Capital Asset Activity for Year Ended June 30, 2018

	<u>Capital Assets</u> <u>FY Start</u>	<u>Transfers</u>	<u>Acquisition</u>	<u>Retirement</u>	<u>Capital Assets</u> <u>FY End</u>
Water	\$ 309,243,104	\$ 2,446,138	\$ 5,369,363	\$ (618,586)	\$ 316,440,019
Electric	687,921,365	7,822,325	39,936,364	(5,531,603)	730,148,451
Steam	71,614,976	917,849	6,343,874	(761,022)	78,115,677
Chilled	34,023,916	-	54,150	-	34,078,066
Common	92,329,375	869,060	4,103,668	(5,229,347)	92,072,756
AUC	19,591,830	(67,862,791)	86,789,362	-	38,518,401
Total	<u>\$ 1,214,724,566</u>	<u>\$ (55,807,419)</u>	<u>\$ 142,596,781</u>	<u>\$ (12,140,558)</u>	<u>\$ 1,289,373,370</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 4 – Utility Plant (Continued)

Accumulated Depreciation for Year Ended June 30, 2018

	Accum. Depr. FY Start	Depreciation Transfer	Depr. / Amort. and Impairment for Year	Depreciation Retirement	Accum. Depr. FY End
Water	\$ (101,610,740)	\$ 60,509	\$ (6,517,356)	\$ 402,202	\$ (107,665,385)
Electric	(355,112,374)	41,362	(30,373,332)	4,276,603	(381,167,741)
Steam	(18,877,713)	-	(2,410,469)	205,104	(21,083,078)
Chilled	(11,409,281)	-	(1,179,524)	-	(12,588,805)
Common	(47,306,279)	(101,871)	(4,757,200)	4,631,497	(47,533,853)
Total	<u>\$ (534,316,387)</u>	<u>\$ -</u>	<u>\$ (45,237,881)</u>	<u>\$ 9,515,406</u>	<u>\$ (570,038,862)</u>

Non-depreciable assets – Included in the table above are non-depreciable assets of \$1,210,196 for water, \$14,760,199 for electric, \$124,224 for steam, and \$412,339 for common facilities.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 5 – Long-term Debt

Long-term debt as of June 30 consists of the following:

	2019	2018
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bonds, Series 2019A, due serially beginning July 1, 2020 and continuing through July 1, 2048, plus interest at rates ranging from 4.00% to 5.00%. Original amount of issue \$319,875,000.	\$ 319,875,000	\$ -
Water Supply, Steam, Chilled Water and Electric Utility System Revenue Refunding Bonds, Series 2017A, due in annual principal installments beginning July 1, 2019 and continuing through July 1, 2032, plus interest at a rate of 5.00%. Original amount of issue \$30,365,000.	30,365,000	30,365,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Refunding Bonds, Series 2013A, due in annual principal installments beginning July 1, 2014 through July 1, 2026, plus interest at rates ranging from 2.00% to 5.00%. Original amount of issue \$21,085,000.	15,035,000	16,560,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Refunding Bonds, Series 2012A, due in annual principal installments beginning July 1, 2013 through July 1, 2018, plus interest at rates ranging from 2.00% to 5.00%. Original amount of issue \$17,370,000.	-	5,310,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bonds, Series 2011A, due in annual principal installments beginning July 1, 2015 through July 1, 2041, plus interest at rates ranging from 3.00% to 5.50%. Original amount of issue \$250,000,000.	249,980,000	249,985,000
Water Supply, Steam, Chilled Water, and Electric Utility System Revenue Bonds, Series 2008A, due serially beginning July 1, 2012 and continuing through July 1, 2032, plus interest at rates ranging from 3.00% to 5.00%. Original amount of issue \$40,000,000.	-	1,745,000

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 5 – Long-term Debt (Continued)

	<u>2019</u>	<u>2018</u>
Promissory note, due to the City of Lansing in semi-annual installments through October 1, 2024, plus interest at a rate of 2.50%. Original amount of issue \$13,225,385.	\$ 6,745,123	\$ 7,389,778
Lansing Economic Development Corp due in monthly installments of \$4,500 through 2022.	13,500	18,000
Charter Township of Lansing Special Assessment pertaining to the Groesbeck II Park Drain. Due in annual installments ranging from \$132,000 to \$291,000 with final payment in 2044.	3,283,939	3,410,245
Bond anticipation note for a future issuance of revenue bonds pertaining to a natural gas combined cycle facility and other system improvements.	<u>-</u>	<u>50,001</u>
Total	625,297,562	314,833,024
Less current portion	(7,608,792)	(9,360,459)
Plus unamortized premium	<u>77,011,183</u>	<u>12,408,334</u>
Total long-term portion	<u>\$ 694,699,953</u>	<u>\$ 317,880,899</u>

The unamortized premium and deferral on refunded bonds is being amortized over the life of the bonds, using the straight-line method.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 5 – Long-term Debt (Continued)

Aggregate principal and interest payments applicable to long-term debt are as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 7,608,792	\$ 31,443,424	\$ 39,052,216
2021	7,942,341	30,844,871	38,787,212
2022	11,242,081	30,489,233	41,731,314
2023	11,773,537	29,938,219	41,711,756
2024	12,329,635	29,360,237	41,689,872
2025–2029	69,599,982	137,279,493	206,879,475
2030–2034	85,576,836	118,302,880	203,879,716
2035–2039	108,826,527	94,282,754	203,109,281
2040–2044	165,346,527	66,183,523	231,530,050
2045–2048	<u>145,051,304</u>	<u>18,562,929</u>	<u>163,614,233</u>
Total	<u>\$ 625,297,562</u>	<u>\$ 586,687,563</u>	<u>\$ 1,211,985,125</u>

The 2008A, 2011A, 2012A, 2013A, and 2017A Bonds required the BWL to establish a reserve account equal to the highest annual principal and interest requirements of such issues. This requirement was removed with the 2019A Bonds. As of June 30, 2019, the balance of this reserve account was \$0 (see Note 3).

All Water Supply and Electric Utility System Revenue Bonds were issued by authority of the BWL. All bonds were issued on a parity basis and are payable solely from the net revenue of the combined water, electric, chilled water, and steam operations of the BWL.

The 2019A Bonds are payable in annual installments in the years 2022 through 2028, inclusive, and shall not be subject to optional redemption prior to maturity. The bonds maturing on or after July 1, 2028 shall be subject to redemption at the option of the BWL in such order of maturity as the BWL shall determine, and within a single maturity by lot, on any date on or after July 1, 2028 at par plus accrued interest to the fixed date for redemption.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 5 – Long-term Debt (Continued)

The 2017A Bonds are payable in annual installments in the years 2019 through 2027, inclusive, and shall not be subject to optional redemption prior to maturity. The bonds, or portions of the bonds in multiples of \$5,000 maturing or subject to mandatory redemption in the years 2028 and thereafter, shall be subject to redemption at the option of the BWL in such order of maturity as the BWL shall determine, and within a single maturity by lot, on any date on or after July 1, 2027 at par plus accrued interest to the fixed date for redemption.

The 2013A Bonds are payable in annual installments in the years 2014 to 2024, inclusive, and shall not be subject to optional redemption prior to maturity. The bonds maturing on or after July 1, 2024 shall be subject to redemption at the option of the BWL on or after July 1, 2023 as a whole or in part at any time and by lot within a maturity at par plus accrued interest to the redemption date.

The 2012A Bonds are payable in annual installments in the years 2013 to 2018, inclusive, and shall not be subject to optional redemption prior to maturity.

The Series 2011A Bonds are payable in annual installments in the years 2015 to 2022, inclusive, and shall not be subject to optional redemption prior to maturity. The bonds maturing on or after July 1, 2022 shall be subject to redemption at the option of the BWL on or after July 1, 2021 as a whole or in part at any time and by lot within a maturity at par plus interest accrued to the redemption date.

The Series 2008A Bonds maturing in the years 2012 to 2018, inclusive, shall not be subject to optional redemption prior to maturity. The bonds, or portions of bonds in multiples of \$5,000 maturing in the years 2019 to 2032, inclusive, shall be subject to redemption at the option of the BWL in such order of maturity as the BWL shall determine and within a single maturity by lot on any date on or after July 1, 2018, at par plus accrued interest to the date fixed for redemption. These bonds were refinanced as part of the 2019A Bonds.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 5 – Long-term Debt (Continued)

The long-term debt activity for the year ended June 30, 2019 is as follows:

	<u>Revenue Bonds</u>	<u>Other Notes</u>	<u>Total</u>
Beginning balance	\$ 316,373,336	\$ 10,868,022	\$ 327,241,358
Additions	385,333,509	65,550,000	450,883,509
Reductions	<u>(9,440,662)</u>	<u>(66,375,460)</u>	<u>(75,816,122)</u>
Ending balance	<u>\$ 692,266,183</u>	<u>\$ 10,042,562</u>	<u>\$ 702,308,745</u>
Due within one year	\$ 6,820,000	\$ 788,792	\$ 7,608,792

The BWL has pledged substantially all revenue, net of operating expenses, to repay the revenue bonds. Proceeds from the bonds provided financing for the construction of the utility plant. The bonds are payable solely from the net revenues of the BWL. The remaining principal and interest to be paid on the bonds total \$1,211,985,125. During the current year, net revenues of the BWL were \$94,002,000 compared to the annual debt requirements of \$21,883,000.

The long-term debt activity for the year ended June 30, 2018 is as follows:

	<u>Revenue Bonds</u>	<u>Other Notes</u>	<u>Total</u>
Beginning balance	\$ 325,875,924	\$ 12,491,666	\$ 338,367,590
Additions	-	50,001	50,001
Reductions	<u>(9,502,588)</u>	<u>(1,673,645)</u>	<u>(11,176,233)</u>
Ending balance	<u>\$ 316,373,336</u>	<u>\$ 10,868,022</u>	<u>\$ 327,241,358</u>
Due within one year	\$ 8,585,000	\$ 775,459	\$ 9,360,459

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 – Costs/Credits Recoverable in Future Years

Environmental Remediation

During the year ended June 30, 2006, the GASB 49 environmental remediation liability related to a second landfill was approved for regulated entity accounting under GASB 62. The balance of the regulatory asset at June 30, 2019 and 2018 was \$485,811 and \$620,768, respectively. The BWL reviews the adequacy of its rates to recover its cost of service on an annual basis. During the year ended June 30, 2009, regulatory accounting as per GASB 62 was authorized by the Board of Commissioners to collect rates for all environmental remediation sites. The balance as of June 30, 2019 and 2018 for additional sites was \$1,949,918 and \$2,363,018, respectively. The BWL reviews the adequacy of its rates to recover its cost of service on an annual basis.

Recoverable Cost Adjustments

During the year ended June 30, 2005, the Board of Commissioners approved the use of regulatory accounting as per GASB 62 in accounting for the BWL's power supply cost recovery (PSCR) adjustment, power chemical adjustment (PCA), and fuel cost adjustment (FCA). These affect the amount to be billed to retail electric, water, and steam customers to reflect the difference between the BWL's actual material costs and the amounts incorporated into rates. This resulted in recoverable assets of \$(8,087,614) and \$(4,908,441) at June 30, 2019 and 2018, respectively. This amount represents costs to be billed (credited) to customers in future years because actual costs of providing utilities were higher (lower) than the costs incorporated into the BWL's rates.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 6 – Costs/Credits Recoverable in Future Years (Continued)

Renewable Energy Plan (REP) and Energy Optimization (EO)

During the year ended June 30, 2010, the Board of Commissioners approved the implementation of regulatory accounting as per GASB 62 to account for Public Act 295 of 2008 (PA. 295). PA. 295 set forth requirements for all Michigan utilities to meet the new renewable energy standards and undertake energy optimization programs. As a municipally owned electric utility, the BWL was required to file a proposed energy plan with the Michigan Public Service Commission (MPSC) and this plan was approved on July 1, 2009. These changes will affect the amount to be billed to electric customers. This resulted in deferred inflow of resources of \$3,811,772 and \$5,652,720 as of June 30, 2019 and 2018, respectively.

Chiller Plant

During the year ended June 30, 2010, the BWL chose to use regulatory accounting as per GASB 62 to recognize the contribution in aid of construction (CIAC) for the development of a new chilled water plant. The remaining recoverable inflow of resources of \$1,321,629 and \$1,541,901 as of June 30, 2019 and 2018, respectively. The BWL will recognize this as revenue monthly over the life of the new chilled water plant to offset depreciation expense.

Wise Road

During the year ended June 30, 2012, the BWL chose to use regulatory accounting as per GASB 62 to recognize the insurance proceeds for the damaged equipment at the Wise Road Water Conditioning Plant (see Note 13). The remaining recoverable inflow of resources as of June 30, 2019 and 2018 was \$9,744,369 and \$10,726,994, respectively.

Other Items

Other items recognized as recoverable inflows total \$500,000 and zero at June 30, 2019 and 2018, respectively.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 7 – Transactions with the City of Lansing, Michigan

Operations – The BWL recognized revenue of \$12,714,325 and \$8,492,561 in 2019 and 2018, respectively, for water, electric, and steam services provided to the City. The BWL incurred expenses for sewerage services purchased from the City of \$824,634 and \$839,024 in 2019 and 2018, respectively.

Additionally, the BWL bills and collects sewerage fees for the City. In connection with these services, the BWL received sewerage collection fees of \$1,019,935 and \$963,577 in 2019 and 2018, respectively, included in other income.

Return on Equity – Effective July 1, 1992, the BWL entered into an agreement with the City to provide payment of a return on equity in accordance with a formula based on net billed retail sales from its water, steam heat, and electric utilities for the preceding 12-month period ending May 31 of each year. The return on equity represents compensation to the City for a permanent easement granted to the BWL. Effective March 1, 2002, the formula to calculate the amount owed to the City for return on equity will also include wholesale revenue generated from the BWL's electric, water, steam, and chilled water utilities for the preceding 12-month period ending May 31 of each year. Subject to the provisions of Act 94 Public Acts of 1933, as amended, and the BWL's various bond covenants, this amount is payable to the City in semi-annual installments. Under terms of this agreement, the BWL paid to the City \$21,110,884 in 2019 and \$20,561,871 in 2018 of operational cash flow in excess of debt service requirements.

Note 8 – Retirement Plans

The BWL has three retirement plans. The BWL administers a tax-qualified, single-employer, noncontributory, defined benefit public employee retirement pension plan (“Defined Benefit Plan”), and the BWL has a tax-qualified, single-employer, noncontributory, defined contribution public employee retirement pension plan (“Defined Contribution Plan”). The BWL also has a tax-qualified, single-employer, defined benefit plan to administer and fund retiree healthcare benefits (“Retiree Benefit Plan and Trust”).

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Defined Benefit Plan

Plan Description – The BWL administers the Lansing Board of Water and Light Defined Benefit Plan and Trust for Employees’ Pensions (“Defined Benefit Plan”) – a noncontributory single–employer defined benefit pension plan for employees of the BWL. The benefit terms were established by the BWL and may be amended by future BWL actions.

The Defined Benefit Plan issues a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to the Lansing Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901–3007.

Effective July 1, 1999, the Defined Benefit Plan was amended to include a medical benefit component, in addition to the normal retirement benefits, to fund a portion of the postretirement obligations for certain retirees and their beneficiaries. The funding of the medical benefit component is limited to the amount of excess pension plan assets available for transfer, as determined by the actuary. No medical benefits were paid by the Defined Benefit Plan during the years ended June 30, 2019 and 2018.

Employees Covered by Benefit Terms – At February 28, 2019 and 2018 (the most recent actuarial valuation for funding purposes), Defined Benefit Plan membership consisted of the following:

	<u>2019</u>	<u>2018</u>
Inactive plan members or beneficiaries currently receiving benefits	337	352
Inactive plan members entitled to but not yet receiving benefits	3	4
Active plan members	<u>5</u>	<u>8</u>
Total	<u>345</u>	<u>364</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

The Defined Benefit Plan, by resolution of the Board of Commissioners, was closed to employees hired subsequent to December 31, 1996, and a defined contribution plan was established for employees hired after December 31, 1996. Effective December 1, 1997, all active participants in this plan were required to make an irrevocable choice to either remain in this plan (defined benefit) or move to the newly established defined contribution plan. Those participants who elected to move to the defined contribution plan received lump-sum distributions from this plan that were rolled into their accounts in the newly established defined contribution plan. Of the 760 employees who were required to make this election, 602 elected to convert their retirement benefits to the newly established defined contribution plan. As a result of this action, effective December 1, 1997, the Board of Commissioners transferred \$75,116,470 to the newly established defined contribution plan, reflecting the plan participants' accumulated benefits as of said date.

Benefits Provided – The Defined Benefit Plan provides retirement, early retirement, disability, termination, and death benefits. The Plan provides for an annual benefit upon normal retirement age equal to the product of the total number of years of credited service multiplied by a percentage equal to 1.80 percent of the highest annual pay during the last 10 years of service, paid in equal monthly installments.

Payments will either be non-increasing or increase only as follows: (a) By an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics; (b) To the extent of the reduction in the amount of the employee's payments to provide for a survivor benefit upon death, but only if the beneficiary whose life was being used to determine the distribution period described in Subsection 8 dies or is no longer the employee's beneficiary pursuant to a qualified domestic relations order within the meaning of Internal Revenue Code Section 414(p); (c) To provide cash refunds of employee contributions upon the employee's death; or (d) To pay increased benefits that result from a plan amendment.

Contributions – Article 9, Section 24 of the State of Michigan constitution requires that financial benefits arising on account of employee service rendered in each year be funded during that year. Accordingly, the BWL retains an independent actuary to determine the annual contribution. The actuarially determined contribution is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability. There was no contribution required for the years ended June 30, 2018 and 2019. Plan documents do not require participant contributions.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Net Pension Asset – The components of the net pension asset of the BWL at June 30, 2019 and June 30, 2018 were as follows (in thousands):

	<u>2019</u>	<u>2018</u>
Total pension liability	\$ 53,826	\$ 55,751
Plan fiduciary net pension	<u>60,422</u>	<u>62,367</u>
Plan's net pension asset	<u>\$ (6,596)</u>	<u>\$ (6,616)</u>
Plan fiduciary net position, as a percentage of the total pension liability	112.25%	111.87%

The BWL has chosen to use June 30, 2019 as its measurement date for fiscal year 2019. The June 30, 2019 reported net pension asset was determined using a measure of the total pension liability and the pension net position as of June 30, 2019. The June 30, 2019 total pension liability was determined by an actuarial valuation as of February 28, 2019, which used update procedures to roll forward the estimated liability to June 30, 2018.

The BWL has chosen to use June 30, 2018 as its measurement date for fiscal year 2018. The June 30, 2018 reported net pension asset was determined using a measure of the total pension liability and the pension net position as of June 30, 2018. The June 30, 2018 total pension liability was determined by an actuarial valuation as of February 28, 2018, which used update procedures to roll forward the estimated liability to June 30, 2018.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Changes in the net pension asset during the measurement years were as follows:

	(in thousands)		
	Total Pension Liability	Plan Net Position	Net Pension Asset
Balance at June 30, 2017	\$ 56,895	\$ 65,924	\$ (9,029)
Changes for the year:			
Service cost	50	-	50
Interest	4,031	-	4,031
Differences between expected and actual experience	(230)	-	(230)
Changes in assumptions	1,419	-	1,419
Net investment income	-	3,112	(3,112)
Benefit payments, including refunds	(6,414)	(6,414)	-
Administrative expenses	-	(255)	255
Miscellaneous other charges	-	-	-
Net changes	(1,144)	(3,557)	2,413
Balances at June 30, 2018	<u>\$ 55,751</u>	<u>\$ 62,367</u>	<u>\$ (6,616)</u>
Changes for the year:			
Service cost	\$ 60	\$ -	\$ 60
Interest	3,691	-	3,691
Differences between expected and actual experience	(743)	-	(743)
Changes in assumptions	1,210	-	1,210
Net investment income	-	4,381	(4,381)
Benefit payments, including refunds	(6,143)	(6,143)	-
Administrative expenses	-	(183)	183
Miscellaneous other charges	-	-	-
Net changes	(1,925)	(1,945)	20
Balance at June 30, 2019	<u>\$ 53,826</u>	<u>\$ 60,422</u>	<u>\$ (6,596)</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions – For the year ended June 30, 2019, the BWL recognized pension expense of \$1,615,810. At June 30, 2019, the BWL reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ 337,272	\$ –

For the year ended June 30, 2018, the BWL recognized pension expense of \$811,903. At June 30, 2018, the BWL reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Net difference between projected and actual earnings on pension plan investments	\$ 1,932,329	\$ –

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

<u>Years Ending June 30</u>	
2020	\$ 573,362
2021	(460,342)
2022	270,786
2023	<u>(46,534)</u>
Total	<u>\$ 337,272</u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Actuarial Assumptions – The total pension liability in the June 30, 2019 and June 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

	<u>2019</u>	<u>2018</u>
Inflation	2.50%	3.00%
Salary increases	3.50%	3.50%
Investment rate of return	7.00%	7.00%

Mortality rates were based on the PUB-2010 General Employees Mortality Table with MP-2018 Improvement Scale for the June 30, 2019 valuation. The June 30, 2018 valuation used the RP-2014 Total Dataset Mortality adjusted to 2006 and projected using the MP-2017 scale.

The most recent experience review was completed in 2014. Since the Defined Benefit Plan covered 5 active participants in fiscal year 2019 and 8 active participants in fiscal year 2018, assumptions like termination, retirement, and disability have an immaterial impact on the results and have not been changed.

Discount Rate – The discount rate used to measure the total pension liability was 7 percent in 2019 and 2018. The projection of cash flows used to determine the discount rate assumed that BWL contributions will be made at rates equal to the actuarially determined contribution rates.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Projected Cash Flows

Based on those assumptions, the Defined Benefit Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on the Defined Benefit Plan investments was applied to all periods of projected benefit payments to determine the total pension asset.

The long-term expected rate of return on Defined Benefit 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. Best estimates of arithmetic real rates of return as of June 30, 2019 and 2018 for each major asset class included in the Defined Benefit Plan's target asset allocation, as disclosed in the Defined Benefit Plan's financial statements, are summarized in the following table:

<u>Asset Class</u>	<u>2019 Long-term Expected Real Rate of Return</u>	<u>2018 Long-term Expected Real Rate of Return</u>
Fixed income	2.62%	2.74%
Domestic equity	7.82%	8.16%
International equity	8.34%	8.73%
Real estate	6.78%	5.91%
Multi-sector	3.49%	3.60%
Absolute return	3.75%	3.82%

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Sensitivity of the Net Pension Asset to Changes in the Discount Rate – The following presents the net pension asset of the BWL at June 30, 2019, calculated using the discount rate of 7.0 percent, as well as what the BWL's net pension asset would be if it were calculated using a discount rate that is 1 percentage-point lower (6.0 percent) or 1 percentage-point higher (8.0 percent) than the current rate:

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
Net pension liability (asset) of the BWL	\$ (1,697,353)	\$ (6,595,727)	\$ (9,364,768)

The following presents the net pension asset of the BWL at June 30, 2018, calculated using the discount rate of 7.0 percent, as well as what the BWL's net pension asset would be if it were calculated using a discount rate that is 1 percentage-point lower (6.0 percent) or 1 percentage-point higher (8.0 percent) than the current rate:

	<u>1% Decrease (6.00%)</u>	<u>Current Discount Rate (7.00%)</u>	<u>1% Increase (8.00%)</u>
Net pension liability (asset) of the BWL	\$ (1,539,264)	\$ (6,616,482)	\$ (9,466,780)

Defined Benefit Plan Fiduciary Net Position – Detailed information about the Defined Benefit Plan's fiduciary net position is available in the separately issued financial report. For the purpose of measuring the net pension asset, deferred outflows of resources, and deferred inflows or resources related to pension and pension expense, information about the Defined Benefit Plan's fiduciary net position and addition to/deduction from fiduciary net position have been determined on the same basis as they are reported by the Defined Benefit Plan. The Defined Benefit Plan uses the economic resources measurement focus and the full accrual basis of accounting. Investments are stated at fair value. Contribution revenue is recorded as contributions are due, pursuant to legal requirements. Benefit payments and refunds of employee contributions are recognized as expense when due and payable in accordance with the benefit terms.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Defined Contribution Plan

The Lansing Board of Water and Light Employees' Defined Contribution Pension Plan and Trust ("Defined Contribution Plan") was established by the BWL in 1997 under Section 5-203 of the City Charter. The Defined Contribution Plan covers substantially all full-time employees hired after December 31, 1996. In addition, 602 employees hired before January 1, 1997 elected to convert their retirement benefits from the Defined Benefit Plan effective December 1, 1997.

The Defined Contribution Plan issues a publicly available financial report. That report may be obtained by writing to the Lansing Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901-3007.

The Defined Contribution Plan operates as a money purchase pension plan and meets the requirements of Sections 401(a) and 501(a) of the IRC of 1986, as amended from time to time.

For employees hired before January 1, 1997, the BWL is required to contribute 15.0 percent of the employees' compensation. For employees hired after January 1, 1997, the BWL is required to contribute 9.5 percent of the employees' compensation. In addition, the BWL is required to contribute 3.0 percent of the employees' compensation for all employees who are not eligible to receive overtime pay and 0.5 percent of the employees' compensation for all nonbargaining employees. No participant contributions are required.

During the years ended June 30, 2019 and 2018, the BWL contributed \$6,618,384 and \$6,534,888, respectively. The BWL's contributions are recognized in the period that the contributions are due.

Basis of Accounting – The Defined Contribution Plan's financial statements are prepared using the accrual method of accounting in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Valuation of Investments and Income Recognition – The Defined Contribution Plan investments are stated at market value based on closing sales prices reported on recognized securities exchanges on the last business day of the year, or, for listed securities having no sales reported and for unlisted securities, upon the last reported bid prices on that date. The mutual funds are valued at quoted market prices, which represent the net asset values of shares held by the Defined Contribution Plan at year end.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is accrued when earned. Dividend income is recorded on the ex-dividend date.

Regulatory Status – The Defined Contribution Plan is not subject to the reporting requirements of the Employee Retirement Income Security Act of 1974 (ERISA) as it has been established for the benefit of a governmental unit.

Retiree Benefit Plan and Trust (OPEB)

Plan Description – The Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light (“Retiree Benefit Plan and Trust”) is a single-employer defined benefit healthcare plan. The Plan provides medical, dental, and life insurance benefits in accordance with Section 5-203 of the City Charter. Substantially all of the BWL’s employees may become eligible for healthcare benefits and life insurance benefits if they reach normal retirement age while working for the BWL. There were 745 participants eligible to receive benefits at June 30, 2019 and 728 participants eligible at June 30, 2018.

In October 1999, the BWL formed a Voluntary Employee Benefit Administration (VEBA) trust for the purpose of accumulating assets sufficient to fund retiree healthcare insurance costs in future years. During the years ended June 30, 2019 and 2018, the cost to BWL of maintaining the Retiree Benefit Plan and Trust was \$9,277,538 and \$10,395,327, of which respectively, was incurred as direct costs of benefits.

The Retiree Benefit Plan and Trust issues a publicly available financial report. That report may be obtained by writing to the Lansing Board of Water and Light, Chief Financial Officer, P.O. Box 13007, Lansing, Michigan 48901-3007.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Benefits Provided – The Plan provides medical, dental, and life insurance benefits in accordance with Section 5–203 of the City Charter. Benefits are provided through third-party insurers, and the full cost of the benefits is covered by the plan.

Employees covered by benefit terms. At June 30, 2019, the following employees were covered by the benefit terms:

Active plan members (not eligible to receive benefits)	690
Disabled participants	78
Retired participants	523
Surviving spouses	<u>144</u>
Total	<u>1,435</u>

At June 30, 2018, the following employees were covered by the benefit terms:

Active plan members (not eligible to receive benefits)	703
Disabled participants	77
Retired participants	506
Surviving spouses	<u>145</u>
Total	<u>1,431</u>

Contributions – Section 5–203 of the City Charter grants the authority to establish and amend the contribution requirement to the BWL. The BWL establishes its minimum contribution based on an actuarially determined rate. For the years ended June 30, 2019 and 2018, the actual contribution rates of the BWL were 16.3 percent and 18.7 percent of covered-employee payroll, respectively.

Net OPEB Liability (Asset) – The BWL has chosen to use June 30, 2019 as its measurement date for fiscal year 2019. The June 30, 2019 reported net OPEB liability (asset) was determined using a measure of the total OPEB liability and the OPEB net position as of June 30, 2019. The June 30, 2019 total OPEB liability was determined by an actuarial valuation as of February 28, 2019, which used update procedures to roll forward the estimated liability to June 30, 2019.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

The BWL has chosen to use June 30, 2018 as its measurement date for fiscal year 2018. The June 30, 2018 reported net OPEB liability was determined using a measure of the total OPEB liability and the OPEB net position as of June 30, 2018. The June 30, 2018 total OPEB liability was determined by an actuarial valuation as of February 28, 2018, which used update procedures to roll forward the estimated liability to June 30, 2018.

Actuarial Assumptions – The total OPEB liability in the June 30, 2019 and June 30, 2018 actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurements, unless otherwise specified:

Inflation	3.0 percent
Payroll Growth	9.3% growth at age 25 and decreases to 6.4% for ages 60+. This percentage includes general wage inflation and merit/productivity increases.
Investment rate of return	7.5 percent, net of OPEB plan investment expense, including inflation

Healthcare cost trend rates 2019	<u>FYE</u>	<u>Medical / RX</u>		<u>Part B</u>	<u>Dental</u>
		<u>Pre-65</u>	<u>Post-65</u>		
2019	8.50%	7.00%	3.00%	5.00%	
2020	8.25%	6.75%	3.25%	4.75%	
2021	8.00%	6.50%	3.50%	4.50%	
2022	7.75%	6.25%	3.75%	4.25%	
2023	7.50%	6.00%	4.00%	4.00%	
2024	7.25%	5.75%	4.25%	4.00%	
2025	7.00%	5.50%	4.50%	4.00%	
2026	6.75%	5.25%	4.75%	4.00%	
2027	6.50%	5.00%	5.00%	4.00%	
2028	6.25%	4.75%	5.00%	4.00%	
2029	6.00%	4.50%	5.00%	4.00%	
2030	5.75%	4.25%	5.00%	4.00%	
2031	5.50%	4.25%	5.00%	4.00%	
2032	5.25%	4.25%	5.00%	4.00%	
2033	5.00%	4.25%	5.00%	4.00%	
2034	4.75%	4.25%	5.00%	4.00%	
2035	4.50%	4.25%	5.00%	4.00%	

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

2018	<u>FYE</u>	<u>Medical / RX</u>	<u>Part B</u>	<u>Dental</u>
	2019	9.00%	3.00%	5.00%
	2020	8.50%	3.25%	4.75%
	2021	8.00%	3.50%	4.50%
	2022	7.50%	3.75%	4.25%
	2023	7.00%	4.00%	4.00%
	2024	6.50%	4.25%	4.00%
	2025	6.00%	4.50%	4.00%
	2026	5.50%	4.75%	4.00%
	2027	5.00%	5.00%	4.00%

2019 Mortality rates were based on the PUBH-2010 General Employee Mortality Table fully generational using Scale MP-2018.

2018 Mortality rates were based on the RPH-2016 Total Dataset Mortality Table fully generational using Scale MP-2016 (RPH-2016 table is created based on RPH-2014 Total Dataset Mortality Table with 8 years of MP-2014 mortality improvement backed out, adjusted to 2010 using MP-2017 projection scale).

Best actuarial practices call for a periodic assumption review and BWL completed an experience study in 2017.

BWL's policy in regard to the allocation of invested assets is established and may be amended by the BWL by a majority vote of the Board of Commissioners. It is the policy of the BWL to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the adopted asset allocation policy as of June 30, 2019 and 2018:

<u>Asset Class</u>	<u>Target Allocation</u>
U.S. Equities	40%
Non-U.S. Equities	20%
Global Fixed Income	25%
Commercial Real Estate	15%

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

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 OPEB 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 best estimates of arithmetic real rates of return for each major asset class as of June 30, 2019 are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
Core bonds	2.6%
Multi-Sector	3.5
Absolute return	3.8
U.S. large cap equity	7.2
U.S. small cap equity	8.4
Non-U.S. equity	8.3
Core real estate	6.8
Value add RE	7.3

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

For the June 30, 2019 valuation, the long-term expected rate of return was 7.50%. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments was selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown. The final equivalent single discount rate used for the June 30, 2019 valuation was 7.50% with the expectation that BWL will continue contributing the actuarially determined contribution and/or paying for the pay-go cost.

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
S&P Municipal Bond 20-year High Grade Rate Index	2.71%
Fidelity 20-year Go Municipal Bond Index	2.92%
Actual Discount Rate Used	7.50%

Discount rate – The discount rate used to measure the total OPEB liability as of June 30, 2019 and 2018 was 7.5 percent. The projection of cash flows used to determine the discount rate assumed that BWL 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 OPEB payments for current active and inactive employees. 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.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Balances at 6/30/2018	<u>\$ 203,487,065</u>	<u>\$ 184,039,624</u>	<u>\$ 19,447,441</u>
Changes for the year:			
Service cost	4,402,631	-	4,402,631
Interest	14,919,912	-	14,919,912
Change in benefit terms	(414,594)	-	(414,594)
Differences between expected and actual experience	(5,231,311)	-	(5,231,311)
Changes in assumptions	(59,336,488)	-	(59,336,488)
Contributions-employer	-	9,277,538	(9,277,538)
Contributions-employee	-	-	-
Net investment income	-	11,687,551	(11,687,551)
Benefit payments	(9,277,538)	(9,277,538)	-
Administrative expense	-	(568,600)	568,600
Net changes	<u>(54,937,388)</u>	<u>11,118,951</u>	<u>(66,056,339)</u>
Balances at 6/30/2019	<u><u>\$ 148,549,677</u></u>	<u><u>\$ 195,158,575</u></u>	<u><u>\$ (46,608,898)</u></u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a)-(b)
Balances at 6/30/2017	<u>\$ 205,624,392</u>	<u>\$ 173,635,057</u>	<u>\$ 31,989,335</u>
Changes for the year:			
Service cost	4,826,401	-	4,826,401
Interest	15,039,052	-	15,039,052
Differences between expected and actual experience	(9,879,514)	-	(9,879,514)
Changes in assumptions	(1,727,939)	-	(1,727,939)
Contributions-employer	-	10,395,327	(10,395,327)
Contributions-employee	-	-	-
Net investment income	-	11,038,903	(11,038,903)
Benefit payments	(10,395,327)	(10,395,327)	-
Administrative expense	-	(634,336)	634,336
Net changes	<u>(2,137,327)</u>	<u>10,404,567</u>	<u>(12,541,894)</u>
Balances at 6/30/2018	<u><u>\$ 203,487,065</u></u>	<u><u>\$ 184,039,624</u></u>	<u><u>\$ 19,447,441</u></u>

Sensitivity of the net OPEB liability (asset) to changes in the discount rate – The following presents the net OPEB liability (asset) of BWL, as well as what BWL’s net OPEB liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower (6.5 percent) or 1 percentage point higher (8.5 percent) than the current discount rate (7.5 percent) as of June 30, 2019 and 2018:

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

	June 30, 2019		
	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Net OPEB Liability (asset)	\$(30,506,982)	\$(46,608,898)	\$(60,250,506)

	June 30, 2018		
	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Net OPEB Liability (asset)	\$43,845,533	\$19,447,441	\$(991,597)

Sensitivity of the net OPEB liability (asset) to changes in the healthcare cost trend rates

– The following presents the net OPEB liability (asset) of BWL, as well as what BWL's net OPEB liability (asset) would be if it were calculated using healthcare cost trend rates that are 1–percentage–point lower (7.5 percent decreasing to 3.25 percent) or 1–percentage–point higher (9.5 percent decreasing to 5.25 percent) than the current healthcare cost trend rates as of June 30, 2019:

	June 30, 2019		
	<u>1% Decrease</u>	<u>Healthcare Cost Trend Rates</u>	<u>1% Increase</u>
Net OPEB Liability (asset)	\$(61,585,517)	\$(46,608,898)	\$(28,613,760)

Sensitivity of the net OPEB liability (asset) to changes in the healthcare cost trend rates –

The following presents the net OPEB liability (asset) of BWL, as well as what BWL's net OPEB liability (asset) would be if it were calculated using healthcare cost trend rates that are 1–percentage–point lower (8.0 percent decreasing to 4.0 percent) or 1–percentage–point higher (10.0 percent decreasing to 6.0 percent) than the current healthcare cost trend rates as of June 30, 2018:

	June 30, 2018		
	<u>1% Decrease</u>	<u>Healthcare Cost Trend Rates</u>	<u>1% Increase</u>
Net OPEB Liability (asset)	\$(2,824,476)	\$19,447,441	\$46,517,181

OPEB plan fiduciary net position – Detailed information about the OPEB plan's fiduciary net position is available in the separately issued Post-Retirement Benefit Plan and Trust for Eligible Employees of Lansing Board of Water and Light June 30, 2019 GASB 74/75 Report, issued July 12, 2019.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

For the year ended June 30, 2019, the Plan recognized OPEB expense of \$(6,226,213). At June 30, 2019, the Plan reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 2,843,372	\$ 11,190,994
Changes of assumptions	-	52,281,843
Net difference between projected and actual earnings on OPEB plan investments	<u>337,263</u>	<u>-</u>
Total	<u><u>\$ 3,180,635</u></u>	<u><u>\$ 63,472,837</u></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:

2020	\$(11,920,727)
2021	(11,920,727)
2022	(10,663,457)
2023	(11,305,754)
2024	(10,846,876)
Thereafter	(3,634,661)

For the year ended June 30, 2018, the Plan recognized OPEB expense of \$5,316,416. At June 30, 2018, the Plan reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 3,655,674	\$ 8,331,001
Changes of assumptions	-	2,860,855
Net difference between projected and actual earnings on OPEB plan investments	<u>-</u>	<u>2,203,522</u>
Total	<u><u>\$ 3,655,674</u></u>	<u><u>\$ 13,395,378</u></u>

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 8 – Retirement Plans (Continued)

Other Postretirement Benefits

The BWL offers its employees a deferred compensation plan, created in accordance with IRC 457. The BWL makes contributions of \$1,000 annually for the employees as of January 1 of each year, during the month of January. The BWL also will match employee contributions at one dollar for every one dollar up to \$1,500 in a calendar year.

Note 9 – Commitments and Contingencies

At June 30, 2019, the BWL has two letters of credit in the amounts of \$817,000 and \$1,000,000 issued to the Michigan Department of Natural Resources. The letters of credit were issued to satisfy requirements of the Michigan Department of Natural Resources to provide financial assurance to the State of Michigan for the cost of closure and postclosure monitoring and maintenance of a landfill site operated by the BWL.

Through monitoring tests performed on the landfill sites operated by the BWL, it has been discovered that the sites are contaminating the groundwater. The contamination does not pose a significant health risk, but does lower the quality of the groundwater. The BWL received landfill closure approval as well as interim remediation approval. The BWL has estimated the total cost for remediation, including closure and postclosure cost of the landfills, and has recorded a liability of \$6,902,174 and \$7,321,928 for the years ended June 30, 2019 and 2018, respectively. Certain remediation activities have commenced and are in progress. The landfill sites are no longer receiving waste products. Landfill closure and postclosure requirements are associated with the Michigan Department of Environmental Quality. Annual postclosure costs of these landfill sites are not expected to exceed \$380,000 annually and are included in the liability above. Estimates will be revised as approvals are received from the State. In accordance with the regulatory basis of accounting as per GASB 62 (see Note 1), the BWL recorded a corresponding regulatory asset (see Note 6).

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 9 – Commitments and Contingencies (Continued)

The BWL is subject to various laws and regulations with respect to environmental matters such as air and water quality, soil contamination, solid waste disposal, handling of hazardous materials, and other similar matters. Compliance with these various laws and regulations could result in substantial expenditures. The BWL has established a Designated Purpose Fund (see Note 1), of which one of the purposes of the fund is to meet extraordinary expenditures resulting from responsibilities under environmental laws and regulations. Management believes that all known or expected responsibilities to these various laws and regulations by the BWL will be sufficiently covered by the Designated Purpose Fund and the environmental remediation liability.

The BWL is involved in various other legal actions which have arisen in the normal course of business. Such actions are usually brought for claims in excess of possible settlement or awards, if any, that may result. After taking into consideration legal counsel's evaluation of pending actions, management has recorded an adequate reserve as of June 30, 2019 and 2018 in regard to specific pending legal cases.

The BWL has entered into contracts to purchase coal totaling \$12,102,000 through December 31, 2020. In addition, the BWL has entered into contracts for the rail services related to shipping the coal. Commitments for future rail services to be purchased are approximately \$18,601,000 through December 2019.

Construction in progress consists of projects for expansion or additions to the utility plant. The estimated additional cost to complete various projects is approximately \$463,704,000 and \$492,873,000 at June 30, 2019 and 2018, respectively, including commitments on existing construction contracts approximating \$139,992,000 and \$122,664,000 at June 30, 2019 and 2018, respectively. These projects will be funded through revenue bonds and operational cash flow, including the project funds reported as other assets. There are additional commitments on projects in the process of being constructed that are not included above.

Environmental Protection Agency (EPA) Notice of Finding of Violation

On March 19, 2015, the EPA served the BWL with a Notice of Finding of Violation specifically focused on BWL's Erickson capital projects. As of the date of the financial statements the matter is still being negotiated. The BWL anticipates a settlement cost of \$275,000 and mitigation costs of \$400,000. The mitigation costs will be incurred over 3 years once the matter is settled and the entire cost is included in the financial statements as presented.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 10 – Power Supply Purchase

In 1983, the BWL entered into power supply and project support contracts with MPPA, of which the BWL is a member. Under the agreement, the BWL has the ability to purchase power from MPPA, will sell power to MPPA at an agreed-upon rate, and will purchase 64.29 percent of the energy generated by MPPA's 37.22 percent ownership in Detroit Edison's Belle River Plant (Belle River), which became operational in August 1984.

Under the terms of its contract, the BWL must make minimum annual payments equal to its share of capital and its share of the fixed operating costs of Belle River. The estimated required payments presented below assume no early calls or refinancing of existing revenue bonds and a 3.0 percent annual inflation of fixed operating costs, which include expected major maintenance projects.

<u>Year</u>	<u>Debt Service and Capital</u>	<u>Estimated Fixed Operating Costs</u>	<u>Total Required</u>
2020	\$ 562,536	\$ 14,086,302	\$ 14,648,838
Total	<u>\$ 562,536</u>	<u>\$ 14,086,302</u>	<u>\$ 14,648,838</u>

In addition to the above required payments, the BWL must pay for fuel, other operating costs, and transmission costs related to any kilowatt hours (KWHs) purchased under these contracts.

The BWL recognized expenses for 2019 and 2018 of \$28,650,463 and \$36,653,466, respectively, to purchase power under the terms of this contract. The price of this power was calculated on a basis, as specified in the contracts, to enable MPPA to recover its production, transmission, and capital costs.

In connection with the Belle River purchase, in December 2002, MPPA issued \$280,180,000, principal amount, of its Belle River Project Refunding Revenue Bonds, 2002 Series A, with rates ranging from 2.125 percent to 5.25 percent to advance refund \$330,850,000 of outstanding 1993A and B bonds.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 10 – Power Supply Purchase (Continued)

The BWL has entered into agreements with Energy Developments Limited, formerly Granger Electric Company, to purchase power generated from landfill gases. The agreements will expire as of June 30, 2028 and September 30, 2028, and includes an early termination option. The power to be purchased in the contract is 11.2 megawatts. The estimated total cost of electricity expected to be purchased and estimated termination payments is \$23,045,115.

Note 11 – Estimated Liability for Excess Earnings on Water Supply and Electric Utility System Revenue Bonds

In accordance with Section 148(f)(2) of the IRC of 1986, as amended, the BWL is required on each anniversary date (July 1) of the Water Supply, Electric Utility, and Steam Utility System Revenue Bonds, Series 2008A, 2011A, 2012A, 2013A, 2017A, and 2019A to compute amounts representing the cumulative excess earnings on such bonds. That amount essentially represents a defined portion of any excess of interest earned on funds borrowed over the interest cost of the tax-exempt borrowings. Expense is charged (credited) annually in an amount equal to the estimated increase (decrease) in the cumulative excess earnings for the year. On every fifth anniversary date and upon final maturity of the bonds, the BWL is required to remit to the Internal Revenue Service the amount of any cumulative excess earnings computed on the date of such maturity plus an amount equal to estimated interest earned on previous years' segregated funds.

The estimated liability for excess earnings was \$0 at June 30, 2019 and 2018. In accordance with the requirements of the bond indenture, the BWL is required to set aside any current year additions to this estimated liability in a rebate fund within 60 days of the anniversary date of the bonds.

Board of Water and Light – City of Lansing, Michigan

Notes to Financial Statements As of and for the Years Ended June 30, 2019 and 2018

Note 12 – Risk Management and Insurance

The BWL is exposed to various risks of loss related to property loss, torts, errors and omissions, and employee injuries (workers' compensation), as well as medical benefits provided to employees. The BWL has purchased commercial insurance for certain general liability, business auto, excess liability, property and boiler and machinery, public officials and employee liability claims, specific excess health insurance claims, and specific excess workers' compensation claims, subject to policy terms, limits, limitations, and deductibles. The BWL is self-insured for most workers' compensation and health insurance claims. Settled claims relating to the commercial insurance have not exceeded the amount of insurance coverage in any of the past three fiscal years.

The BWL estimates the liability for self-insured workers' compensation and health insurance claims that have been incurred through the end of the fiscal year, including claims that have been reported as well as those that have not yet been reported. Changes in the estimated liability for the past two fiscal years were as follows:

	Workers' Compensation			Health Insurance		
	2019	2018	2017	2019	2018	2017
Unpaid claims – Beginning of year	\$ 2,200,000	\$ 2,200,000	\$ 2,200,000	\$ 1,167,466	\$ 1,167,466	\$ 1,167,466
Incurred claims, including claims incurred but not reported	390,707	128,524	86,951	11,990,226	14,494,539	13,838,436
Claim payments	<u>(390,707)</u>	<u>(128,524)</u>	<u>(86,951)</u>	<u>(11,990,226)</u>	<u>(14,494,539)</u>	<u>(13,838,436)</u>
Unpaid claims – End of year	<u>\$ 2,200,000</u>	<u>\$ 2,200,000</u>	<u>\$ 2,200,000</u>	<u>\$ 1,167,466</u>	<u>\$ 1,167,466</u>	<u>\$ 1,167,466</u>

The liability for health insurance is included with accounts payable on the statement of net position.

Note 13 – Upcoming Pronouncements

GASB has approved GASB Statement No. 84, *Fiduciary Activities*, Statement No. 85, *Omnibus*, Statement No. 86, *Certain Debt Extinguishment Issues*, Statement No. 87, *Leases* and Statement No. 91, *Conduit Debt Obligations*. When they become effective, application of these standards may restate portions of these financial statements.

Required Supplemental Information

**Lansing Board of Water and Light
Defined Benefit Plan and Trust for Employees' Pensions**

**Required Supplemental Information (Unaudited)
Schedule of Changes in the Net Pension Asset
Last Ten Fiscal Years
(in thousands)**

	2019	2018	2017	2016	2015	2014	2013	2012*	2011*	2010*
Total Pension Liability										
Service cost	\$ 60	\$ 50	\$ 113	\$ 223	\$ 274	\$ 349	\$ 407	\$ -	\$ -	\$ -
Interest	3,691	4,031	4,317	4,625	4,919	4,751	5,085	-	-	-
Changes in benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(743)	(230)	(383)	299	(1,093)	964	(1,716)	-	-	-
Changes in assumptions	1,210	1,419	(857)	(1,468)	-	4,538	-	-	-	-
Benefit payments, including refunds	(6,143)	(6,414)	(7,473)	(7,896)	(8,046)	(8,541)	(7,777)	-	-	-
Net Change in Total Pension Liability	(1,925)	(1,144)	(4,283)	(4,217)	(3,946)	2,061	(4,001)	-	-	-
Total Pension Liability - Beginning of year	55,751	56,895	61,178	65,395	69,341	67,280	71,281	-	-	-
Total Pension Liability - End of year	53,826	55,751	56,895	61,178	65,395	69,341	67,280	-	-	-
Plan Net Position										
Contributions - Employer	-	-	-	-	-	-	-	-	-	-
Contributions - Member	-	-	-	-	-	-	-	-	-	-
Net investment income	4,381	3,112	8,272	47	1,771	14,243	10,170	-	-	-
Administrative expenses	(183)	(255)	(317)	(388)	(576)	(596)	(536)	-	-	-
Benefit payments, including refunds	(6,143)	(6,414)	(7,473)	(7,896)	(8,045)	(8,541)	(7,777)	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Net change in Net Position Held in Trust	(1,945)	(3,557)	482	(8,237)	(6,850)	5,106	1,857	-	-	-
Net Position Restricted for Pensions - Beginning of year	62,367	65,924	65,442	73,679	80,529	75,424	73,567	-	-	-
Net Position Restricted for Pensions - End of year	60,422	62,367	65,924	65,442	73,679	80,530	75,424	-	-	-
BWL Net Pension Asset - Ending	\$ (6,596)	\$ (6,616)	\$ (9,029)	\$ (4,264)	\$ (8,284)	\$ (11,189)	\$ (8,144)	\$ -	\$ -	\$ -
Plan Net Position as a % of Total Pension Liability	112.25%	111.87%	115.87%	106.97%	112.67%	116.14%	112.10%	- %	- %	- %
Covered Employee Payroll	\$ 406	\$ 603	\$ 586	\$ 772	\$ 1,018	\$ 1,225	\$ 1,684	\$ -	\$ -	\$ -
BWL's Net Pension Asset as a % of Covered Employee Payroll	(1,625%)	(1,097%)	(1,541%)	(552%)	(814%)	(913%)	(484%)	- %	- %	- %

*GASB Statement No. 67 was implemented as of June 30, 2014. Information from 2010 - 2012 is not available and this schedule will be presented on a prospective basis.

**Lansing Board of Water and Light
Defined Benefit Plan and Trust for Employees' Pensions**

**Required Supplemental Information (Unaudited)
Schedule of Employer Contributions to the Net Pension Asset
Last Ten Fiscal Years
(in thousands)**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined contribution	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 86	\$ 2,109
Contributions in relation to the actuarially determined contribution	-	-	-	-	-	-	-	-	86	2,109
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Covered Employee Payroll	\$ 406	\$ 603	\$ 586	\$ 772	\$ 1,018	\$ 1,225	\$ 1,684	\$ 2,398	\$ 2,660	\$ 3,089
Contributions as a Percentage of Covered Employee Payroll	- %	- %	- %	- %	3.23%	68.27%				

**Post-Retirement Benefit Plan and Trust for
Eligible Employees of Lansing Board of Water and Light**

**Required Supplemental Information (Unaudited)
Schedule of Changes in the Net OPEB Liability
Last Ten Fiscal Years
(in thousands)**

	2019	2018	2017	2016*	2015*	2014*	2013*	2012*	2011*	2010*
Total OPEB Liability										
Service cost	\$ 4,403	\$ 4,827	\$ 3,130	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest	14,920	15,039	14,226	-	-	-	-	-	-	-
Changes in benefit terms	(415)	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(5,231)	(9,880)	5,281	-	-	-	-	-	-	-
Changes in assumptions	(59,336)	(1,728)	(2,027)	-	-	-	-	-	-	-
Benefit payments, including refunds	(9,278)	(10,395)	(9,574)	-	-	-	-	-	-	-
Net Change in Total OPEB Liability	(54,937)	(2,137)	11,036	-	-	-	-	-	-	-
Total OPEB Liability - Beginning of year	203,487	205,624	194,588	-	-	-	-	-	-	-
Total OPEB Liability - End of year	148,550	203,487	205,624	-	-	-	-	-	-	-
Trust Net Position										
Contributions - Employer	9,278	10,395	9,574	-	-	-	-	-	-	-
Contributions - Member	-	-	-	-	-	-	-	-	-	-
Net investment income	11,688	11,039	18,040	-	-	-	-	-	-	-
Administrative expenses	(569)	(634)	(705)	-	-	-	-	-	-	-
Benefit payments, including refunds	(9,278)	(10,395)	(9,574)	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Net change in Net Position Held in Trust	11,119	10,405	17,335	-	-	-	-	-	-	-
Trust fiduciary net position - Beginning of year	184,040	173,635	156,300	-	-	-	-	-	-	-
Trust fiduciary net position - End of year	195,159	184,040	173,635	-	-	-	-	-	-	-
BWL Net OPEB Liability - Ending	\$ (46,609)	\$ 19,447	\$ 31,989	\$ -						
Trust Fiduciary Net Position as a % of Total OPEB Liability	131.38%	90.44%	84.44%	- %	- %	- %	- %	- %	- %	- %
Covered Employee Payroll	\$ 56,785	\$ 55,650	\$ 54,383	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
BWL's Net OPEB Liability as a % of Covered Employee Payroll	(82.08%)	34.95%	58.82%	- %	- %	- %	- %	- %	- %	- %

*GASB Statement No. 75 was implemented as of June 30, 2016. Information from 2010 - 2016 is not available and this schedule will be presented on a prospective basis.

**Post-Retirement Benefit Plan and Trust for
Eligible Employees of Lansing Board of Water and Light**

**Required Supplemental Information (Unaudited)
Schedule of Employer Contributions to the Net OPEB Liability
Last Ten Fiscal Years
(in thousands)**

Fiscal Year Ended	Employer Contributions		Difference of Required to Actual Contributions	Covered Employee Payroll	Percentage of Actual Contributions to Covered Payroll
	Required	Actual			
6/30/2010*	21,291	21,318	27	-	-
6/30/2011	17,300	17,236	(64)	47,213	37%
6/30/2012	15,774	15,854	80	46,885	34%
6/30/2013	13,994	14,045	51	47,468	30%
6/30/2014	9,200	9,268	68	46,971	20%
6/30/2015	5,762	9,671	3,909	50,885	19%
6/30/2016	5,788	9,423	3,635	53,893	17%
6/30/2017	7,508	9,574	2,066	54,383	18%
6/30/2018	7,535	10,395	2,860	55,650	19%
6/30/2019	7,031	9,278	2,247	56,785	16%

*GASB Statement No. 75 was implemented as of June 30, 2016. Information from 2010 is not available and this schedule will be presented on a prospective basis.

Board of Water and Light – City of Lansing, Michigan

Notes to Required Supplementary Information (Unaudited) As of and for the Years Ended June 30, 2019 and 2018

Defined Benefit Plan:

Actuarial valuation information relative to the determination of contributions:

Valuation date June 30, 2019, based on roll-forward of February 28, 2019 valuation

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age method
Amortization method	Level dollar over a 15-year period
Remaining amortization period	15 years
Asset valuation method	Market value of the assets
Inflation	2.5 percent
Salary increases	3.5 percent per year
Investment rate of return	7.0 percent per year compounded annually
Mortality Scale	PUB-2010 General Mortality Table with MP-2018 Improvement Scale

Changes to assumptions: The mortality table was changed to the PUB-2010 General Mortality Table and the improvement scale was updated to the MP-2018 improvement scale.

Actuarial valuation information relative to the determination of contributions:

Valuation date June 30, 2018, based on roll-forward of February 28, 2018 valuation

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age method
Amortization method	Level dollar over a 15-year period
Remaining amortization period	15 years
Asset valuation method	Market value of the assets
Inflation	3.0 percent
Salary increases	3.5 percent per year
Investment rate of return	7.0 percent per year compounded annually
Mortality	RP-2014 Mortality Table with MP-2017 Improvement Scale

Changes to assumptions: The mortality projection scale was updated from the RP-2014 Total Dataset adjusted to 2006 and using the MP-2017 improvement scale. The assumed form of payment for active participants was changed from life annuity to a 100% joint and survivor annuity. The discount rate and the expected long-term rate of return on assets was decreased from 7.50% to 7.00%.

Board of Water and Light – City of Lansing, Michigan

Notes to Required Supplementary Information (Unaudited) As of and for the Years Ended June 30, 2019 and 2018

Post Retirement Benefit Plan:

Actuarial valuation information relative to the determination of contributions:

Valuation date June 30, 2019, based on roll-forward of February 28, 2019 valuation

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal level % of salary method
Amortization method	Level dollar over a 30-year closed period
Remaining amortization period	30 years
Inflation	3.0 percent
Salary increases	9.3 percent growth at age 25 and decreases to 6.4 percent for ages 60+. This percentage includes general wage inflation and merit / productivity increases.
Investment rate of return	7.5 percent per year compounded annually
Mortality	PUBH-2010 General Mortality Table projected generationally using MP-2018 scale

Actuarial valuation information relative to the determination of contributions:

Valuation date June 30, 2018, based on roll-forward of February 28, 2018 valuation

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal level % of salary method
Amortization method	Level dollar over a 30-year closed period
Remaining amortization period	30 years
Inflation	3.0 percent
Salary increases	9.3 percent growth at age 25 and decreases to 6.4 percent for ages 60+
Investment rate of return	7.5 percent per year compounded annually
Mortality	RPH-2014 Total Dataset Mortality Table, Male and Female, adjusted to 2006 and projected generationally using an MP-2017 Projection Scale

Board of Water and Light – City of Lansing, Michigan

Notes to Required Supplementary Information (Unaudited) As of and for the Years Ended June 30, 2019 and 2018

Significant Changes:

June 30, 2019

- > Difference between actual and expected experience – The \$5.2 million gain on the Total OPEB Liability for the fiscal year ending June 30, 2019 is primarily due to favorable demographic experience. The favorable experience is mainly attributable to terminations of active participants and deaths of participants with and without beneficiaries.
- > Assumption changes – (1) The plan experienced a \$54.4 million gain on the Total OPEB Liability due to a change of the assumed per capita claims cost. The Board changed the Plan's insurance provider for Medicare eligible participants from The Hartford and Envision Insurance to Humana. Doing so resulted in a dramatic decrease in both the medical and prescription drug monthly premiums from the prior fiscal year (\$98.99 per month vs. \$219.54 per month for medical coverage and \$213.47 per month vs. \$305.00 per month for prescription drug coverage); (2) The Plan experienced a \$3.8 million loss on the mortality assumption change. The mortality assumption was updated from the RPH-2014 Total Dataset mortality, adjusted to 2006 and projected generationally using the MP-2017 improvement scale to the PUBH-2010 General Employees mortality, projected generationally using the MP-2018 improvement scale; and (3) The Plan experienced a \$8.7 million gain on a change to the medical and prescription drug trend assumptions. The trend assumptions were changed to those prescribed under the Michigan Uniform Assumptions for the 2019 fiscal year.
- > Change in benefit terms – The Plan experienced a \$.4 million gain due to an expected increase in the retiree contribution percentage for employees hired on or after January 1, 2009. The expected contribution percentage was increased from 14% to 20% of the premium charged to active employees.
- > Investment loss – During the fiscal year ending 6/30/2019 the actual return on assets was 6.36% vs. an expected return of 7.5%.

June 30, 2018

- > Difference between actual and expected experience – The \$9.9 million gain on the Total OPEB Liability for the fiscal year ending June 30, 2018 is attributable to a reduction in the per capita claims cost used in the 6/30/2018 valuation. Better than expected claims experience during the fiscal year resulted in a decrease in the projected claims when compared to those used in the 6/30/2017 valuation.
- > Assumption change – The mortality improvement scale was updated to the MP-2017 scale.
- > Investment loss – During the fiscal year ending 6/30/2018 the actual return on assets was 6.37% vs. an expected return of 7.5%.

Additional Information

Board of Water and Light - City of Lansing, Michigan

Income Available for Revenue Bond Debt Retirement

	<u>For the Year Ended June 30</u>	
	<u>2019</u>	<u>2018</u>
Income - Before capital contributions per statement of revenues, expenses, and changes in net position	\$ 32,403,126	\$ 14,116,063
Adjustments to Income		
Depreciation and impairment	46,123,865	44,255,255
Interest on long-term debt:		
Notes	78,810	62,210
Revenue bonds	<u>15,443,098</u>	<u>13,331,897</u>
Total additional income	<u>61,645,773</u>	<u>57,649,362</u>
Income Available for Revenue Bonds and Interest Redemption	<u>\$ 94,048,899</u>	<u>\$ 71,765,425</u>
Debt Retirement Pertaining to Revenue Bonds		
Principal	\$ 6,820,000	\$ 8,585,000
Interest	<u>31,160,284</u>	<u>15,295,875</u>
Total	<u>\$ 37,980,284</u>	<u>\$ 23,880,875</u>
Percent Coverage of Revenue Bonds and Interest Requirements	<u>248</u>	<u>301</u>

Board of Water and Light - City of Lansing, Michigan

Detail of Statements of Revenues and Expenses For the Years Ended June 30, 2018 and 2017

	Combined		Water		Electric		Steam		Chilled Water	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Operating Revenues										
Water	\$ 42,851,399	\$ 41,524,143	\$ 42,851,399	\$ 41,524,143	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Electric:										
Retail	280,612,893	271,414,998	-	-	280,612,893	271,414,998	-	-	-	-
Sales for resale	13,487,713	21,846,410	-	-	13,487,713	21,846,410	-	-	-	-
Steam	13,740,119	12,072,017	-	-	-	-	13,740,119	12,072,017	-	-
Chilled water	6,192,397	6,225,356	-	-	-	-	-	-	6,192,397	6,225,356
Total operating revenues	356,884,521	353,082,924	42,851,399	41,524,143	294,100,606	293,261,408	13,740,119	12,072,017	6,192,397	6,225,356
Operating Expenses										
Production:										
Fuel, purchased power, and other operating expenses	125,335,173	142,679,119	10,128,854	8,900,728	108,114,467	127,702,294	5,322,283	4,637,601	1,769,569	1,438,496
Maintenance	18,941,418	16,474,970	3,803,622	3,303,312	14,084,591	12,257,504	482,628	722,446	570,577	191,708
Transmission and distribution:										
Operating expenses	8,186,690	7,929,917	1,883,305	1,639,903	6,002,627	5,977,257	300,758	312,757	-	-
Maintenance	21,688,566	19,983,487	3,118,051	3,211,987	18,132,525	16,329,536	437,990	441,964	-	-
Administrative and general	70,664,307	73,638,904	12,314,058	12,964,161	55,896,376	58,806,770	1,830,404	1,300,400	623,469	567,573
Return on Equity	21,110,884	20,561,871	2,600,113	2,465,989	17,391,645	17,067,336	734,501	652,087	384,625	376,459
Depreciation	46,123,865	44,255,255	7,276,010	6,717,444	35,007,435	33,825,801	2,650,473	2,525,735	1,189,947	1,186,275
Total operating expenses	312,050,903	325,523,523	41,124,013	39,203,524	254,629,666	271,966,498	11,759,037	10,592,990	4,538,187	3,760,511
Operating Income	44,833,618	27,559,401	1,727,386	2,320,619	39,470,940	21,294,910	1,981,082	1,479,027	1,654,210	2,464,845
Nonoperating Income (Expenses)										
Investment income	5,464,438	834,087	928,249	(28,686)	3,900,767	848,930	417,796	22,278	217,626	(8,435)
Other (expense) income	(2,373,022)	(883,318)	967,508	733,527	(3,498,560)	(1,289,108)	(62,737)	(549,009)	220,767	221,272
Bonded debt interest expense	(15,443,098)	(13,331,897)	(1,386,974)	(1,391,610)	(11,476,150)	(9,508,962)	(2,053,740)	(1,855,996)	(526,234)	(575,329)
Other interest expense	(78,810)	(62,210)	(13,648)	(7,070)	(65,057)	(55,119)	(105)	(21)	-	-
Total nonoperating expense	(12,430,492)	(13,443,338)	495,135	(693,839)	(11,139,000)	(10,004,259)	(1,698,786)	(2,382,748)	(87,841)	(362,492)
Net Income (Loss)	\$ 32,403,126	\$ 14,116,063	\$ 2,222,521	\$ 1,626,780	\$ 28,331,940	\$ 11,290,651	\$ 282,296	\$ (903,721)	\$ 1,566,369	\$ 2,102,353

Board of Water and Light - City of Lansing, Michigan

Detail of Statements of Changes in Net Position

	<u>Combined</u>	<u>Water</u>	<u>Electric</u>	<u>Steam</u>	<u>Chilled Water</u>
Net Position - June 30, 2017	\$ 556,381,814	\$ 92,478,543	\$ 463,784,034	\$ (4,956,693)	\$ 5,075,930
Income (loss) before contributions	<u>14,116,063</u>	<u>1,626,780</u>	<u>11,290,651</u>	<u>(903,721)</u>	<u>2,102,353</u>
Net Position - June 30, 2018	570,497,877	94,105,323	475,074,685	(5,860,414)	7,178,283
Income (loss) before contributions	<u>32,403,126</u>	<u>2,222,521</u>	<u>28,331,940</u>	<u>282,296</u>	<u>1,566,369</u>
Net Position - June 30, 2019	<u>\$ 602,901,003</u>	<u>\$ 96,327,844</u>	<u>\$ 503,406,625</u>	<u>\$ (5,578,118)</u>	<u>\$ 8,744,652</u>

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Detail of Statements of Net Position

	As of June 30, 2019			
	Defined Contribution Plan	Defined Benefit Plan	VEBA	Total
Assets				
Receivable - investment interest receivable	\$ -	\$ 85,635	\$ 261,067	\$ 346,702
Trade receivable - due from broker	-	-	1,539	1,539
Investments at fair value:				
Cash and money market trust fund	-	1,963,325	3,437,276	5,400,601
U.S. government obligations	-	4,873,353	18,994,138	23,867,491
Fixed income securities	-	6,379,674	20,108,406	26,488,080
Mutual funds	156,708,066	36,596,278	85,263,185	278,567,529
Stable value	36,352,914	-	-	36,352,914
Common stock	-	10,529,824	67,168,552	77,698,376
Self-directed brokerage account	3,787,956	-	-	3,787,956
Participant notes receivable	3,422,076	-	-	3,422,076
Total investments	200,271,012	60,342,454	194,971,557	455,585,023
Liabilities				
Trade payable - due to broker	-	6,242	75,586	81,828
Net Position - Held in trust for pension and other employee benefits	\$ 200,271,012	\$ 60,421,847	\$ 195,158,577	\$ 455,851,436

	As of June 30, 2018			
	Defined Contribution Plan	Defined Benefit Plan	VEBA	Total
Assets				
Receivable - investment interest receivable	\$ -	\$ 148,763	\$ 404,369	\$ 553,132
Trade receivable - due from broker	-	11,853	-	11,853
Investments at fair value:				
Cash and money market trust fund	-	1,890,701	1,985,712	3,876,413
U.S. government obligations	-	7,966,488	26,527,961	34,494,449
Fixed income securities	-	12,372,866	34,748,141	47,121,007
Mutual funds	153,737,225	26,341,508	72,109,667	252,188,400
Stable value	35,135,911	-	-	35,135,911
Common stock	-	13,634,806	48,418,160	62,052,966
Self-directed brokerage account	2,144,556	-	-	2,144,556
Participant notes receivable	3,649,872	-	-	3,649,872
Total investments	194,667,564	62,206,369	183,789,641	440,663,574
Liabilities				
Trade payable - due to broker	-	-	154,385	154,385
Net Position - Held in trust for pension and other employee benefits	\$ 194,667,564	\$ 62,366,985	\$ 184,039,625	\$ 441,074,174

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Detail of Statement of Changes in Net Position For the Year Ended June 30, 2019

	Defined Contribution Plan	Defined Benefit Plan	VEBA	Total
Increases				
Investment income (loss):				
Net appreciation (depreciation) in fair value of investments	\$ 1,406,649	\$ 2,540,532	\$ 7,052,500	\$ 10,999,681
Interest and dividend income	9,637,603	1,840,190	4,635,052	16,112,845
Net investment income (loss)	11,044,252	4,380,722	11,687,552	27,112,526
Employer contributions	6,618,384	-	9,277,538	15,895,922
Participant rollover contributions	1,786,985	-	-	1,786,985
Interest from participant notes receivable	210,373	-	-	210,373
Total increases	19,659,994	4,380,722	20,965,090	45,005,806
Decreases				
Retiree benefits paid	13,639,444	6,142,622	9,277,538	29,059,604
Loan defaults	247,237	-	-	247,237
Participants' note and administrative fees	169,865	183,238	568,600	921,703
Total decreases	14,056,546	6,325,860	9,846,138	30,228,544
Change in Net Position Held in Trust	5,603,448	(1,945,138)	11,118,952	14,777,262
Net Position Held in Trust for Pension and Other Employee Benefits				
Beginning of year	194,667,564	62,366,985	184,039,625	441,074,174
End of year	<u>\$ 200,271,012</u>	<u>\$ 60,421,847</u>	<u>\$ 195,158,577</u>	<u>\$ 455,851,436</u>

Board of Water and Light - City of Lansing, Michigan

Pension Trust Funds - Detail of Statement of Changes in Net Position For the Year Ended June 30, 2018

	Defined Contribution Plan	Defined Benefit Plan	VEBA	Total
Increases				
Investment income (loss):				
Net appreciation (depreciation) in fair value of investments	\$ 8,851,973	\$ 1,521,207	\$ 6,742,518	\$ 17,115,698
Interest and dividend income	<u>8,778,719</u>	<u>1,590,883</u>	<u>4,296,385</u>	<u>14,665,987</u>
Net investment income (loss)	17,630,692	3,112,090	11,038,903	31,781,685
Employer contributions	6,534,888	-	10,395,327	16,930,215
Participant rollover contributions	1,648,509	-	-	1,648,509
Interest from participant notes receivable	<u>156,090</u>	<u>-</u>	<u>-</u>	<u>156,090</u>
Total increases	25,970,179	3,112,090	21,434,230	50,516,499
Decreases				
Retiree benefits paid	16,928,587	6,413,954	10,395,327	33,737,868
Loan defaults	209,514	-	-	209,514
Participants' note and administrative fees	<u>104,407</u>	<u>254,964</u>	<u>634,334</u>	<u>993,705</u>
Total decreases	<u>17,242,508</u>	<u>6,668,918</u>	<u>11,029,661</u>	<u>34,941,087</u>
Change in Net Position Held in Trust	8,727,671	(3,556,828)	10,404,569	15,575,412
Net Position Held in Trust for Pension and Other Employee Benefits				
Beginning of year	<u>185,939,893</u>	<u>65,923,813</u>	<u>173,635,056</u>	<u>392,973,492</u>
End of year	<u>\$ 194,667,564</u>	<u>\$ 62,366,985</u>	<u>\$ 184,039,625</u>	<u>\$ 441,074,174</u>