

**THE WATER WORKS BOARD
OF THE CITY OF BIRMINGHAM**

**FINANCIAL STATEMENTS
AND OTHER INFORMATION**

December 31, 2017

With Independent Auditor's Report

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
Birmingham, Alabama

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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of
The Water Works Board of the City of Birmingham
Birmingham, Alabama

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of The Water Works Board of the City of Birmingham ("the Board") as of and for the years ended December 31, 2017 and 2016, and the related notes to the financial statements, which collectively comprise the Board'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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements of the Retirement Plan for Employees of the Water Works Board of the City of Birmingham and the Other Post Employment Benefit Plan of the Water Works Board of the City of Birmingham ("the Plans"), discretely presented component units of the Board. Those financial statements were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for the Plans, is based solely on the report of the other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.



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

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

Opinion

In our opinion, based on our audit and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the aggregate discretely presented component units of the Board, as of December 31, 2017 and 2016 and the respective changes in financial position, and, where applicable, 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 management's discussion and analysis, the schedules of changes in net pension liability and employer contributions, and the schedules of OPEB funding progress, net OPEB obligation, and employer contributions on pages 4 thru 8 and 55 thru 57 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, and other auditors, have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Board's basic financial statements. The additional information section is presented for purposes of additional analysis and is not a required part of the basic financial statements.



To the Board of Directors of
The Water Works Board of the City of Birmingham
Birmingham, Alabama

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The schedules of long-term debt, changes in utility plant assets, and amounts on deposit with trustee by fund and the statements of operating expenses and nonoperating revenues (expenses) are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such 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 schedules of long-term debt, changes in utility plant assets, and amounts on deposit with trustee by fund and the statements of operating expenses and nonoperating revenues (expenses) are fairly stated in all material respects in relation to the basic financial statements as a whole.

The schedule of major industrial/governmental customers and schedule of insurance policies have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 29, 2018, on our consideration of the Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Board's internal control over financial reporting and compliance.

Birmingham, Alabama
June 29, 2018

Bank, Finley White & Co.



**BIRMINGHAM
WATER WORKS**

**THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED
December 31, 2017**

This section of The Water Works Board of the City of Birmingham's ("the Board") financial statements presents management's analysis of the Board's financial performance during the fiscal year that ended December 31, 2017. Please read it in conjunction with the financial statements, which follow this section:

Financial Highlights for 2017

- Total operating revenues decreased 2.91% primarily due to decreased commercial customer water sales.
- Total operating expenses decreased 7.96% primarily due to a reduction in healthcare expenses and a reduction in pension expense.
- Nonoperating expenses decreased 14.64% primarily due to interest expense.

Overview of the Financial Statements

The Financial Statements consist of four parts: Management's Discussion and Analysis, the Basic Financial Statements, Required Supplementary Information and Additional Information. The Basic Financial Statements also include notes and required supplementary information that explain in more detail some of the information in the Financial Statements.

Required Basic Financial Statements

The Board utilizes two different funds to account for its activities: an enterprise fund, which reports information about the general operations of the Board, and fiduciary funds, which report information about the Pension Trust Fund and the OPEB Trust Fund. For information regarding the fiduciary funds of the Board, see the Statements of Pension Net Position Pension Trust Fund and the Statement of Plan Net Position OPEB Trust Fund in the financial statements. The Pension Trust Fund and the OPEB Trust Fund issue separate annual audited financial statements which may be obtained by writing to the Board at 3600 First Avenue North, P.O. Box 830110, Birmingham, AL 35283.

**THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED (CONT'D)
December 31, 2017**

The Enterprise Fund Financial Statements of the Board report information about the Board using accounting methods similar to those used by private sector companies. These statements offer information about the Board's activities. The Statements of Net Position include all of the Board's assets and liabilities and provide information about the nature and amounts of investments in resources (assets) and the obligations to Board creditors (liabilities). The assets and liabilities are presented in a classified format, which distinguishes between current and long-term assets and liabilities. It also provides the basis for computing rate of return, evaluating the capital structure of the Board and assessing the liquidity and financial flexibility of the Board.

All of the Board's revenues and expenses are accounted for in the Statements of Revenues, Expenses and Changes in Fund Net Position. This statement measures the operating activities of the Board and can be used to determine whether the Board has successfully recovered all of its costs through its water rates and other charges, as well as its profitability and creditworthiness.

The final required financial statement is the Statements of Cash Flows. The primary purpose of this statement is to provide information about the Board's cash receipts and cash payments during the reporting period. The statement reports cash receipts, cash payments and net changes in cash resulting from operating, investing, noncapital financing and capital and related financing activities and provides information regarding the sources and uses of cash that caused the change in the cash balance during the reporting period.

Financial Analysis

A summary of the Board's Enterprise Fund Statements of Net Position is presented in Table A-1.

Table A-1
Condensed Statements of Net Position

	2017	2016	2015	2017-2016 Change	2016-2015 Change
Current and other assets	\$ 50,679,105	\$ 57,576,884	\$ 45,235,297	\$ (6,897,779)	\$ 12,341,587
Trusteed funds	188,083,729	206,947,143	255,025,518	(18,863,414)	(48,078,375)
Utility plant, net	887,102,076	855,069,811	827,705,999	32,032,265	27,363,812
Total assets	<u>\$ 1,125,864,910</u>	<u>\$ 1,119,593,838</u>	<u>\$ 1,127,966,814</u>	<u>\$ 6,271,072</u>	<u>\$ (8,372,976)</u>
Total deferred outflow of resources	\$ 62,279,851	\$ 67,053,170	\$ 35,642,359	\$ (4,773,319)	\$ 31,410,811
Current and other liabilities	\$ 61,722,282	\$ 54,266,705	\$ 60,212,085	\$ 7,455,577	\$ (5,945,380)
Long-term liabilities	1,054,214,801	1,087,217,642	1,074,951,831	(33,002,841)	12,265,811
Total liabilities	<u>\$ 1,115,937,083</u>	<u>\$ 1,141,484,347</u>	<u>\$ 1,135,163,916</u>	<u>\$ (25,547,264)</u>	<u>\$ 6,320,431</u>
Total deferred inflow of resources	\$ 8,256,657	\$ 579,663	\$ 20,237	\$ 7,676,994	\$ 559,426
Net investment in capital assets	\$ 29,084,018	\$ 8,943,790	\$ (107,177,851)	\$ 20,140,228	\$ 116,121,641
Restricted	167,352,702	164,695,404	185,720,899	2,657,298	(21,025,495)
Unrestricted	(132,485,699)	(129,056,196)	(50,118,028)	(3,429,503)	(78,938,168)
Total net position	<u>\$ 63,951,021</u>	<u>\$ 44,582,998</u>	<u>\$ 28,425,020</u>	<u>\$ 19,368,023</u>	<u>\$ 16,157,978</u>

**THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED (CONT'D)
December 31, 2017**

As shown in Table A-1, net position increased \$19.4 million from fiscal 2016. Factors contributing to this change include a decrease in current assets along with a decrease in trustee funds of \$18.9 million. In addition, Net utility plant increased \$32.0 million from continued capital construction programs. Total assets increased \$6.3 million. Total current and other liabilities increased \$7.5 million, primarily due to interest accrued on long-term obligations. Total liabilities decreased by \$25.5 million in 2017, primarily due to \$23.7 million principal payments on outstanding bonds and a \$9.3 million decrease in the net pension liability.

A summary of the Board's Enterprise Fund Statements of Revenues, Expenses and Changes in Fund Net Position is presented in Table A-2.

Table A-2
Condensed Statements of Revenues, Expenses and Changes in Fund Net Position

	2017	2016	2015	2017-2016 Change	2016-2015 Change
Water revenue	\$ 164,933,088	\$ 169,889,368	\$ 161,495,107	\$ (4,956,280)	\$ 8,394,261
Other operating revenue	<u>3,009,777</u>	<u>3,088,765</u>	<u>3,445,700</u>	<u>(78,988)</u>	<u>(356,935)</u>
Total operating revenue	167,942,865	172,978,133	164,940,807	(5,035,268)	8,037,326
Other income, primarily interest	<u>2,743,436</u>	<u>3,310,792</u>	<u>2,256,772</u>	<u>(567,356)</u>	<u>1,054,020</u>
Total revenues	170,686,301	176,288,925	167,197,579	(5,602,624)	9,091,346
Water and sewer service expenses	83,444,303	91,300,101	94,789,796	(7,855,798)	(3,489,695)
License fees paid to municipalities	<u>4,473,709</u>	<u>4,216,322</u>	<u>4,045,786</u>	<u>257,387</u>	<u>170,536</u>
Total operating expenses	<u>87,918,012</u>	<u>95,516,423</u>	<u>98,835,582</u>	<u>(7,598,411)</u>	<u>(3,319,159)</u>
Depreciation	27,992,890	23,026,421	24,370,094	4,966,469	(1,343,673)
Other expenses, primarily interest on debt	<u>40,251,055</u>	<u>47,248,944</u>	<u>46,995,923</u>	<u>(6,997,889)</u>	<u>253,021</u>
Total expenses	<u>156,161,957</u>	<u>165,791,788</u>	<u>170,201,599</u>	<u>(9,629,831)</u>	<u>(4,409,811)</u>
Gain (loss) before contributions	14,524,344	10,497,137	(3,004,020)	4,027,207	13,501,157
Capital contributions	<u>4,843,679</u>	<u>5,660,841</u>	<u>12,848,409</u>	<u>(817,162)</u>	<u>(7,187,568)</u>
Change in net position	19,368,023	16,157,978	9,844,389	3,210,045	6,313,589
Net position at beginning of the year	<u>44,582,998</u>	<u>28,425,020</u>	<u>18,580,631</u>	<u>16,157,978</u>	<u>9,844,389</u>
Net position at end of the year	<u>\$ 63,951,021</u>	<u>\$ 44,582,998</u>	<u>\$ 28,425,020</u>	<u>\$ 19,368,023</u>	<u>\$ 16,157,978</u>

With total operating and nonoperating revenues, including capital contributions amounting to \$175.5 million and expenses of \$156.2 million, the Board's net position increased \$19.4 million in 2017 to \$64.0 million.

**THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED (CONT'D)
December 31, 2017**

Financial Operations Summary

Utility Plant

The Board's utility plant increased by \$30.2 million during 2017. Major expenditures were made to maintain regulatory compliance, ensure adequate capacity, enhance performance and to maintain and replace aging infrastructure. Total assets before depreciation was \$1,262.3 million and \$1,232.1 million for December 31, 2017 and 2016, respectively. Changes in utility plant (before accumulated depreciation) are displayed in the table below. At December 31, 2017, commitments for capital expenditures totaled approximately \$10.4 million.

**Changes in Utility Plant
Year-to-Year Comparison**

Utility Plant	2017	2016	2015	2017-2016 Change	2016-2015 Change
Land and land rights	\$ 37,600,929	\$ 37,313,941	\$ 37,280,060	\$ 286,988	\$ 33,881
Construction-in-progress	61,823,796	39,706,675	41,447,875	22,117,121	(1,741,200)
Structures and improvements	206,719,859	200,204,381	197,539,172	6,515,478	2,665,209
Pumping equipment	34,773,047	38,440,347	33,913,974	(3,667,300)	4,526,373
Transmission and distribution mains	465,445,602	451,372,646	424,991,439	14,072,956	26,381,207
Equipment and other utility plant	<u>455,971,583</u>	<u>465,067,864</u>	<u>447,249,185</u>	<u>(9,096,281)</u>	<u>17,818,679</u>
	<u>\$ 1,262,334,816</u>	<u>\$ 1,232,105,854</u>	<u>\$ 1,182,421,705</u>	<u>\$ 30,228,962</u>	<u>\$ 49,684,149</u>

Debt Administration

A summary of changes in debt obligations from 2017 to 2016, is presented as follows:

**Changes in Debt
Year-to-Year Comparison**

Utility Plant	2017	2016	2015	2017-2016 Change	2016-2015 Change
Long-term debt	\$ 1,002,915,463	\$ 1,027,223,443	\$ 1,020,857,792	\$ (24,307,980)	\$ 6,365,651
Current maturities of long-term debt	<u>20,495,000</u>	<u>17,215,000</u>	<u>19,335,000</u>	<u>3,280,000</u>	<u>\$ (2,120,000)</u>
Total debt obligations	<u>\$ 1,023,410,463</u>	<u>\$ 1,044,438,443</u>	<u>\$ 1,040,192,792</u>	<u>\$ (21,027,980)</u>	<u>\$ 4,245,651</u>

Standard and Poor's and Moody's Investor Services, both of which are widely recognized bond rating agencies, rated the Board's Water Revenue Bonds, Series 2016-A at AA and Aa2 respectively and rated the Board's Water Revenue Bonds Series 2016-B, and 2016-C at AA- and Aa3, respectively.

Debt service coverage on parity debt is required by the Board's bond indenture covenant to be maintained at a minimum of 1.25 times Revenue Available for Debt Service as defined in the bond indenture. Debt service coverage on parity debt was 1.92 in 2017.

**THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED (CONT'D)
December 31, 2017**

Investment Portfolio

Trusted fund balances at December 31, 2017 decreased by \$18.9 million from the end of 2016. This was mainly a result of the use of the revenue fund to fund capital projects.

Economic Factors

The Board continues working to strengthen the infrastructure and financial position of the water system to provide reliable, high quality water and services to its customers. Capital improvements driven by regulatory mandates continue to increase. In this environment, operating efficiencies are constantly sought to keep water rates as affordable as possible.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF NET POSITION
ENTERPRISE FUND
December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 17,370,299	\$ 19,770,749
Customer accounts receivable, net of allowance for doubtful accounts of \$1,421,761 and \$1,089,101 in 2017 and 2016, respectively	8,721,748	9,610,455
Unbilled water revenue	7,212,334	11,159,113
Other receivables	5,004,647	5,674,599
Materials and supplies	5,794,346	5,226,527
Prepaid expenses	<u>1,821,447</u>	<u>1,747,198</u>
Total current assets	45,924,821	53,188,641
Noncurrent assets:		
Net OPEB asset	4,754,284	4,388,243
Trusted fund assets:		
Cash and cash equivalents	42,204,160	68,602,772
Investments	145,530,363	137,534,466
Interest accrued on securities	<u>349,208</u>	<u>809,905</u>
Total trusted fund assets	<u>188,083,731</u>	<u>206,947,143</u>
Utility plant:		
Utility plant in service	1,200,511,020	1,192,399,179
Construction-in-progress	<u>61,823,796</u>	<u>39,706,675</u>
	1,262,334,816	1,232,105,854
Less accumulated depreciation	<u>(375,232,737)</u>	<u>(377,036,043)</u>
Net utility plant	887,102,079	855,069,811
Total noncurrent assets	<u>1,079,940,094</u>	<u>1,066,405,197</u>
Total assets	<u>1,125,864,915</u>	<u>1,119,593,838</u>
DEFERRED OUTFLOWS OF RESOURCES		
Deferred loss on refundings of debt	52,116,942	54,636,159
Deferred outflow related to pension	<u>10,162,910</u>	<u>12,417,011</u>
Total deferred outflows of resources	<u>62,279,852</u>	<u>67,053,170</u>
Total assets and deferred outflows of resources	<u>\$1,188,144,761</u>	<u>\$1,186,647,008</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF NET POSITION (CONT'D)
ENTERPRISE FUND
December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
LIABILITIES		
Current liabilities:		
Accounts payable, including contract retentions	\$ 14,600,732	\$ 14,563,497
General taxes payable	906,727	960,082
Accrued expenses	4,988,796	5,864,210
Current maturities of long-term obligations	<u>20,495,000</u>	<u>17,215,000</u>
	40,991,255	38,602,789
 Current liabilities payable from restricted assets:		
Interest accrued on long-term obligations	<u>20,731,027</u>	<u>15,663,916</u>
Total current liabilities	<u>61,722,282</u>	<u>54,266,705</u>
 Noncurrent liabilities:		
Long-term obligations, net of current maturities	1,002,915,463	1,027,223,442
Customer guarantee deposits	12,325,442	11,334,497
Customer advances for construction	451,639	817,693
Net pension liability	<u>38,522,257</u>	<u>47,842,010</u>
Total noncurrent liabilities	<u>1,054,214,801</u>	<u>1,087,217,642</u>
 Total liabilities	<u>1,115,937,083</u>	<u>1,141,484,347</u>
 DEFERRED INFLOWS OF RESOURCES		
Deferred inflow of resources related to pension	<u>8,256,657</u>	<u>579,663</u>
 NET POSITION		
Invested in capital assets, net of related debt	29,084,018	8,943,790
Restricted for debt service	167,352,702	164,695,404
Unrestricted	<u>(132,485,699)</u>	<u>(129,056,196)</u>
Total net position	<u>63,951,021</u>	<u>44,582,998</u>
Total liabilities, deferred inflows of resources and net position	<u>\$1,188,144,761</u>	<u>\$1,186,647,008</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF REVENUES, EXPENSES AND
CHANGES IN FUND NET POSITION
ENTERPRISE FUND
For the years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
OPERATING REVENUES		
Sale of water:		
Residential	\$ 91,054,330	\$ 89,228,959
Commercial	54,778,354	64,810,847
Industrial	1,398,981	1,408,355
Other water utilities	3,338,448	3,833,408
Municipal	4,887,003	2,264,821
Public and private fire protection	5,235,514	4,110,979
Raw water	<u>4,240,458</u>	<u>4,231,999</u>
Total sale of water	164,933,088	169,889,368
Rent from utility properties	374,190	359,843
Other operating revenue	<u>2,635,587</u>	<u>2,728,922</u>
Total operating revenues	167,942,865	172,978,133
OPERATING EXPENSES		
Source of supply	2,190,419	2,168,874
Power and pumping	11,772,189	11,555,755
Purification	11,305,916	12,471,801
Transmission and distribution	22,016,711	22,239,627
Customer accounting and collection	7,840,509	6,417,631
Administrative and general	28,318,559	36,446,413
License fees paid to the City of Birmingham	2,093,280	1,961,511
License fees paid to other municipalities	<u>2,380,429</u>	<u>2,254,811</u>
Total operating expenses, excluding depreciation	87,918,012	95,516,423
Depreciation	<u>27,992,890</u>	<u>23,026,421</u>
	<u>115,910,902</u>	<u>118,542,844</u>
Operating income	52,031,963	54,435,289
Nonoperating revenues (expenses):		
Other income, primarily interest	2,743,436	3,310,792
Interest expense	<u>(40,251,055)</u>	<u>(47,248,944)</u>
Total nonoperating expenses	<u>(37,507,619)</u>	<u>(43,938,152)</u>
Gain before contributions	14,524,344	10,497,137
Capital contributions	<u>4,843,679</u>	<u>5,660,841</u>
Change in net position	19,368,023	16,157,978
Net position at beginning of the year	<u>44,582,998</u>	<u>28,425,020</u>
Net position at end of the year	<u>\$ 63,951,021</u>	<u>\$ 44,582,998</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF CASH FLOWS
ENTERPRISE FUND
For the years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash received from potable water customers	\$ 165,675,740	\$ 159,526,002
Cash received from raw water customers	4,092,831	4,481,732
Cash received from rent of utility properties	374,190	359,843
Cash received from other operating revenues	4,527,924	7,941,574
Cash received for agency agreements	186,206,359	170,610,692
Cash payments for agency agreements	(185,912,306)	(169,902,280)
Payments to suppliers	(51,500,175)	(53,071,160)
Payments to employees	<u>(37,701,395)</u>	<u>(32,130,814)</u>
Net cash provided by operating activities	85,763,168	87,815,589
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Purchases of capital assets	(59,259,506)	(49,684,148)
Proceeds from asset disposition	(1,051,463)	(993,513)
Contributed capital for construction	4,843,679	5,660,841
Customer advances for construction	(366,055)	294,026
Proceeds from bond offering	-	521,859,262
Payment on long-term debt	(17,215,000)	(548,465,000)
Interest paid on debt	<u>(36,472,986)</u>	<u>(54,764,777)</u>
Net cash provided (used) in capital and related financing activities	(109,521,331)	(126,093,309)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchases of investment securities	(660,573,463)	(552,585,373)
Proceeds from sale and maturities of investment securities	678,976,179	600,556,056
Interest on investments	<u>2,954,997</u>	<u>3,224,312</u>
Net cash (used) provided by investing activities	<u>21,357,713</u>	<u>51,194,995</u>
Net (decrease) increase in cash and cash equivalents	(2,400,450)	12,917,275
Cash and cash equivalents at beginning of the year	<u>19,770,749</u>	<u>6,853,474</u>
Cash and cash equivalents at end of the year	<u>\$ 17,370,299</u>	<u>\$ 19,770,749</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF CASH FLOWS (CONT'D)
ENTERPRISE FUND
For the years ended December 31, 2017 and 2016

	2017	2016
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income	\$ 52,031,963	\$ 54,435,288
Adjustments to reconcile operating income to net cash provided by operating activities:		
Depreciation	27,992,890	23,026,422
Provision for (reduction in) bad debts	332,660	(82,528)
Miscellaneous nonoperating expenses	530,230	477,920
Changes in operating assets and liabilities:		
Customer accounts receivable	556,047	(1,895,760)
Unbilled water revenue	3,946,778	(3,903,344)
Other receivables	669,952	4,310,886
Materials and supplies	(567,818)	1,669,048
Prepaid expenses	(74,249)	434,231
Net pension liability and related deferred inflows and outflows	611,342	4,216,987
Net OPEB asset	(366,041)	43,156
Accounts payable, including contract retentions	37,237	3,476,848
General taxes payable	(53,354)	80,665
Accrued expenses	(875,414)	136,622
Customer guarantee deposits	990,945	1,389,148
Net cash provided by operating activities	\$ 85,763,168	\$ 87,815,589

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF PENSION NET POSITION - PENSION TRUST FUND
December 31, 2017 and 2016

	2017	2016
Assets:		
Cash and cash equivalents	\$ 2,434,937	\$ 6,118,420
Investments, at market	145,029,862	123,228,141
Accrued interest and dividends	195,314	204,245
Total assets	<u>\$ 147,660,113</u>	<u>\$ 129,550,806</u>
 Liabilities and net position:		
Net position held in trust for pension benefits	<u>\$ 147,660,113</u>	<u>\$ 129,550,806</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF CHANGES IN PENSION NET POSITION
PENSION TRUST FUND

For the years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Net position held in trust for pension benefits, beginning of the year	\$ 129,550,806	\$ 127,302,065
Additions:		
Employer contributions	5,688,889	5,082,832
Employee contributions	2,986,899	2,881,884
Investment income	3,611,396	2,674,786
Net realized gain (loss) on sale of assets	5,034,409	368,638
Changes in unrealized appreciation (depreciation)	<u>11,120,904</u>	<u>1,382,889</u>
Total additions (deductions), net	28,442,497	12,391,029
Deductions:		
Distributions to participants	9,695,978	9,381,209
Administrative expenses	<u>637,212</u>	<u>761,079</u>
Total deductions	<u>10,333,190</u>	<u>10,142,288</u>
Net increase (decrease)	<u>18,109,307</u>	<u>2,248,741</u>
Total net position held in trust for pension benefits, end of the year	<u>\$ 147,660,113</u>	<u>\$ 129,550,806</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF PLAN NET POSITION - OPEB TRUST FUND
December 31, 2017 and 2016

	2017	2016
Assets:		
Cash and cash equivalents	\$ 296,448	\$ 213,109
Investments, at market	30,423,032	26,596,614
Accrued interest and dividends	25,786	130,270
Total assets	\$ 30,745,266	\$ 26,939,993
 Liabilities and net position:		
Net position held in trust for pension benefits	\$ 30,745,266	\$ 26,939,993

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
STATEMENTS OF CHANGES IN PLAN NET POSITION - OPEB TRUST FUND
For the years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Net position held in trust for pension benefits, beginning of the year	\$ 26,939,994	\$ 25,181,083
Additions:		
Employer contributions	1,695,429	1,431,787
Employee contributions	-	-
Investment income	597,213	861,204
Net realized gain (loss) on sale of assets	255,089	3,051,389
Changes in unrealized appreciation (depreciation)	<u>3,044,517</u>	<u>(2,112,585)</u>
Total additions (deductions), net	5,592,248	3,231,795
Deductions:		
Benefits	2,154,593	2,385,769
Premiums	(531,992)	(1,021,451)
Administrative expenses	<u>164,375</u>	<u>108,567</u>
Total deductions	<u>1,786,976</u>	<u>1,472,885</u>
Net increase (decrease)	<u>3,805,272</u>	<u>1,758,910</u>
Total net position held in trust for pension benefits, end of the year	<u>\$ 30,745,266</u>	<u>\$ 26,939,993</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization

The Water Works Board of the City of Birmingham ("the Board") is a public corporation incorporated on November 21, 1950, pursuant to a resolution adopted by the governing board of the City of Birmingham (the City). In accordance with ACT No. 2016-276, signed by the Governor of Alabama on May 5, 2016, the Water Works Board was changed from five members to a nine-member board, effective January 1, 2017. Two members are appointed by the Mayor of the City of Birmingham; four members are appointed by the Birmingham City Council; and three members are appointed outside the City of Birmingham consisting of one member from the Shelby County Commission; one member from the Blount County Commission and one member from the Jefferson County Mayors' Association. The Board's directors are appointed by the Birmingham City Council. The Board operates and manages water filtration plants, a water distribution system, sewage treatment plants (until sold during 2008) and waste water collection systems (collectively referred to as the System) in Jefferson County, Alabama and portions of adjacent counties.

In evaluating the Board as a reporting entity, management has determined that the Board is financially accountable for the Retirement Plan for Employees of The Water Works Board of the City of Birmingham (the Pension Plan) and the Other Postemployment Benefits Plan of The Water Works Board of the City of Birmingham (the OPEB Plan) and, as such, has included the Plan as a Pension Trust Fund and the OPEB Plan as an OPEB Trust Fund within the Board's financial statements.

Basis of Presentation and Basis of Accounting

The accounting policies of the Board conform to generally accepted accounting principles (GAAP) as applicable to governmental units. This report, the accounting systems and classification of accounts conform to standards of the Governmental Accounting Standards Board (GASB) or, where applicable, the Financial Accounting Standards Board (FASB).

The Board has adopted GASB Statement No. 20, *Accounting and Financial Report for Proprietary Funds and Other Governmental Entities that use Proprietary Fund Accounting*.

On July 1, 2009, the Financial Accounting Standards Board (FASB) released the Accounting Standards Codification (ASC). The ASC became the single source of authoritative nongovernmental generally accepted accounting principles (GAAP) and is effective for periods ending after September 15, 2009. All existing accounting standards documents were superseded, and any other literature not included in the ASC is considered nonauthoritative. The adoption of the ASC did not have any impact on the Board's financial condition, results of operations and cash flows, as the ASC did not change existing GAAP. The adoption of the ASC changes the approach of referencing authoritative literature by topic rather than by type of standard. Accordingly, references to former FASB positions, statements, interpretations, opinions, bulletins or other pronouncements in the Board's notes to basic financial statements are now presented as references to the corresponding topic in the ASC.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

Net Position

Net position is classified and reported in three components: net investment in capital assets; restricted net position; and unrestricted net position. The classifications are defined as follows:

- **Net investment in capital assets** - This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction or improvement of those assets. If there are significant unspent related debt proceeds at year end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of invested in capital assets, net of related debt. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.
- **Restricted net position** - This component of net position includes assets subject to external constraints imposed by creditors (such as through debt covenants), grantors, contributors, laws or regulations of other governments, or constraints imposed by law through constitutional provisions or enabling legislation.
- **Unrestricted net position** - This component of net position consists of net assets that do not meet the definition of "restricted" or "invested in capital assets, net of related debt."

Sometimes the Board 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 Board's policy to consider restricted-net position to have been depleted before unrestricted-net position is applied.

Fund Accounting

The Board uses funds to report on its financial position and the results of its operations determined in conformity with accounting principles generally accepted in the United States. A fund is a separate accounting entity with a self-balancing set of accounts.

The funds presented in this report are as follows:

Proprietary Fund Type

Enterprise Fund - The fund is used to account for operations that are financed and operated in a manner similar to private business enterprises. A fund of this type is entitled Enterprise Fund in accordance with terminology set forth in accounting principles generally accepted in the United States.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

Fiduciary Fund Type

Pension Trust Fund - The fund is used to account for the Retirement Plan for Employees of the Board. A fund of this type is entitled Pension Trust Fund in accordance with terminology set forth in accounting principles generally accepted in the United States and is accounted for on the accrual basis of accounting. Employee contributions are recognized in the period in which the contributions are due. Board contributions are recognized when due. Benefits are recognized when due and payable in accordance with the terms of the Pension Plan. Investments are reported at fair value.

OPEB Trust Fund - The fund is used to account for the Other Postemployment Benefits Plan of the Board. A fund of this type is entitled an OPEB Trust Fund in accordance with terminology set forth in accounting principles generally accepted in the United States and is accounted for on the accrual basis of accounting. Employee contributions are recognized in the period in which the contributions are due. Board contributions are recognized when due. Benefits are recognized when due and payable in accordance with the terms of the OPEB Plan. Investments are reported at fair value.

Utility Plant and Depreciation

Utility plant is recorded at cost. Expenditures for maintenance, repairs and minor renewals are charged to operations as incurred. The cost of assets retired or otherwise disposed of and the related accumulated depreciation are removed from the accounts, and the gain or loss on such disposition is reflected in income. Depreciation is recorded on individual assets using the straight-line method over the estimated useful lives of the assets.

The useful lives for the principal utility plant asset classifications are as follows:

Structures and improvements	30 to 100 years
Transmission mains	100 years
Distribution mains	67 years
Purification and pumping equipment	25 to 50 years
Transportation equipment	5 to 10 years
Other equipment	3 to 50 years

Land rights have indefinite lives and are not depreciated.

Revenues and Expenses

Operating revenues and expenses consist of those revenues and expenses that result from the ongoing principal operations of the Board. Operating revenues consist primarily of charges for services. Nonoperating revenues and expenses consist of those revenues and expenses that are related to financing and investing activities and result from nonexchange transactions or ancillary activities.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

When an expense is incurred for purposes for which there are both restricted and unrestricted net assets available, it is the Board's policy to apply those expenses to restricted net assets to the extent such are available and then to unrestricted net assets.

Trusted Funds

Under the Series 2009-A, 2009-B, 2010-A, 2010-B, 2011 and 2012-A Water and Sewer Revenue Warrants indentures, the Series 2015-A, 2015-B, 2016-A, 2016-B, and 2016-C Water Revenue Bonds, and the Series 2013-A and 2013-B General Obligation Capital Improvement Warrants Indenture (see Note 5), as supplemented and amended, certain funds and bank accounts were required to be established and controlled by a trustee. The accounts of the trusted funds are maintained on the cash receipts and disbursements basis and are adjusted for financial statement purposes to reflect accrued receivables and payables and certain interfund transfers.

Among other uses, trusted funds are used to make debt service payments. Accordingly, trusted funds necessary to fund current debt service are classified as current assets on the accompanying statements of net position - enterprise fund. The trusted funds assets include investments that are uninsured and unregistered, with the securities held by the trustee, and not in the Board's name.

Investments

Investments, which consist of money market funds and U.S. government and agency securities, are stated at fair market value based on quoted market prices with all investment income, including changes in the fair value of investments, reported in the statements of revenues, expenses and changes in net position - enterprise fund. These securities are adjusted for impairments in value considered to be other than temporary.

Cash and Cash Equivalents

For purposes of the statements of cash flows - enterprise fund, the Board considers all highly liquid, nontrusted securities purchased with an original maturity of three months or less to be cash equivalents.

Customer Advances for Construction

Fees charged to tap into the System are recorded as liabilities until construction is complete, at which time the amounts are recognized as capital contributions in the statements of revenues, expenses and changes in net position - enterprise fund.

Materials and Supplies

Materials and supplies inventory is valued at the lower of cost (first-in, first-out basis) or market.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

Unbilled Water Revenue

Revenue for water delivered but not billed is estimated and accrued monthly.

License Fees

The Board is not subject to federal, state or local taxes; however, annual payments are made to the City and other local municipalities for business license fees.

Compensated Absences

Compensated absences are recorded when vested or earned by employees in accordance with GASB Statement No. 16, *Accounting for Compensated Absences*.

Deferred Outflows/Inflows of Resources

In addition to assets, the statements of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period and so will not be recognized as an outflow of resources (expenses) until then. The Board has two items that qualify for reporting in this category. They are the deferred charge on the refunding on debt and the deferred charge relating to pension activities.

In addition to liabilities, the statements of position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Board has only one type of item that qualifies for reporting in this category. It is the amount related to the Board's pension activities.

Long-Term Debt

Long-term debts are reported as liabilities on the statements of net position. Bond premiums and discounts, and losses on refunding are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are expensed during the current period.

Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value because of the immediate or short-term maturity of these financial instruments. The carrying amounts of long-term obligations approximate fair value because the stated interest rates on the indebtedness approximate current borrowing rates.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management of the Board to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results could differ from these estimates.

Budget

The Board prepares an internal operations budget for management purposes which is not subject to City or State of Alabama (State) approval.

Subsequent Events

Management has evaluated subsequent events and their potential effect on these financial statements through June 29, 2018, the audit report date.

Capital Contributions

Capital contributions are recorded for the receipt of capital grants, contributions of funds, property, lines and improvements by developers, customers or other governments. Availability fees in excess of related costs are also recorded as capital contributions.

Implementation of New Accounting Standards

As required by governmental accounting standards, the Board adopted and implemented GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pensions*, which replaces the requirements of Statements No. 43 and No. 57. The primary objective of GASB No. 74 is to improve accounting and financial reporting for state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB).

The Board also adopted and implemented GASB Statement No. 82, *Pension Issues an amendment of GASB Statements No. 67, No. 68, and No. 73*, which addresses certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68*.

Future Accounting Pronouncements

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other than Pension Plans (OPEB)*. GASB Statement No. 75 establishes standards for the measurement, recognition, and disclosure of OPEB expenses and related liabilities and is effective for the Board for the year ended December 31, 2018.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

Management has determined that the effect of GASB Statement No. 75, will result in a Net OPEB Asset of \$ 38,735 for the year ended December 31, 2018.

NOTE 2 - CASH AND CASH EQUIVALENTS

The Board of Directors approves all banks or other institutions as depositories for Board funds. The Board requires all funds on deposit to be collateralized by a pledge of unencumbered securities.

The carrying amount of cash bank balances at December 31, 2017 and 2016 totaled \$17,370,299 and \$19,770,749, respectively, and the bank balances were \$20,084,766 and \$22,201,869, respectively.

The Alabama State Legislature has enacted the Security of Alabama Funds Enhancement (SAFE) Program (Title 41, Chapter 14A, Code of Alabama 1975, as amended) that prescribes the way all Alabama public deposits are collateralized. Public deposits include the funds of any covered public entity or covered public official placed on deposit in a qualified depository, including time and demand deposit accounts and certificates of deposit but excluding bonds, notes, money market mutual funds, repurchase agreements and similar investment instruments.

Covered public entities include the state and its political subdivisions, including school boards. In the past, the bank pledged collateral directly to each public entity. Under SAFE, which is mandatory, each qualified public depository (QPD) is required to hold collateral for all of its public deposits on a pooled basis in a custody account (SAFE Custody Account) established by the State Treasurer as SAFE Administrator. In the unlikely event a public entity should suffer a deposit loss due to QPD insolvency or default; a claim form would be filed with the State Treasurer, pool collateral or other means to reimburse the loss. All deposits of the Board as of December 31, 2017 and 2016 are held in a qualified public depository.

NOTE 3 - INVESTMENTS

Assumptions

The Board's Bond Indenture limits trustee investments to "eligible investments." It is the Board's policy to invest public operating funds consistent with Section 11-81-21 of the Code of Alabama 1975 regarding the investment of public funds in obligations in which sinking funds may be invested. Eligible investments include i) U.S. treasury obligations, ii) certificates of deposit, iii) repurchase agreements, iv) bonds of the State of Alabama, v) obligations of U.S. federal agencies, vi) money market mutual funds, and vii) securities lending.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 3 - INVESTMENTS (CONT'D)

Disclosures

As of December 31, 2017, the Board had the following investments and maturities.

Investment Type	Market Value	Investment Maturities (in Years)			
		Less Than 1	1-5	6-10	More Than 10
Trusted Fund					
Securities:					
US Agency Notes	\$ 27,251,624	\$ 27,251,624	\$ -	\$ -	\$ -
BB&T Money Market	42,204,160	42,204,160	-	-	-
Fixed Income Corporate Issues - Guaranteed					
Investment Contracts	<u>118,278,739</u>	<u>50,000,000</u>	<u>55,630,326</u>	<u>-</u>	<u>12,648,413</u>
	<u>\$ 187,734,523</u>	<u>\$ 119,455,784</u>	<u>\$ 55,630,326</u>	<u>\$ -</u>	<u>\$ 12,648,413</u>

As of December 31, 2016, the Board had the following investments and maturities.

Investment Type	Market Value	Investment Maturities (in Years)			
		Less Than 1	1-5	6-10	More Than 10
Trusted Fund					
Securities:					
US Agency Notes	\$ 66,280,636	\$ 54,352,862	\$ 11,927,774	\$ -	\$ -
BB&T Money Market	68,602,772	68,602,772	-	-	-
Fixed Income Corporate Issues - Guaranteed					
Investment Contracts	<u>71,253,830</u>	<u>43,000,000</u>	<u>14,343,154</u>	<u>1,262,263</u>	<u>12,648,413</u>
	<u>\$ 206,137,238</u>	<u>\$ 165,955,634</u>	<u>\$ 26,270,928</u>	<u>\$ 1,262,263</u>	<u>\$ 12,648,413</u>

Interest Rate Risk. The Board does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. The guaranteed investment contracts contain a "full-flex" withdrawal provision allowing the Board to remove the funds at par for any purpose designated in the Trust Indenture. Should the credit rating of the contract provider be downgraded below Aa/AA level, the provider is required to collateralize at a level of 102 percent of the par value of the agreement. If the provider fails to collateralize in the event of a downgrade, the Board may remove funds in their entirety at par.

Credit Risk. The Board's Bond Indenture limits investments to Eligible Investments defined as: (i) Federal Obligations, (ii) Eligible Bank Obligations (fully collateralized by Federal Obligations), (iii) share or investment unit whose portfolio consists exclusively of "Eligible Investments" if purchased directly, (iv) to the extent permitted by applicable law either: (A)

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 3 - INVESTMENTS (CONT'D)

Repurchase agreement or collateralized investment agreement with long-term rating of at least A- by Standard & Poor's or A3 by Moody's Investor Services (Moody's), provided the obligations or securities subject to any such agreement shall be of the kind described in clauses (i), (ii) and (iii) of this definition and are fully collateralized or (B) any investment agreement issued or guaranteed by any financial institution with long-term rating of at least AA- by Standard & Poor's or AA3 by Moody's; and (v) any other investments at the time permitted by applicable law.

As of December 31, 2017, the Branch Banking & Trust Deposit RI's was rated AAA by Standard and Poor's and Aaa by Moody's. The Guaranteed Investment Contracts investments are unrated.

Custodial Credit Risk. For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Board will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Balances are held in securities that are allowed by the Indenture, which require no collateralization. The accounts are in the name of the trustee for the benefit of the holders.

If the securities pledged fail to produce adequate funds, every institution participating in the pool would share the liability for the remaining balance.

Fair Value Measurement

GASB Statement No. 72, *Fair Value Measurement and Application*, enhances comparability of governmental financial statements by requiring fair value measurement for certain assets and liabilities using a consistent definition and accepted valuation techniques. The standard establishes a hierarchy of inputs used to measure fair value that prioritizes the inputs into three categories—Level 1, Level 2, and Level 3 inputs—considering the relative reliability of the inputs. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 inputs are quoted (unadjusted) prices in active markets for identical financial assets or liabilities that are accessible at the measurement date.

Level 2 inputs are inputs other than quoted market prices included within level 1 that are observable for the financial assets or liability, either directly or indirectly; and

Level 3 inputs are unobservable inputs for the financial asset or liability.

The level in the fair value measurement falls is based on the lowest level that is significant to the fair value measurement in its entirety.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 3 - INVESTMENTS (CONT'D)

The following tables present the Board's financial assets carried at fair value by level within the valuation hierarchy as of December 31, 2017 and 2016:

	2017			
	Total	Level 1	Level 2	Level 3
Trusted Fund Securities:				
US Agency Notes	\$ 27,251,624	\$ 27,251,624	\$ -	\$ -
BB&T Money Market	42,204,160	42,204,160	-	-
Fixed Income Corporate Issues - Guaranteed Investment Contracts	<u>118,278,739</u>	<u>-</u>	<u>118,278,739</u>	<u>-</u>
	<u>\$ 187,734,523</u>	<u>\$ 69,455,784</u>	<u>\$ 118,278,739</u>	<u>\$ -</u>
	2016			
	Total	Level 1	Level 2	Level 3
Trusted Fund Securities:				
BB&T Money Market	\$ 66,280,636	\$ 66,280,636	\$ -	\$ -
US Agency Notes	68,602,772	68,602,772	-	-
Fixed Income Corporate Issues - Guaranteed Investment Contracts	<u>71,253,830</u>	<u>-</u>	<u>71,253,830</u>	<u>-</u>
	<u>\$ 206,137,238</u>	<u>\$ 134,883,408</u>	<u>\$ 71,253,830</u>	<u>\$ -</u>

NOTE 4 - UTILITY PLANT

Balances of major classes of utility plant assets and accumulated depreciation at December 31, 2017 and changes therein for the year then ended are as follows:

	Balance at December 31, 2016	Additions	Transfers	Deletions	Balance at December 31, 2017
Nondepreciable:					
Land and land rights	\$ 37,313,940	\$ 266,466	\$ 20,521	\$ -	\$ 37,600,927
Construction-in-progress	39,706,675	38,142,224	(16,025,103)	-	61,823,796
Depreciable:					
Structures and improvements	200,204,381	2,008,032	4,612,537	(105,090)	206,719,860
Equipment	<u>954,880,858</u>	<u>19,788,820</u>	<u>11,392,045</u>	<u>(29,871,490)</u>	<u>956,190,233</u>
Total utility plant in service	1,232,105,854	60,205,542	-	(29,976,580)	1,262,334,816
Less accumulated depreciation	<u>(377,036,043)</u>	<u>(27,992,892)</u>	<u>-</u>	<u>29,796,198</u>	<u>(375,232,737)</u>
Net utility plant	<u>\$ 855,069,811</u>	<u>\$ 32,212,650</u>	<u>\$ -</u>	<u>\$ (180,382)</u>	<u>\$ 887,102,079</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 4 - UTILITY PLANT (CONT'D)

Balances of major classes of utility plant assets and accumulated depreciation at December 31, 2016 and changes therein for the year then ended are as follows:

	Balance at December 31, 2015	Additions	Transfers	Deletions	Balance at December 31, 2016
Nondepreciable:					
Land and land rights	\$ 37,280,060	\$ 18,072	\$ 18,500	\$ (2,692)	\$ 37,313,940
Construction-in-progress	41,447,875	18,737,171	(19,871,545)	(606,826)	39,706,675
Depreciable:					
Structures and improvements	197,539,173	3,000,426	(335,218)	-	200,204,381
Equipment	906,154,598	29,355,693	20,188,263	(817,696)	954,880,858
Total utility plant in service	1,182,421,706	51,111,362	-	(1,427,214)	1,232,105,854
Less accumulated depreciation	(354,715,707)	(25,170,588)	-	2,850,252	(377,036,043)
Net utility plant	<u>\$ 827,705,999</u>	<u>\$ 25,940,774</u>	<u>\$ -</u>	<u>\$ 1,423,038</u>	<u>\$ 855,069,811</u>

NOTE 5 - LONG-TERM OBLIGATIONS

On October 4, 2016, the Board issued \$157,190,000 of Senior Water Revenue Refunding Bonds, Series 2016-A. The 2016-A Bonds were issued for the purposes of advance refunding of a portion of the Board's Series 2009-A Water Revenue Bonds, advance refunding of a portion of the Board's Series 2011, Water Revenue Bonds and paying the costs of issuing Series 2016-A Bonds. The Series 2016-A Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a premium of \$29,046,288. After issuance costs and underwriter discounts of \$1,042,503, \$8,112,252 was transferred to the Debt Service Fund and the remaining \$193,306,038 was deposited into the 2016-A Bonds Escrow Fund.

On October 4, 2016, the Board issued \$278,200,000 of Subordinate Water Revenue Refunding Bonds, Series 2016-B. The 2016-B Bonds were issued for the purposes of current refunding of a portion of the Board's Series 2007-A Water Revenue Bonds, advance refunding of a portion of the Board's Series 2009, Subordinate Water Revenue Bonds, financing certain capital improvements to the Board's water distribution system, and paying the costs of issuing Series 2016-B Bonds. The Series 2016-B Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a premium of \$55,766,348. After issuance costs and underwriter discounts of \$1,796,044, \$30,072,631 was transferred to the Debt Service Fund and the remaining \$337,517,541 was deposited into the 2016-B Bonds Escrow Fund and the remaining \$24,725,394 was deposited and available for capital improvements.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

On October 4, 2016, the Board issued \$34,110,000 of Subordinate Water Revenue Refunding Bonds, Series 2016-C. The 2016-C Bonds were issued for the purposes of advance refunding of a portion of the Board's Series 2009, Subordinate Water Revenue Bonds, financing certain capital improvements to the system, and paying the costs of issuing Series 2016-C Bonds. The Series 2016-C Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. After issuance costs and underwriter discounts of \$442,267, \$3,356,355 was transferred to the Debt Service Fund and the remaining \$34,642,895 was deposited into the 2016-C Bonds Escrow Fund and \$2,381,192 was deposited and available for capital improvements.

On March 30, 2015, the Board issued \$100,205,000 of Water Revenue Refunding Bonds, Series 2015-A. The 2015-A Bonds were issued for the purpose of, 1) advance refunding all of the Board's Water and Sewer Revenue Bonds, Series 2006-A, 2) advance refunding all of the Board's Water Revenue Bonds, Series 2008-A, 3) advance refunding a portion of the Board's Water Revenue Bonds, Series 2009-A, and 4) paying the costs of issuing the Series 2015-A Bonds. The Series 2015-A Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a premium of \$14,044,150. After issuance costs and underwriter discounts of \$900,824, \$1,402,725 was transferred to the Debt Service Fund and the remaining \$114,751,051 was deposited into the 2015-A Bonds Escrow Fund.

On March 30, 2015, the Board issued \$75,760,000 of Water Revenue Bonds, Series 2015-B. The 2015-B Bonds were issued for the purpose of 1) paying the costs of certain capital improvements to the water system including improvements for regulatory compliance, 2) funding the required deposit in the Debt Service Reserve Fund, and 3) paying the costs of issuing the Series 2015-B Bonds. The Series 2015-B Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a premium of \$8,258,957. After issuance costs and underwriter discounts of \$677,558, \$3,341,398 was transferred to the Debt Service Reserve Fund and the remaining \$80,000,000 was deposited and available for capital improvements.

On September 15, 2014, the Board issued Subordinate Water Revenue Bonds, Series 2014-DWSRF-DL. The bonds were issued in the aggregate principal amount of \$615,000 for the purpose of funding certain capital improvements to the System. The 2014 SRF Bonds are presently outstanding in the aggregate principal amount of \$615,000 and mature or are subject to mandatory redemption in the years 2016 through 2035.

On April 17, 2013, the Board issued \$23,335,000 of Water Revenue Refunding, Series 2013-A Bonds. The 2013-A Bonds were issued for the purpose of, 1) advance refunding a portion of Board's Series 2006-A Bonds, consisting of \$5,000,000 principal amount maturing January 1, 2040, and subject to mandatory redemption beginning in 2036, and \$14,760,000 principal amount maturing January 1, 2043, subject to mandatory redemption in 2041 and 2042, and 2)

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

paying a portion of the cost of issuing the 2013-A Bonds. The Series 2013-A Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a discount of \$781,818. After transfer of certain funds in the Debt Service Fund of \$247,000 and payment of issuance costs and underwriter discounts of \$238,597, \$22,561,585 was deposited into a 2013-A escrow fund.

On April 17, 2013, the Board issued \$70,785,000 of Water Revenue Bonds, Series 2013-B Bonds. The 2013-B Bonds were issued for the purpose of, 1) paying the costs of certain capital improvements to the water system including improvements for regulatory compliance, enhancements in safety, security, operational performance and capacity, and maintenance and replacement of system assets, 2) funding the required deposit to the Debt Service Reserve Fund, and 3) paying the costs of issuance. The Series 2013-A Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a premium of \$8,540,051. After transfer of certain funds in the Debt Service Fund of \$3,630,709 and payment of issuance costs and underwriter discounts of \$694,343, \$75,000,000 was deposited and available for capital improvements.

On February 1, 2013, the Board issued Subordinate Water Revenue Bonds, Series 2013-DWSRF-DL. The bonds were issued in the aggregate principal amount of \$5,780,000 for the purpose of funding certain capital improvements to the System. The 2013 SRF Bonds are presently outstanding in the aggregate principal amount of \$5,560,000 and mature or are subject to mandatory redemption in the years 2014 through 2033.

On March 15, 2012, the Board issued \$51,710,000 of Water Revenue Bonds. The 2012-A Bonds were issued for the purpose of advance refunding the Series 2004-A Bonds. The Series 2012-A Bonds are payable solely out of and secured by a pledge and assignment of the revenues attributable to the system. The bonds were issued at a premium of \$1,283,128. After issuance costs, underwriter discounts, and bond issuance premiums of \$1,804,427, \$52,807,932 was deposited into a 2004-A escrow fund.

On February 15, 2012, the Board issued Subordinate Water Revenue Bonds, Series 2012-DWSRF-DL. The bonds were issued in the aggregate principal amount of \$1,365,000 for the purpose of funding certain capital improvements to the System. The 2012 SRF Bonds are presently outstanding in the aggregate principal amount of \$1,205,000 and mature or are subject to mandatory redemption in the years 2014 through 2032.

On June 7, 2011, the Board issued \$133,565,000 of Water Revenue Bonds. The 2011 Bonds were issued for the purposes of financing the costs of certain capital improvements to the System and funding the Reserve Fund under the Trust Indenture, as amended, and paying the costs of issuance of the bonds. The Series 2011 Bonds are payable solely out of and secured by a pledge and assignment of, the revenues of the Board attributable to the System. The bonds were issued at a premium of \$1,127,806. After issuance costs, underwriter, discounts and bond issuance premiums of \$1,171,856, \$8,520,950 was deposited into the Debt Reserve Fund, the remaining \$125,000,000 was deposited into the Construction Fund.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

On February 25, 2011, the Board issued Subordinate Water Revenue Bonds, Series 2011-DWSRF-DL. The bonds were issued in the aggregate principal amount of \$2,045,000 for the purpose of funding certain capital improvements to the System. The 2011 SRF Bonds are presently outstanding in the aggregate principal amount of \$1,730,000 and mature or are subject to mandatory redemption in the years 2013 through 2031.

On November 4, 2010, the Board issued \$86,975,000 of Water Revenue Refunding Bonds. The 2010-A Bonds were issued for the purpose of refunding the Board's outstanding Series 1998-A Warrants that mature in 2021 and 2029. The Series 2010-A Bonds are payable solely out of, and secured by a pledge and assignment of, the revenues of the Board attributable to the System. The bonds were issued at a premium of \$5,677,960. After issuance costs, underwriter discounts and bond insurance premiums of \$722,868, \$93,529,555 was deposited into an escrow fund for the 1998-A Bonds maturing in years 2021 through 2029.

On November 4, 2010, the Board issued \$7,525,000 of Taxable Water Revenue Refunding Bonds. The 2010-B Bonds were issued for the purpose of refunding the Board's outstanding Series 2004-B Taxable Water and Sewer Revenue Bonds that mature from 2011 through 2017. The Series 2010-B Bonds are payable solely out of, and secured by a pledge and assignment of, the revenues of the Board attributable to the System. After issuance costs, underwriter discounts and bond insurance premiums of \$65,274, \$10,767,735 was deposited into an escrow fund for the 2004-B Bonds maturing in years 2011 through 2017.

On December 15, 2009, the Board issued \$73,890,000 of Subordinate Water Revenue Refunding Bonds. The Series 2009 Bonds were issued for the purposes of refunding the Board's outstanding Series 1998-A G.O., the 1998-B G.O. Warrants and the Series 2000-A G.O. Warrants, and paying the costs of issuance of the bonds. The Series 2009 Bonds are payable solely out of, and secured by a pledge and assignment of, the revenues of the Board attributable to the System. The bonds were issued at a discount of \$59,930. After issuance costs, underwriter discounts and bond insurance premiums of \$900,732, \$1,684,959 was deposited into the Debt Reserve Fund, and the remaining \$74,514,198, which included \$3,269,819 of the Board's debt service funds related to the refunded issues, was deposited into escrow funds for the Series 1998-A G.O., the 1998-B G.O. Warrants and the Series 2000-A G.O. Warrants.

On May 1, 2009, the Board issued \$108,305,000 of Water Revenue Bonds. The 2009-A Bonds were issued for the purposes of financing the costs of certain capital improvements to the System and funding the Reserve Fund under the Trust Indenture, as amended, and paying the costs of issuance of the bonds. The Series 2009-A Bonds are payable solely out of, and secured by a pledge and assignment of, the revenues of the Board attributable to the System. The bonds were issued at a premium of \$1,509,234. After issuance costs, underwriter discounts and bond insurance premiums of \$2,804,904, \$6,999,431 was deposited into the Debt Reserve Fund, and the remaining \$100,000,000 was deposited into the Construction Fund.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

On May 1, 2009, the Board issued \$46,760,000 of Water Revenue Refunding Bonds. The 2009-B Bonds were issued for the purposes of refunding the Board's outstanding Series 1998-A Warrants that mature in the years 2011 through 2019, and paying the costs of issuance of the bonds. The Series 2009-B Bonds are payable solely out of, and secured by a pledge and assignment of, the revenues of the Board attributable to the System. The bonds were issued at a premium of \$4,232,889. After issuance costs, underwriter discounts and bond insurance premiums of \$911,234, the remaining \$50,916,568, which included \$834,915 of the Board's debt service funds related to the refunded bonds, was deposited into an escrow fund for the 1998-A Bonds maturing in years 2011 through 2019.

On March 1, 2007, the Board issued \$326,305,000 of Subordinate Water and Sewer Revenue Bonds, Series 2007-A. The 2007-A Bonds were issued for the purposes of advance refunding of outstanding 2002-B Bonds, providing for the addition of a surety bond or insurance policy to the Reserve Fund under the Trust Indenture, as amended, and paying the costs of issuance of the bonds, as well as refunding the 2007-B Bonds that were issued in the amount of \$11,160,000 in February 2007 for the purpose of providing funds for the Board's capital improvement program. The Series 2007-A Bonds are payable solely out of, and secured by a pledge and assignment of, the revenues of the Board attributable to the System. The bonds were issued at a discount of \$3,708,928. After issuance costs, underwriter discounts and bond insurance premiums of \$4,556,588, the remaining \$306,899,284 was deposited into an escrow fund for the 2002-B Bonds, and \$11,160,000 was used to pay off the 2007-B Bonds.

The debt service reserve fund for the Subordinate Water and Sewer Revenue Bonds, Series 2007-A, was funded initially with a reserve fund surety bond (the Original Surety Bond) in the approximate amount of \$27,200,000 that was issued by Ambac Assurance Corporation (Ambac). Because of rating changes that have occurred with respect to Ambac during 2008, the Board was required, by the provisions of the Subordinate Indenture, to either (i) replace the Original Surety Bond, by no later than December 5, 2008, with a surety bond or insurance policy in the same amount issued by a AAA-rated municipal bond insurer or with a letter of credit issued by a AA-rated bank or (ii) make cash deposits to the reserve fund to replace the Original Surety Bond, with such installments to be made in installments on at least a monthly basis over the 12-month period that ends November 5, 2009. The Board satisfied that replenishment requirement by making cash deposits to the Reserve Fund. In March 2009, \$10,000,000 was deposited, and the balance was funded in October 2009 from operating reserves.

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THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

Long-term debt outstanding at December 31, is summarized as follows:

	2017	2016
Series 2009-A Water and Sewer Revenue Bonds, issued May 1, 2009, 3.00% to 5.25% interest, due annually through 2039	\$ 4,905,000	\$ 7,180,000
Series 2009-B Water Revenue Refunding Bonds, issued May 1, 2009, 5.00% interest only due annually through 2011, principal and interest due annually 2012 through 2019	13,610,000	19,920,000
Series 2010-A Water Revenue Refunding Bonds, issued November 4, 2010, 4.00% to 5.00% interest only due annually through 2019, principal and interest due annually 2020 through 2029	86,975,000	86,975,000
Series 2010-B Taxable Water Revenue Refunding Bonds, issued November 4, 2010, 1.574% to 3.463%, due annually through 2017	-	1,300,000
Series 2011 Water Revenue Refunding Bonds, issued June 7, 2011, 3.00% to 5.00%, due annually through 2041	11,860,000	14,515,000
Series 2011 Subordinate Water Revenue Bonds, issued February 25, 2011, 3.00% to 5.00%, due 2014 through 2031	1,555,000	1,645,000
Series 2012-A Water Revenue Refunding Bonds, issued March 15, 2012, 2.00% to 5.00%, due annually through 2034	50,360,000	50,680,000
Series 2012 Subordinate Water Revenue Bonds, issued February 15, 2012, 2.00% to 5.00%, due 2014 through 2032	1,095,000	1,150,000
Series 2013-A Water Revenue Refunding Bonds, issued April 17, 2014, 2.00% to 4.00%, due annually through 2043	23,055,000	23,150,000
Series 2013-B Water Revenue Bonds, issued April 17, 2014, 5.00%, due annually 2030 through 2034	70,785,000	70,785,000
Series 2013 Subordinate Water Revenue Bonds, issued February 1, 2013, 2.00% to 5.00%, due 2014 through 2033	4,865,000	5,105,000
Series 2014 Subordinate Water Revenue Bonds, issued September 25, 2014, 2.45%, due 2016 through 2035	565,000	590,000
Series 2015-A Water Revenue Refunding Bonds, issued April 14, 2015, 3.00% to 5.00%, due 2016 through 2042	99,290,000	99,755,000

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

	<u>2017</u>	<u>2016</u>
Series 2015-B Water Revenue Bonds, issued April 14, 2015, 3.00% to 5.00%, due 2016 through 2045	74,415,000	75,100,000
Series 2016-A Water Revenue Bonds, issued October 4, 2016, 4.00% to 5.00%, due 2020 through 2041	157,190,000	157,190,000
Series 2016-B Water Revenue Bonds, issued October 4, 2016, 4.00% to 5.00%, due 2023 through 2043	278,200,000	278,200,000
Series 2016-C Water Revenue Bonds, issued October 4, 2016, 1.03% to 2.39%, due 2017 through 2023	<u>31,410,000</u>	<u>34,110,000</u>
Total long-term debt	910,135,000	927,350,000
Unamortized premium	<u>113,275,463</u>	<u>117,088,442</u>
Long-term obligations	<u>1,023,410,463</u>	<u>1,044,438,442</u>
Less current portion	<u>(20,495,000)</u>	<u>(17,215,000)</u>
Long-term obligations - net	<u>\$ 1,002,915,463</u>	<u>\$ 1,027,223,442</u>

Activity during 2017 related to long-term debt principal obligations is as follows:

	<u>Balance at 12/31/16</u>	<u>Additions</u>	<u>Payments</u>	<u>Balance at 12/31/17</u>	<u>Due Within One Year</u>
Water Works Board Series 2009-A	\$ 7,180,000	\$ -	\$ (2,275,000)	\$ 4,905,000	\$ 2,390,000
Water Works Board Series 2009-B	19,920,000	-	(6,310,000)	13,610,000	6,635,000
Water Works Board Series 2010-A	86,975,000	-	-	86,975,000	-
Water Works Board Series 2010-B	1,300,000	-	(1,300,000)	-	-
Water Works Board Series 2011	14,515,000	-	(2,655,000)	11,860,000	2,785,000
Water Works Board Subordinate Series 2011	1,645,000	-	(90,000)	1,555,000	90,000
Water Works Board Series 2012-A	50,680,000	-	(320,000)	50,360,000	2,105,000
Water Works Board Subordinate Series 2012	1,150,000	-	(55,000)	1,095,000	60,000
Water Works Board Series 2013-A	23,150,000	-	(95,000)	23,055,000	75,000
Water Works Board Series 2013-B	70,785,000	-	-	70,785,000	-
Water Works Board Subordinate Series 2013	5,105,000	-	(240,000)	4,865,000	245,000
Water Works Board Subordinate Series 2014	590,000	-	(25,000)	565,000	25,000
Water Works Board Series 2015-A	99,755,000	-	(465,000)	99,290,000	480,000
Water Works Board Series 2015-B	75,100,000	-	(685,000)	74,415,000	300,000
Water Works Board Series 2016-A	157,190,000	-	-	157,190,000	-
Water Works Board Series 2016-B	278,200,000	-	-	278,200,000	-
Water Works Board Series 2016-C	<u>34,110,000</u>	<u>-</u>	<u>(2,700,000)</u>	<u>31,410,000</u>	<u>5,305,000</u>
	<u>\$ 927,350,000</u>	<u>\$ -</u>	<u>\$ (17,215,000)</u>	<u>\$ 910,135,000</u>	<u>\$ 20,495,000</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

Activity during 2016 related to long-term debt principal obligations is as follows:

	Balance at 12/31/15	Additions	Payments	Balance at 12/31/16	Due Within One Year
Water Works and Sewer Board Series 2007-A	\$ 313,375,000	\$ -	\$ (313,375,000)	\$ -	\$ -
Water Works Board Series 2009-A	69,380,000	-	(62,200,000)	7,180,000	2,275,000
Water Works Board Series 2009-B	25,925,000	-	(6,005,000)	19,920,000	6,310,000
Water Works Board Subordinate Series 2009	52,680,000	-	(52,680,000)	-	-
Water Works Board Series 2010-A	86,975,000	-	-	86,975,000	-
Water Works Board Series 2010-B	2,605,000	-	(1,305,000)	1,300,000	1,300,000
Water Works Board Series 2011	125,550,000	-	(111,035,000)	14,515,000	2,655,000
Water Works Board Subordinate Series 2011	1,730,000	-	(85,000)	1,645,000	90,000
Water Works Board Series 2012-A	50,945,000	-	(265,000)	50,680,000	320,000
Water Works Board Subordinate Series 2012	1,205,000	-	(55,000)	1,150,000	55,000
Water Works Board Series 2013-A	23,245,000	-	(95,000)	23,150,000	95,000
Water Works Board Series 2013-B	70,785,000	-	-	70,785,000	-
Water Works Board Subordinate Series 2013	5,335,000	-	(230,000)	5,105,000	240,000
Water Works Board Subordinate Series 2014	615,000	-	(25,000)	590,000	25,000
Water Works Board Series 2015-A	100,205,000	-	(450,000)	99,755,000	465,000
Water Works Board Series 2015-B	75,760,000	-	(660,000)	75,100,000	685,000
Water Works Board Series 2016-A	-	157,190,000	-	157,190,000	-
Water Works Board Series 2016-B	-	278,200,000	-	278,200,000	-
Water Works Board Series 2016-C	-	34,110,000	-	34,110,000	2,700,000
	<u>\$ 1,006,315,000</u>	<u>\$ 469,500,000</u>	<u>\$ (548,465,000)</u>	<u>\$ 927,350,000</u>	<u>\$ 17,215,000</u>

The aggregate maturities of long-term debt at December 31, 2017, are as follows:

Years ending December 31,	<u>Principal</u>	<u>Interest</u>
2018	\$ 20,495,000	\$ 41,161,532
2019	21,275,000	40,400,363
2020	21,805,000	39,576,979
2021	23,090,000	38,676,123
2022	23,765,000	37,706,417
2023-2027	127,850,000	171,138,570
2028-2032	158,380,000	139,143,885
2033-2037	211,575,000	95,626,038
2038-2042	240,750,000	42,573,768
2043-2045	<u>61,150,000</u>	<u>2,459,362</u>
	<u>\$ 910,135,000</u>	<u>\$ 648,463,037</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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December 31, 2017

NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

Bond Discount

The following is a schedule of original issue discount, reoffering premium and amortization per issue at December 31, 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Water Works Board Series 2009-B premium	\$ 193,109	\$ 428,049
Water Works Board Series 2010-A premium	2,981,743	3,388,719
Water Works Board Series 2012-A premium	806,490	894,575
Water Works Board Series 2013-A discount	(720,432)	(734,954)
Water Works Board Series 2013-B premium	7,688,652	7,866,645
Water Works Board Series 2015-A premium	13,163,199	13,548,028
Water Works Board Series 2015-B premium	7,836,756	8,020,856
Water Works Board Series 2016-A premium	27,692,712	28,605,236
Water Works Board Series 2016-B premium	<u>53,633,235</u>	<u>55,071,289</u>
Original issue discounts and premiums	<u>\$ 113,275,464</u>	<u>\$ 117,088,443</u>

Bond discounts and premiums totaling \$ 113,275,464 are being amortized over the terms of the respective bonds using the effective interest method. Unamortized discounts and premiums are netted against long-term debt in the accompanying statements of net position - enterprise fund.

The Series 2007-A Water and Sewer Revenue Bonds are subject to optional redemption on or after January 1, 2017 at a redemption price equal to 100%.

The Series 2009-A Water and Sewer Revenue Bonds are subject to optional redemption on or after January 1, 2019 at a redemption price equal to 100%.

The Series 2009-B Water Revenue Bonds are not subject to optional redemption.

The Series 2009 Subordinate Water Revenue Bonds are subject to optional redemption on or after January 1, 2019 at a redemption price equal to 100%.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
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NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

The Series 2010-A Water Revenue Bonds are subject to optional redemption on or after January 1, 2021 at a redemption price equal to 100%.

The Series 2010-B Water Revenue Bonds are not subject to optional redemption.

The Series 2011 Water Revenue Bonds are subject to optional redemption at any time on or after January 1, 2021, at a redemption price equal to 100%.

The Series 2012-A Water Revenue Bonds are subject to optional redemption on or after January 1, 2022 at a redemption price equal to 100%.

The Series 2013-A Water Revenue Bonds maturing in 2024 are subject to optional redemption on or after January 1, 2023 at a redemption price equal to 100%.

The Series 2013-B Water Revenue Bonds maturing in 2030 are subject to optional redemption on or after January 1, 2023 at a redemption price equal to 100%.

The Series 2015-A Water Revenue Refunding Bonds are priced to the optional redemption date of January 1, 2025 at 100%.

The Series 2015-B Water Revenue Bonds are priced to the optional redemption date of January 1, 2025 at 100%.

The Series 2016-A Water Revenue Bonds are priced to the optional redemption date of January 1, 2027 at 100%.

The Series 2016-B Water Revenue Bonds are priced to the optional redemption date of January 1, 2027 at 100%.

Bond Issue Costs

In accordance with GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*, bond issue costs, other than insurance cost, are expensed in the period incurred.

Bond Refundings

The Board issued the Series 2016-A Senior Water Revenue Refunding Bonds for the purpose of advance refunding a portion of the previously issued and outstanding Series 2009-A bonds in the amount of \$67,215,000, and advance refunding a portion of the previously issued and outstanding Series 2011 bonds in the amount of \$122,990,000. Neither the assets of the trust accounts nor this defeased indebtedness are included in the accompanying statements of net position – enterprise fund.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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December 31, 2017

NOTE 5 - LONG-TERM OBLIGATIONS (CONT'D)

The refunding in October 2016 resulted in an accounting loss of \$ 21,304,945 which has been capitalized in accordance with GASB Statement No. 65, and is being reported as a deferred outflow of resources and amortized using the effective interest method through 2041. The Board decreased its aggregate debt service by approximately \$38,799,874 and incurred an economic gain (the difference between the present values of the old debt service requirements and the new debt service requirements) of approximately \$22,749,369.

The Board issued the Series 2016-B and 2016-C Subordinate Water Revenue Refunding Bonds for the purpose of refunding all of the previously issued and outstanding Series 2007-A bonds in the amount of \$311,780,000, and advance refunding a portion of the previously issued and outstanding Series 2009 bonds in the amount of \$48,840,000. Neither the assets of the trust accounts nor this defeased indebtedness are included in the accompanying statements of net position – enterprise fund.

The refunding in October 2016 resulted in an accounting loss of \$ 7,595,515 which has been capitalized in accordance with GASB Statement No. 65, and is being reported as a deferred outflow of resources and amortized using the effective interest method through 2043. The Board decreased its aggregate debt service by approximately \$67,063,082 and incurred an economic gain (the difference between the present values of the old debt service requirements and the new debt service requirements) of approximately \$48,710,428.

When the board defeased the previously described indebtedness, it deposited funds in certain escrow accounts sufficient to provide for the subsequent payment of principle and interest on the defeased indebtedness. Under the trust agreements, all funds deposited in the trust accounts are invested in obligations of the U.S government. Neither the assets of the trust accounts nor this defeased indebtedness are included in the accompanying statements of net position enterprise fund. The principle outstanding on this defeased indebtedness at December 31, 2017, and 2016, was approximately \$529,130,000 and \$106,215,000 respectively.

NOTE 6 - TRUSTEED FUNDS - INVESTMENTS

Restricted assets are established to the extent required by bond resolutions for the Board's long-term debt (see Note 5) and Board action. Bond proceeds, water revenue and interest income are utilized to maintain the various funds at their required levels. Amounts not needed to fund requirements may be used for any lawful purpose. Components and descriptions of the various funds, exclusive of accrued interest, are as follows at December 31, 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Construction funds	\$ -	\$ 26,587,820
Debt service funds	52,529,569	35,082,321
Development, renewal and replacement funds	1,227,605	1,217,060
Revenue funds	98,387,162	109,416,636
Debt service reserve funds	35,590,187	33,833,401
Total	<u>\$ 187,734,523</u>	<u>\$ 206,137,238</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 6 - TRUSTEED FUNDS - INVESTMENTS (CONT'D)

Construction Funds - Construction funds account for unexpended debt proceeds and interest income thereon from the Revenue Bonds, Series 2009-A, Series 2011 and Series 2013-B.

Debt Service Funds - Debt service funds represent the principal and interest amounts for the next debt service payment due on all outstanding long-term debt.

Development, Renewal and Replacement Funds - Development, renewal and replacement funds are required for renewal and replacement of the water production, transmission and treatment facilities.

Revenue Funds - All system revenues are deposited in this fund. Monies in the Revenue Fund are applied for payment of all operating expenses. After operating expenses have been paid, remaining monies are to be used for payments into the Debt Service Fund, the Reserve Fund and the Improvement Fund, in the order named, and of such amounts required by the Trust Indenture.

Debt Service Reserve Funds - The debt service reserve funds are required to maintain one year's maximum debt service for the 2009-A, 2009-B, 2010-A, 2010-B, 2011, 2013, 2013-A, 2014, 2015-A, 2015-B, 2016-A, 2016-B and 2016-C. The reserve fund requirement may be satisfied, in whole or in part, with an insurance policy, surety bond or letter of credit.

Bond resolutions place certain limitations on investments permitted by the various funds.

NOTE 7 - ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses are summarized as follows at December 31, 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Accounts payable	\$ 10,936,861	\$ 11,039,338
Agency payables	3,249,766	3,315,181
Contract retentions	243,901	94,768
Payroll deduction payables	2,573,411	2,431,499
Accrued professional fees	103,163	117,026
Workers' compensation reserve	2,323,614	2,762,413
Other payables/accruals	<u>158,812</u>	<u>657,482</u>
	<u>\$ 19,589,528</u>	<u>\$ 20,417,707</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 8 - CHANGES IN AMOUNTS INVESTED IN CAPITAL ASSETS, NET OF RELATED DEBT

The changes in amounts invested in capital assets, net of related debt are summarized as follows for the years ended December 31, 2017 and 2016:

	<u>2017</u>	<u>2016</u>
Balance at beginning of the year	\$ 8,943,790	\$(107,177,851)
Change in capital assets	32,032,265	27,363,813
Change in related debt	<u>(11,892,037)</u>	<u>88,757,828</u>
Balance at end of the year	<u>\$ 29,084,018</u>	<u>\$ 8,943,790</u>

NOTE 9 - EMPLOYEE BENEFIT PLANS

General Information

The Board administers one contributory single-employer defined benefit retirement plan, the Retirement Plan for Employees of the Water Works Board of the City of Birmingham (the Plan), which covers all employees of the Board and the employees who were previously employed by the Industrial Water Works Board (IWWB). The following discussion summarizes key provisions of the Plan. The Plan document should be referred to for a more detailed description of terms and assumptions. The Plan issues annual audited financial statements which may be obtained by writing to the Board at 3600 First Avenue North, P.O. Box 830110, Birmingham, Alabama 35283.

The funding methods and determination of benefits payable were established by the legislative acts creating such plans and provide that the pension plan funds are to be funded from employee contributions, employer contributions, and income from the investment of accumulated funds. The cost of administering the plans is funded by the Board. The Board acts as the trustee for these plans. Separate financial statements are presented in this report for the pension funds.

Significant Accounting Policies

Basis of Accounting - The Plan's financial statements are prepared using the accrual basis of accounting.

Plan member contributions are recognized in the period in which the contributions are due. Employer contributions to each plan are recognized when due and payable in accordance with the terms of each plan.

Estimates - The preparation of financial statements prepared in conformity with generally accepted accounting principles requires the plan administrator to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results may differ from those estimates.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 9 - EMPLOYEE BENEFIT PLANS (CONT'D)

Deposits & Investments – Cash and cash equivalents include cash on hand, demand deposits, savings accounts, and short-term investments with maturities of three months or less at the time of purchase. The Plan's investments are stated at fair value. Quoted market prices are used to value investments. Investment transactions are recorded on the trade date. Realized gains and losses from sales of securities are determined using the average cost basis. In accordance with the provisions of the Plan to state investments at market value, net unrealized appreciation or depreciation for the year is reflected in the statement of changes in pension net position.

Plan Description

The Retirement Plan for Employees of the Water Works Board of the City of Birmingham (the Plan) is a single employer defined benefit pension plan formed by the Water Works Board of the City of Birmingham (the Board) to provide retirement benefits to eligible employees. The plan was established in 1951 and was funded under a group annuity contract issued by Metropolitan Life Insurance Company. In 1962, the Plan was amended and restated and all future benefits were funded through a trust fund. The Plan was amended and restated as of January 1, 1976, January 1, 1981, January 1, 1984, and January 1, 1989. Effective January 1, 2009, the Plan was further amended and restated to comply with any and all Federal laws and regulations applicable to the Plan.

Accumulated plan benefits are those future periodic payments, including lump-sum distributions that are attributable under the Plan's provisions to the service employees have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who have died, and (c) present employees or their beneficiaries. Benefits under the Plan are based on employees' compensation during their last ten years of credited service. The accumulated plan benefits for active employees are based on their average compensation during the five years ending on the date as of which the benefit information is presented (the valuation date). Benefits payable under all circumstances – retirement, death, disability, and termination of employment – are included, to the extent they are deemed attributable to employee service rendered to the valuation date. Benefits to be provided via annuity contracts excluded from Plan assets are excluded from accumulated plan benefits.

Benefits Provided

A participant retiring at his normal retirement date is entitled to a benefit, payable in monthly installments equal to one-twelfth of the participant's accrued retirement income, which is calculated as the result of (a) minus (b) minus (c) where:

- (a) equals 2% of the final average earnings (as defined by the Plan) determined as of the date of calculation multiplied by the number of years and monthly fractions of continuous service to the date of calculation, and

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 9 - EMPLOYEE BENEFIT PLANS (CONT'D)

- (b) equals the individual paid-up benefits, payable under the group annuity contract with Metropolitan Life Insurance Company prior to January 1, 1992, for active participants in the Plan as in effect on January 1, 1962, and
- (c) equals the accrued retirement income attributed to any prior period of service credited for an employee who has been re-employed by the Board after a break in service.

The Plan also provides adjusted benefits, in the case of early retirement, deferred retirement, death or disability of participant. Benefit provisions are established and may be amended by the Board.

Contributions

The contribution requirements of the plan members are established and may be amended by the Board. Plan members were required to contribute seven percent (7%) of their annual covered salary in 2017 and 2016. The Board is required to contribute at an actuarially determined rate. The Board made the decision to adopt a new funding policy for the fiscal year January 1, 2014 to December 31, 2014. The new funding policy is to contribute the employer's normal cost plus the unfunded actuarial accrued liability that is based on an effective amortization period, of approximately 16 years, determined based on a contribution schedule increasing 4% per year beginning with a contribution of \$4,500,000 for 2014. The Board funding policy for 2014 was to contribute the employer normal cost plus the unfunded actuarial accrued liability that is based on a 12-year level dollar amortization period. All contributions made during 2017 and 2016 were cash contributions. Administrative costs of the Plan are financed through investment earnings.

Membership Data

At December 31, 2017, the most recent measurement date of the net pension liability, membership data for the pension plan is as follows:

Retired participants and beneficiaries	305
Vested terminated participants	5
Active participants	<u>626</u>
	<u>936</u>

Plan Fiduciary Net Position

The Plan issues a stand-alone financial report, where detailed information about its fiduciary net position is available. See page 41 for the address where the report can be obtained.

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NOTE 9 - EMPLOYEE BENEFIT PLANS (CONT'D)

Net Pension Liability

The net pension liability (NPL) is the difference between the "Total Pension Liability" (TPL) and the plan's "fiduciary net position" (FNP). The total pension liability (TPL) is the present value of pension benefits that are allocated to current members due to past service by entry age normal actuarial cost method. The TPL includes benefits related to projected salary and service, and automatic cost of living adjustments (COLA's). In addition, ad hoc COLAs are also included in the TPL to the extent they are substantively automatic. The FNP is determined on the same basis used by the pension plan. The Board's net pension liability was measured as of December 31, 2017 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

<u>Net Pension Liability</u>	
Measurement Date	<u>12/31/17</u>
Total Pension Liability	\$ 186,182,370
Fiduciary Net Position	<u>147,660,114</u>
Net Pension Liability	<u>\$ 38,522,256</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	79.31%

Schedule of Changes in Net Pension Liability

The Changes in Net Pension Liability Plan for the fiscal year ended December 31, 2017, are as follows:

<u>Change in Net Pension Liability</u>	<u>Total Pension Liability</u>	<u>Plan Fiduciary Net Position</u>	<u>Net Pension Liability</u>
Service Cost	\$ 4,209,926	-	\$ 4,209,926
Interest on Total Pension Liability	12,940,862	-	12,940,862
Change in Benefit Terms	-	-	-
Difference Between Expected and Actual Experience	1,334,744	-	1,334,744
Employer Contribution	-	5,688,889	(5,688,889)
Employee Contributions	-	2,986,900	(2,986,900)
Pension Plan Net Investment Income	-	19,358,952	(19,358,952)
Assumption Changes	-	-	-
Benefit Payments, including Refunds	(9,695,978)	(9,695,978)	-
Administrative Expense	-	(229,456)	229,456
Net Change	<u>8,789,554</u>	<u>18,109,307</u>	<u>(9,319,753)</u>
Net Pension Liability Beginning	<u>177,392,816</u>	<u>129,550,806</u>	<u>47,842,010</u>
Net Pension Liability Ending	<u>\$ 186,182,370</u>	<u>147,660,113</u>	<u>\$ 38,522,257</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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December 31, 2017

NOTE 9 - EMPLOYEE BENEFIT PLANS (CONT'D)

Discount Rate

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rates (as a percentage of pay) and that employer contributions will be made in accordance with the current funding policy of paying contributions starting with \$4,500,000 for Fiscal 2014, increasing by 4% per year for future years, until the Plan is fully funded, after which point contributions will be reduced to the actuarially determined normal cost including expected administrative expenses. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. For the prior year, the discount rate was 7.50%.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

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

<u>Sensitivity</u>	<u>1% Decrease 6.50%</u>	<u>Current Discount Rate 7.50%</u>	<u>1% Increase 8.50%</u>
Plan's net pension liability	\$60,820,637	\$38,522,257	\$19,757,045

Pension Expense and Schedule of Deferred Outflows and Inflow of Resources

For the fiscal year ended December 31, 2017, the Board recognized pension expense of \$6,195,998. Deferred outflows of resources and deferred inflows of resources reported by the Board at December 31, 2017, are as follows:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflow of Resources</u>
Differences between expected and actual experience	\$ 1,186,440	\$ 496,441
Changes of assumptions	1,650,595	-
Net difference between projected and actual	-	434,341
Total	<u>\$ 2,837,035</u>	<u>\$ 930,782</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 9 - EMPLOYEE BENEFIT PLANS (CONT'D)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at December 31, 2017 will be recognized in pension expense as follows:

<u>Years ended December 31,</u>	<u>Retirement Plan</u>
2018	\$1,565,570
2019	\$1,565,570
2020	(\$439,821)
2021	(\$1,544,852)
2022	\$395,202
Thereafter	\$364,584

Assumptions and Other Data

<u>Schedule of Assumptions</u>	<u>Retirement Plan</u>
Valuation Date	January 1, 2018
Actuarial Cost Method	Entry Age Normal
Amortization Method	Effective amortization based on contribution schedule
Amortization Period	13.4 Years remaining as of January 1, 2017
Asset Valuation Method	5 Year Smooth
Investment Rate of Return	7.50%
Inflation	3.25%
Salary increases	3.25% - 13.25%, based on years of service
Mortality Rates	<p>Mortality rates for active and terminated vested participants were based on the sex-distinct RP-2014 Employee Mortality Table, projected generationally with Scale MP2015 from 2014.</p> <p>Mortality rates for healthy annuitants were based on the sex-distinct RP-2014 Healthy Annuitant Mortality Table with rates multiplied by 1.25, projected generationally with Scale MP2015 from 2014.</p> <p>Mortality rates for disabled annuitants were based on the sex-distinct RP-2014 Disabled Retiree Mortality Table with rates multiplied by 1.25, projected generationally with Scale MP2015 from 2014.</p>

The actuarial assumptions used in the December 31, 2017 measurements were based on the results of an experience study for the period January 1, 2009 to December 31, 2013.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
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NOTE 9 - EMPLOYEE BENEFIT PLANS (CONT'D)

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

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-term Expected Real Rate of Return</u>
Domestic Equity	55%	6.4%
Core Fixed Income	33%	1.8%
Alternatives	10%	10.7%
Cash Equivalents	<u>2%</u>	1.1%
Total	<u>100%</u>	

NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS PLAN

Plan Description

The Board sponsors a single-employer other postemployment benefit plan (OPEB). The OPEB provides for medical and dental insurance coverage to eligible retirees and their dependents as indicated below:

Eligibility: Participants who are retired and receiving a pension under The Water Works Board of the City of Birmingham Pension Plan or disabled with at least two years of service are eligible for coverage under the OPEB. Benefits are generally available at the earliest of the following:

- a. 30 years of service
- b. The later of age 52 and 20 years of service
- c. The later of age 54 and 10 years of service

Benefit Types: Life, medical and prescription drug benefits are provided to all eligible retirees. Dental and vision benefits are provided only to under age 65 retirees. Dependents of eligible retirees are granted the same benefits as the retiree, with the exception of life insurance coverage, which is not available to dependents.

Duration of Coverage: Coverage is available for eligible participants from the date of retirement until death. When the participant reaches age 65, health benefits will change to Medicare, with the OPEB covering premiums for Medicare Supplemental insurance. Retirees with less than 25 years of service as of January 1, 2008 are not eligible for Post-65 coverage unless they were already retired or over age 65 as of January 1, 2008.

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NOTE 10 - OTHER POSTEMPLOYMENT BENEFIT PLANS (CONT'D)

Dependent Coverage: Benefits are payable to a spouse of an eligible retiree for the spouse's lifetime, regardless of when the retiree dies. When the dependent reaches age 65, health benefits will change to Medicare, with the OPEB covering premiums for Medicare Supplemental insurance. Spouses of retirees with less than 25 years of service as of January 1, 2008 are not eligible for Post-65 coverage unless they were already retired or over age 65 as of January 1, 2008.

At December 31, 2017, the most recent actuarial valuation date, the OPEB had 240 retired participants and beneficiaries receiving benefits. The OPEB had a total of 626 active participants.

In June 2004, the GASB issued Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits (OPEB) other than Pensions*. GASB Statement No. 45 establishes standards for the measurement, recognition and disclosure of OPEB expenses and related liabilities and is effective for the Board for the year ended December 31, 2008. Under this statement, all state and local governmental entities that provide other postemployment benefits (OPEB) are required to report the cost of these benefits on their financial statements. The Board implemented GASB Statement No. 45 prospectively.

The statement covers postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are not offered as part of a pension plan; and long-term disability insurance for employees. These benefits, referred to as OPEB, are typically financed on a pay-as-you-go basis. The new standard introduces an accrual-basis accounting requirement; thereby recognizing the employer cost of postemployment benefits over an employee's career. The standard also introduces a consistent accounting requirement for both pension and nonpension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends and other actuarial assumptions. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the ARC is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made, and any difference is reported as the net OPEB obligation (NOO). In addition, required supplementary information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan.

Funding Policy - The Board made an initial funding of the OPEB trust of \$4,000,000 in 2009. In addition, the Board funded the actuarial required contribution (ARC) to the OPEB in 2011. It is the intention of the Board to fund the ARC on an annual basis as it is determined. Currently, retirees and employees are not required to contribute to the OPEB.

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NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS PLAN (CONT'D)

Annual OPEB Cost and Net OPEB Obligation

The Board's OPEB cost is calculated based on the ARC calculated using the projected unit credit method, an allowable cost method under GASB Statement No. 45. The ARC is the basic annual expense recognized under GASB Statement No. 45 that is projected to cover normal cost each year and to amortize any unfunded actuarial liabilities over a period not to exceed 30 years, which is the amortization period used by the Plan. The following table shows the components of the Board's OPEB cost for the years ended December 31, 2017 and 2016, the amount actually contributed to the Plan and the changes in the Board's net OPEB obligation to the Plan:

	<u>2017</u>	<u>2016</u>
Annual required contribution	\$ 1,281,813	\$ 1,442,113
Interest on net OPEB obligation	(329,118)	(332,355)
Adjustment to annual required contribution	<u>376,693</u>	<u>365,185</u>
Annual OPEB cost	1,329,388	1,474,943
Contributions made	<u>(1,695,429)</u>	<u>(1,431,787)</u>
Change in net OPEB obligation	(366,041)	43,156
Net OPEB obligation, beginning of the year	<u>(4,388,243)</u>	<u>(4,431,399)</u>
Net OPEB (asset) obligation, end of the year	<u>\$ (4,754,284)</u>	<u>\$ (4,388,243)</u>

The Board's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan and the net OPEB obligation for fiscal years 2017 and 2016 were as follows:

<u>Year Ended</u>	<u>Annual OPEB Cost</u>	<u>Actual Employer Contribution</u>	<u>Percentage Contributed</u>	<u>Net Ending OPEB (Asset) Obligation</u>
12/31/2017	\$ 1,329,388	\$ 1,695,429	127.53%	\$ (4,754,284)
12/31/2016	\$ 1,474,943	\$ 1,431,787	97.1%	\$ (4,388,243)
12/31/2015	\$ 2,008,143	\$ 1,949,329	97.1%	\$ (4,431,399)
12/31/2014	\$ 1,984,421	\$ 1,978,720	99.7%	\$ (4,490,213)
12/31/2013	\$ 3,615,481	\$ 897,502	24.82%	\$ (4,495,914)
12/31/2012	\$ 3,665,474	\$ 4,871,996	132.9%	\$ (7,213,893)

Funded Status and Funding Progress

As of December 31, 2017, the most recent actuarial valuation date, the OPEB was 106% funded. The actuarial accrued liability was 28,882,836, and the actuarial value of assets was \$30,745,266, resulting in an unfunded actuarial accrued funding surplus of \$1,862,430. Covered payroll was approximately \$43.1 million, resulting in unfunded actuarial accrued funding surplus as a percentage of covered payroll of 4.32%.

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NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS PLAN (CONT'D)

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the OPEB and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of pension funding progress and employer contributions, presented as required supplementary information following the notes to the basic financial statements, presents multiyear trend information about whether the actuarial value of OPEB assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying Schedules of OPEB Funding Progress Employer Contributions, Net OPEB Obligation, and Employer Contributions present trend information about the amounts contributed to the OPEB by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years.

Actuarial Methods and Assumptions

The information presented above was determined as part of the actuarial valuation at the date indicated. Projections of benefits for financial reporting purposes are based on the substantive plan (the OPEB as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. Additional information as of the latest actuarial valuation follows:

Valuation Date	January 1, 2018
Actuarial Cost Method	Unit Credit
Asset Valuation Method	Market Value
Amortization Method	Closed, 25-year level percent of payroll
Mortality	Healthy Pre-Retirement - RP-2014 Employee Mortality Table. Healthy Post-Retirement - RP-2014 Healthy Annuitant Mortality Table. Disabled - RP-2014 Disabled Retiree Mortality Table
Discount Rate/Investment Return	7.50% per annum
Projected Salary Increases	3.00% - 11.00%, based on years of service
Inflation Rate	2.75% per annum

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NOTE 10 - OTHER POSTEMPLOYMENT BENEFITS PLAN (CONT'D)

Health Care Cost Rates	Under 65 combined Medical and Vision cost trend rate for - 6.00% graded to 4.50% over 6 years
	Over 65 combined Medical and Vision cost trend rate - 7.00% graded to 4.50% over 10 years
	Drug cost trend rate - 10.00% graded to 4.50% over 11 years
	Dental cost trend rate - 4.00%

NOTE 11 - DEFERRED COMPENSATION PLAN

The Board offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan is available to all employees and permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death or unforeseeable emergency.

All amounts of compensation deferred under the plan, all property and rights purchased with those amounts and all income attributable to those amounts, property or rights (until paid or made available to the employee or other beneficiary) are solely the property and rights of the participating employees. In accordance with GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*, the deferred compensation assets and liabilities are not recorded in the accompanying statements of net position - enterprise fund.

NOTE 12 - COMMITMENTS AND CONTINGENCIES

Litigation - The Board is a party to various lawsuits and claims arising in the normal course of System business. While the results of litigation cannot be predicted with certainty, management believes that the outcome of such litigation will not have a material adverse effect on the Board's financial position or results of operations.

Self-Insurance. The Board is self-insured for workers' compensation claims up to \$500,000 per occurrence in a 12-month liability period. Claims in excess of \$500,000 are covered by an excess insurance policy. Provision is made in the financial statements for estimates of both reported claims and claims incurred but not reported.

The Board is self-insured for active and retired employees' health care coverage up to \$150,000 per covered employee during a calendar year. Claims in excess of \$150,000 are covered by an excess health policy. Provision is made in the financial statements for estimates of both reported claims and claims incurred but not reported.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 12 - COMMITMENTS AND CONTINGENCIES (CONT'D)

Both of these estimates are actuarially determined using details of historical activity provided by the Board's claims administrators. The following is a reconciliation of changes in the aggregate liabilities for self-insured workers' compensation and health care coverage claims for the years ended December 31, 2017 and 2016. The end of year accrual is included in accrued expenses in the accompanying statements of net position - enterprise fund.

	2017	2016
Beginning of the year accrual	\$ 2,904,697	\$ 2,469,900
Claims expense	4,338,367	12,123,047
Claims paid	(4,919,450)	(11,688,250)
End of the year accrual	\$ 2,323,614	\$ 2,904,697

At December 31, 2017, commitments for capital expenditures totaled approximately \$2.96 million.

NOTE 13 - AGENCY AGREEMENTS

The Board, in an agreement with Jefferson County, Alabama (the County) and as provided by State of Alabama law, collects service charges for use of the County sewer disposal system from the Board's water customers as a separate item on the Board's water bills. The Board remits weekly to the County all sewer service charges collected, and it bills the County for the cost of collecting such charges which, under the agreement with the County, includes a portion of the Board's general overhead expense. Sewer service charges have been collected for the County by the Board since 1962. The Board has similar agreements with the City of Hoover (Hoover), South West Water and Alabama Utilities. The liability for unremitted collections under these agency agreements is included in accounts payable in the accompanying statements of net position - enterprise fund. The amounts charged under these agency agreements are reflected as reductions in operating expenses in the accompanying statements of revenues, expenses and changes in net position - enterprise fund.

The Board also bills its customers a State of Alabama utility tax based on a percentage of revenues. The funds collected are remitted to the State monthly. The liability for unremitted collections to the State is included in general taxes payable in the accompanying statements of net position - enterprise fund.

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 13 - AGENCY AGREEMENTS (CONT'D)

Following is a summary of amounts received and disbursed and costs of collecting charges billed under the agency agreements described above for the year ended December 31, 2017:

	<u>Sewer Charges</u>	<u>State of Alabama Utility Taxes</u>
Amounts received:		
Jefferson County	\$ 166,737,979	
City of Hoover	3,825,030	
SouthWest Water	7,448,719	
GUSC Moody	1,331,322	
Phoenix	328,423	
State of Alabama - utility taxes		\$ 6,147,231
Total amounts received	<u>179,671,473</u>	<u>6,147,231</u>
Amounts disbursed:		
Jefferson County	166,754,905	
City of Hoover	3,849,482	
SouthWest Water	7,464,334	
GUSC Moody	1,334,855	
Phoenix	333,312	
State of Alabama - utility taxes		6,175,418
Total amounts disbursed	<u>179,736,888</u>	<u>6,175,418</u>
Receipts less disbursements	(65,415)	(28,187)
Balance at beginning of the year	<u>3,315,181</u>	<u>390,328</u>
Balance at end of the year	<u>\$ 3,249,766</u>	<u>\$ 362,141</u>
Cost of collecting charges billed:		
Jefferson County	<u>\$ 4,556,696</u>	
City of Hoover	<u>\$ 199,678</u>	
SouthWest Water	<u>\$ 304,105</u>	
Alabama Utilities/Moody	<u>\$ 55,651</u>	
Phoenix	<u>\$ 13,186</u>	

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
NOTES TO THE FINANCIAL STATEMENTS
December 31, 2017

NOTE 13 - AGENCY AGREEMENTS (CONT'D)

Following is a summary of amounts received and disbursed and costs of collecting charges billed under the agency agreements described above for the year ended December 31, 2016:

	<u>Sewer Charges</u>	<u>State of Alabama Utility Taxes</u>
Amounts received:		
Jefferson County	\$ 153,034,464	
City of Hoover	3,318,405	
SouthWest Water	6,501,409	
GUSC Moody	1,404,785	
Phoenix	268,968	
State of Alabama - utility taxes		\$ 6,584,317
Total amounts received	<u>164,528,031</u>	<u>6,584,317</u>
Amounts disbursed:		
Jefferson County	151,657,364	
City of Hoover	3,477,968	
SouthWest Water	6,512,194	
GUSC Moody	1,419,844	
Phoenix	269,052	
State of Alabama - utility taxes		6,565,857
Total amounts disbursed	<u>163,336,422</u>	<u>6,565,857</u>
Receipts less disbursements	1,191,609	18,460
Balance at beginning of the year	<u>2,123,572</u>	<u>371,868</u>
Balance at end of the year	<u>\$ 3,315,181</u>	<u>\$ 390,328</u>
Cost of collecting charges billed:		
Jefferson County	<u>\$ 4,325,417</u>	
City of Hoover	<u>\$ 173,309</u>	
SouthWest Water	<u>\$ 294,426</u>	
Alabama Utilities	<u>\$ 57,135</u>	
Phoenix	<u>\$ 8,974</u>	

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY
AND RELATED RATIOS
Last 4 Fiscal Years

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total Pension Liability				
Service cost	\$ 4,209,926	\$ 4,020,819	\$ 4,031,007	\$ 3,923,555
Interest on total pension liability	12,940,862	12,467,773	11,758,667	11,172,426
Change in benefit terms	-	-	-	-
Difference between expected and actual experience	1,334,744	(642,645)	(23,124)	995,470
Assumption changes	-	-	2,640,952	-
Benefit payments, including refunds	<u>(9,695,978)</u>	<u>(9,380,217)</u>	<u>(8,525,285)</u>	<u>(8,024,529)</u>
Net change in total pension liability	8,789,554	6,465,730	9,882,217	8,066,922
Total pension liability- beginning	177,392,816	170,927,086	161,044,869	152,977,947
Total pension liability- ending (a)	<u>\$ 186,182,370</u>	<u>\$ 177,392,816</u>	<u>\$ 170,927,086</u>	<u>\$ 161,044,869</u>
Plan Fiduciary Net Position				
Employer contributions	5,688,889	5,082,832	4,709,350	7,246,003
Employee contributions	2,986,900	2,881,884	2,740,313	2,798,057
Pension plan net investment income	19,358,952	3,948,011	(396,188)	9,136,639
Benefit payments, including refunds	(9,695,978)	(9,380,217)	(8,525,285)	(8,024,529)
Administrative expense	<u>(229,456)</u>	<u>(283,769)</u>	<u>(348,393)</u>	<u>(337,198)</u>
Net change in plan fiduciary net position	18,109,307	2,248,741	(1,820,203)	10,818,972
Plan fiduciary net position - beginning	<u>129,550,806</u>	<u>127,302,065</u>	<u>129,122,268</u>	<u>118,303,296</u>
Plan fiduciary net position - end (b)	<u>\$ 147,660,113</u>	<u>\$ 129,550,806</u>	<u>\$ 127,302,065</u>	<u>\$ 129,122,268</u>
Board's net pension liability - ending (a)-(b)	<u>\$ 38,522,257</u>	<u>\$ 47,842,010</u>	<u>\$ 43,625,021</u>	<u>\$ 31,922,601</u>
Plan fiduciary net position as a percentage of the total pension liability	79.31%	73.03%	74.48%	80.18%
Covered employee payroll	\$ 40,567,065	\$ 38,854,522	\$ 37,771,701	\$ 36,473,189
Net position liability as a percentage of covered employee payroll	94.96%	123.13%	115.50%	87.52%

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF EMPLOYER CONTRIBUTIONS
Last 4 Fiscal Years

Year Ended December 31	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll	Contributions as a Percentage of Covered Employee Payroll
2017	\$ 5,061,888	\$ 5,688,889	\$ (627,001)	\$ 40,567,065	14.02%
2016	\$ 4,867,200	\$ 5,082,832	\$ (215,632)	\$ 38,854,522	13.08%
2015	\$ 4,680,000	\$ 4,709,350	\$ (29,350)	\$ 37,771,701	12.47%
2014	\$ 4,500,000	\$ 7,246,003	\$ (2,746,003)	\$ 36,473,189	19.87%

Notes to Schedule

Validation date	Actuarial determined contribution rate is calculated using a January 1st valuation date as of the beginning of the fiscal year in which contributions are reported.
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Effective amortization period determined based on contribution schedule increasing 4% per year beginning with contribution of \$4,500,000 for 2014.
Remaining amortization period	14.0 years remaining as of January 1, 2016
Asset valuation method	Market value of assets less unrecognized returns beginning with the January 1, 2009 valuation. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.
Investment rate of return	7.50% The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each portfolio's asset classes, as well as the Plan's target allocation.
Inflation rate	3.25%
Projected salary increases	3.25% - 13.25%, based on years of service
Cost of living adjustments	N/A

**THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULES OF OPEB FUNDING PROGRESS AND NET OPEB OBLIGATION**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AAL) - Projected Unit Credit (b)	Unfunded/AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (millions) (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
1/1/2018	\$ 30,745,266	\$ 28,882,836	\$ (1,862,430)	106.45%	\$ 43,106,349	N/A
1/1/2017	\$ 26,939,994	\$ 32,640,156	\$ 5,700,162	82.5%	\$ 40,567,065	14.05%
1/1/2016	\$ 25,181,083	\$ 32,627,191	\$ 7,446,108	77.2%	\$ 36,824,712	20.22%
1/1/2015	\$ 25,289,600	\$ 37,349,879	\$ 12,060,279	67.7%	\$ 37,771,701	31.93%
1/1/2014	\$ 23,647,205	\$ 36,123,818	\$ 12,476,613	65.5%	\$ 36,473,189	34.21%
1/1/2013	\$ 20,055,130	\$ 47,632,657	\$ 27,577,527	42.1%	\$ 36,969,463	74.60%
1/1/2012	\$ 15,049,878	\$ 44,693,825	\$ 29,643,947	33.7%	\$ 37,403,410	79.25%
12/31/2010	\$ 11,875,713	\$ 43,539,055	\$ 31,663,342	27.28%	\$ 36,225,354	87.41%
12/31/2009	\$ 7,426,358	\$ 41,189,353	\$ 33,762,995	18.03%	\$ 34,135,746	98.91%
12/31/2008		\$ 41,127,249	\$ 41,127,249	0%	\$ 33,069,690	124.37%

NET OPEB OBLIGATION (NOO)

Actuarial Valuation Date	Fiscal Year End	Annual Required Contribution (ARC) (a)	Interest on Existing NOO (b)	ARC Adjustment (c)	Annual OPEB Cost (a)+(b)+(c) (d)	Annual Contribution Amount (e)	Net Increase (Decrease) in NOO (d)-(e) (f)	NOO as of Valuation Date (g)
01/01/2017	12/31/2017	\$ 1,281,813	\$ (329,118)	\$ 376,693	\$ 1,329,388	\$ 1,695,429	\$ (366,041)	\$ (4,754,284)
01/01/2016	12/31/2016	\$ 1,442,113	\$ (332,355)	\$ 365,185	\$ 1,474,943	\$ 1,431,787	\$ 43,156	\$ (4,388,243)
01/01/2015	12/31/2015	\$ 2,001,009	\$ (336,766)	\$ 343,900	\$ 2,008,143	\$ 1,949,329	\$ 58,814	\$ (4,431,399)
01/01/2014	12/31/2014	\$ 1,989,582	\$ (337,194)	\$ 332,033	\$ 1,984,421	\$ 1,978,720	\$ 5,701	\$ (4,490,213)
01/01/2013	12/31/2013	\$ 3,641,437	\$ (541,042)	\$ 515,086	\$ 3,615,481	\$ 897,502	\$ 2,717,979	\$ (4,495,914)
01/01/2012	12/31/2012	\$ 3,700,336	\$ (450,553)	\$ 415,691	\$ 3,665,474	\$ 4,871,996	\$ (1,206,522)	\$ (7,213,893)
12/31/2010	12/31/2011	\$ 3,573,518	\$ (366,876)	\$ 328,737	\$ 3,535,379	\$ 4,651,072	\$ (1,115,693)	\$ (6,007,371)
12/31/2009	12/31/2010	\$ 3,633,377	\$ (245,795)	\$ 214,313	\$ 3,601,895	\$ 5,216,314	\$ (1,614,419)	\$ (4,891,679)
12/31/2008	12/31/2009	\$ 4,318,418	\$ 72,976	\$ (62,027)	\$ 4,329,367	\$ 8,579,643	\$ (4,250,276)	\$ (3,277,260)

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year End	Annual Required Contribution	Percentage Contributed
12/31/17	\$ 1,281,813	132.27%
12/31/16	\$ 1,442,113	99.28%
12/31/15	\$ 2,001,009	97.42%
12/31/14	\$ 1,989,582	99.45%
12/31/13	\$ 3,641,437	24.65%
12/31/12	\$ 3,700,336	131.66%
12/31/11	\$ 3,573,518	130.15%
12/31/10	\$ 3,633,377	143.57%
12/31/09	\$ 4,318,418	198.68%
12/31/08	\$ 2,749,554	64.60%

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF LONG-TERM DEBT
For the year ended December 31, 2017

Maturity Date	Series 2009-A Bonds				Series 2009-B			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	5.000	\$ 2,390,000	185,500	\$ 2,575,500	5.000	\$ 6,635,000	514,625	\$ 7,149,625
2019	5.000	2,515,000	62,875	2,577,875	5.000	6,975,000	174,375	7,149,375
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Total		<u>4,905,000</u>	<u>248,375</u>	<u>5,153,375</u>		<u>13,610,000</u>	<u>689,000</u>	<u>14,299,000</u>
Bond (discount) premium		<u>\$ 4,905,000</u>				<u>193,109</u>		<u>\$ 13,803,109</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF LONG-TERM DEBT (CONT'D)
For the year ended December 31, 2017

Maturity Date	Series 2010-A Bonds				Series 2011 Bonds			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	-	\$ -	4,239,713	\$ 4,239,713	4.802	\$ 2,785,000	453,219	\$ 3,238,219
2019			4,239,713	4,239,713	3.000	2,895,000	342,925	3,237,925
2020	5.000	6,890,000	4,067,463	10,957,463	5.000	3,015,000	224,125	3,239,125
2021	5.000	7,240,000	3,714,213	10,954,213	4.700	3,165,000	74,375	3,239,375
2022	5.000	7,615,000	3,342,838	10,957,838				
2023	5.000	8,000,000	2,952,463	10,952,463				
2024	5.000	8,410,000	2,542,213	10,952,213				
2025	4.000	8,835,000	2,125,388	10,960,388				
2026	5.000	9,270,000	1,687,063	10,957,063				
2027	5.000	9,745,000	1,211,688	10,956,688				
2028	5.000	10,245,000	711,938	10,956,938				
2029	4.250	10,725,000	227,906	10,952,906				
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2045								
Total		<u>86,975,000</u>	<u>31,062,599</u>	<u>118,037,599</u>		<u>11,860,000</u>	<u>1,094,644</u>	<u>12,954,644</u>
Bond (discount) premium		<u>2,081,743</u>				<u>-</u>		
		<u>\$ 89,056,743</u>				<u>\$ 11,860,000</u>		

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF LONG-TERM DEBT (CONT'D)
For the year ended December 31, 2017

Maturity Date	Series 2011 Subordinate Bonds				Series 2012 Subordinate Bonds			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	3.100	\$ 90,000	46,810	\$ 136,810	2.900	\$ 60,000	30,886	\$ 90,886
2019	3.100	95,000	43,943	138,943	2.900	60,000	29,146	89,146
2020	3.100	95,000	40,998	135,998	2.900	65,000	27,333	92,333
2021	3.100	100,000	37,975	137,975	2.900	65,000	25,448	90,448
2022	3.100	100,000	34,875	134,875	2.900	65,000	23,563	88,563
2023	3.100	105,000	31,698	136,698	2.900	70,000	21,605	91,605
2024	3.100	110,000	28,365	138,365	2.900	70,000	19,575	89,575
2025	3.100	110,000	24,955	134,955	2.900	70,000	17,545	87,545
2026	3.100	115,000	21,468	136,468	2.900	75,000	15,443	90,443
2027	3.100	120,000	17,825	137,825	2.900	75,000	13,268	88,268
2028	3.100	125,000	14,028	139,028	2.900	80,000	11,020	91,020
2029	3.100	125,000	10,153	135,153	2.900	80,000	8,700	88,700
2030	3.100	130,000	6,200	136,200	2.900	85,000	6,308	91,308
2031	3.100	135,000	2,093	137,093	2.900	85,000	3,842	88,842
2032					2.900	90,000	1,305	91,305
2033								
2034								
2035								
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2040								
2041								
2042								
2043								
2044								
2045								
Total		<u>1,555,000</u>	<u>361,386</u>	<u>1,916,386</u>		<u>1,095,000</u>	<u>254,987</u>	<u>1,349,987</u>
Bond (discount) premium		<u>\$ 1,555,000</u>				<u>\$ 1,095,000</u>		

Maturity Date	Series 2013-A Bonds				Series 2013-B Bonds			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	2.000	\$ 75,000	859,475	\$ 934,475	5.000	\$ -	3,539,250	\$ 3,539,250
2019	3.000	100,000	857,225	957,225	5.000	-	3,539,250	3,539,250
2020	3.000	100,000	854,225	954,225	5.000	-	3,539,250	3,539,250
2021	3.000	105,000	851,150	956,150	5.000	-	3,539,250	3,539,250
2022	3.000	110,000	847,925	957,925	5.000	-	3,539,250	3,539,250
2023	3.000	110,000	844,625	954,625	5.000	-	3,539,250	3,539,250
2024	3.000	115,000	841,250	956,250	5.000	-	3,539,250	3,539,250
2025	3.000	120,000	837,725	957,725	5.000	-	3,539,250	3,539,250
2026	3.000	120,000	834,125	954,125	5.000	-	3,539,250	3,539,250
2027	3.000	125,000	830,450	955,450	5.000	-	3,539,250	3,539,250
2028	3.250	130,000	826,462	956,462	5.000	-	3,539,250	3,539,250
2029	3.250	135,000	821,987	956,987	5.000	-	3,539,250	3,539,250
2030	3.250	140,000	817,175	957,175	5.000	3,580,000	3,449,750	7,029,750
2031	3.250	145,000	812,187	957,187	5.000	3,765,000	3,266,125	7,031,125
2032	3.250	150,000	807,025	957,025	5.000	3,955,000	3,073,125	7,028,125
2033	3.500	155,000	801,687	956,687	5.000	4,160,000	2,870,250	7,030,250
2034	3.500	160,000	795,975	955,975	5.000	4,370,000	2,657,000	7,027,000
2035	3.500	165,000	789,881	954,881	5.000	4,595,000	2,432,875	7,027,875
2036	3.500	170,000	783,600	953,600	5.000	4,830,000	2,197,250	7,027,250
2037	3.500	180,000	777,037	953,037	5.000	5,080,000	1,949,500	7,029,500
2038	3.750	5,155,000	677,006	5,832,006	5.000	5,340,000	1,689,000	7,029,000
2039	3.750	125,000	578,006	703,006	5.000	5,615,000	1,415,125	7,030,125
2040	3.750	130,000	573,225	703,225	5.000	5,905,000	1,127,125	7,032,125
2041	3.750	135,000	568,256	703,256	5.000	6,205,000	824,375	7,029,375
2042	3.823	4,430,000	481,050	4,911,050	5.000	6,525,000	506,125	7,031,125
2045	3.786	10,470,000	198,187	10,668,187	5.000	6,860,000	171,500	7,031,500
2044	-	-	-	-	-	-	-	-
2045	-	-	-	-	-	-	-	-
Total		23,055,000	19,566,921	42,621,921		70,785,000	70,100,125	140,885,125
Bond (discount) premium		(720,432)				7,688,652		
		<u>\$ 22,334,568</u>				<u>\$ 78,473,652</u>		

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF LONG-TERM DEBT (CONT'D)
For the year ended December 31, 2017

Maturity Date	Series 2013 Subordinate Bonds				Series 2014 Subordinate Bonds			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	2.750	\$ 245,000	130,419	\$ 375,419	2.450	\$ 25,000	13,842	\$ 38,842
2019	2.750	255,000	123,544	378,544	2.450	25,000	13,230	38,230
2020	2.750	260,000	116,462	376,462	2.450	25,000	12,618	37,618
2021	2.750	265,000	109,244	374,244	2.450	25,000	12,006	37,006
2022	2.750	275,000	101,819	376,819	2.450	30,000	11,392	41,392
2023	2.750	280,000	94,188	374,188	2.450	30,000	10,658	40,658
2024	2.750	290,000	86,350	376,350	2.450	30,000	9,922	39,922
2025	2.750	300,000	78,237	378,237	2.450	30,000	9,188	39,188
2026	2.750	305,000	69,919	374,919	2.450	30,000	8,452	38,452
2027	2.750	315,000	61,394	376,394	2.450	30,000	7,718	37,718
2028	2.750	325,000	52,594	377,594	2.450	30,000	6,982	36,982
2029	2.750	330,000	43,588	373,588	2.450	35,000	6,248	41,248
2030	2.750	340,000	34,375	374,375	2.450	35,000	5,390	40,390
2031	2.750	350,000	24,888	374,888		35,000	4,532	39,532
2032	2.750	360,000	15,125	375,125		35,000	3,676	38,676
2033	2.750	370,000	5,087	375,087		35,000	2,818	37,818
2034						40,000	1,960	41,960
2035						40,000	980	40,980
2036								
2037								
2038								
2039								
2040								
2041								
2042								
2043								
2044								
2045								
Total		<u>4,865,000</u>	<u>1,147,233</u>	<u>6,012,233</u>		<u>565,000</u>	<u>141,612</u>	<u>706,612</u>
Bond (discount) premium		<u>\$ 4,865,000</u>				<u>\$ 565,000</u>		

Maturity Date	Series 2015-A Bonds				Series 2015-B Bonds			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	3.000	\$ 480,000	4,852,225	\$ 5,332,225	3.000	\$ 300,000	3,517,825	\$ 3,817,825
2019	3.000	495,000	4,837,600	5,332,600	3.000	285,000	3,509,050	3,794,050
2020	3.000	505,000	4,822,600	5,327,600	3.000	735,000	3,493,750	4,228,750
2021	4.000	3,320,000	4,748,625	8,068,625	4.000	830,000	3,466,125	4,296,125
2022	5.000	3,470,000	4,595,475	8,065,475	5.000	860,000	3,428,025	4,288,025
2023	5.000	3,650,000	4,417,475	8,067,475	5.000	910,000	3,383,775	4,293,775
2024	5.000	3,840,000	4,230,225	8,070,225	5.000	955,000	3,337,150	4,292,150
2025	5.000	4,030,000	4,033,475	8,063,475	5.000	985,000	3,288,650	4,273,650
2026	5.000	4,240,000	3,826,725	8,066,725	5.000	1,040,000	3,238,025	4,278,025
2027	3.000	700,000	3,710,225	4,410,225	3.000	995,000	3,197,100	4,192,100
2028	3.000	720,000	3,688,925	4,408,925	3.000	1,035,000	3,166,650	4,201,650
2029	3.125	740,000	3,666,563	4,406,563	3.125	1,080,000	3,134,250	4,214,250
2030	5.000	6,180,000	3,500,500	9,680,500	3.250	1,950,000	3,085,688	5,035,688
2031	5.000	5,660,000	3,204,500	8,864,500	5.000	1,965,000	3,004,875	4,969,875
2032	5.000	2,060,000	3,011,500	5,071,500	5.000	2,205,000	2,900,625	5,105,625
2033	5.000	2,165,000	2,905,875	5,070,875	5.000	2,410,000	2,785,250	5,195,250
2034	5.000	2,275,000	2,794,875	5,069,875	5.000	2,935,000	2,651,625	5,586,625
2035	5.000	6,680,000	2,571,000	9,251,000	5.000	2,930,000	2,505,000	5,435,000
2036	5.000	7,020,000	2,228,500	9,248,500	4.599	3,115,000	2,360,125	5,475,125
2037	5.000	7,385,000	1,868,375	9,253,375	4.600	3,255,000	2,213,563	5,468,563
2038	5.000	2,765,000	1,614,625	4,379,625	4.590	3,400,000	2,060,594	5,460,594
2039	5.000	8,160,000	1,341,500	9,501,500	4.593	3,550,000	1,901,031	5,451,031
2040	5.000	8,575,000	923,125	9,498,125	4.721	5,385,000	1,692,375	7,077,375
2041	5.000	9,015,000	483,375	9,498,375	5.000	5,650,000	1,424,000	7,074,000
2042	5.000	5,160,000	129,000	5,289,000	5.000	5,940,000	1,134,250	7,074,250
2043	-	-	-	-	5.000	6,245,000	829,625	7,074,625
2044	-	-	-	-	5.000	6,565,000	509,375	7,074,375
2045	-	-	-	-	5.000	6,905,000	172,625	7,077,625
Total	-	99,290,000	78,006,888	177,296,888	-	74,415,000	71,391,001	145,806,001
Bond (discount) premium		13,163,199				7,836,756		
		\$ 112,453,199				\$ 82,251,756		

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF LONG-TERM DEBT (CONT'D)
For the year ended December 31, 2017

Maturity Date	Series 2016-A Bonds				Series 2016-B Bonds			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	-	\$ -	7,012,700	\$ 7,012,700	-	\$ -	13,303,050	\$ 13,303,050
2019	-	-	7,012,700	7,012,700	-	-	13,303,050	13,303,050
2020	5.000	2,365,000	6,953,575	9,318,575	-	-	13,303,050	13,303,050
2021	5.000	-	6,894,450	6,894,450	-	-	13,303,050	13,303,050
2022	5.000	3,025,000	6,818,825	9,843,825	-	-	13,303,050	13,303,050
2023	5.000	3,185,000	6,663,575	9,848,575	5.000	1,870,000	13,256,300	15,126,300
2024	5.000	3,350,000	6,500,200	9,850,200	5.000	6,090,000	13,057,300	19,147,300
2025	5.000	3,520,000	6,328,450	9,848,450	5.000	6,405,000	12,744,925	19,149,925
2026	5.000	3,700,000	6,147,950	9,847,950	5.000	2,535,000	12,521,425	15,056,425
2027	5.000	7,595,000	5,865,575	13,460,575	5.000	2,660,000	12,391,550	15,051,550
2028	5.000	7,990,000	5,475,950	13,465,950	5.000	2,795,000	12,255,175	15,050,175
2029	5.000	8,395,000	5,066,325	13,461,325	5.000	2,935,000	12,111,925	15,046,925
2030	5.000	4,560,000	4,742,450	9,302,450	5.000	12,940,000	11,715,050	24,655,050
2031	5.000	4,790,000	4,508,700	9,298,700	5.000	13,605,000	11,051,425	24,656,425
2032	5.000	9,765,000	4,144,825	13,909,825	5.000	14,310,000	10,353,550	24,663,550
2033	5.000	10,270,000	3,643,950	13,913,950	5.000	15,045,000	9,619,675	24,664,675
2034	4.000	10,735,000	3,172,500	13,907,500	5.000	16,595,000	8,911,650	25,506,650
2035	4.000	11,175,000	2,734,300	13,909,300	5.000	16,460,000	8,188,300	24,648,300
2036	4.000	11,635,000	2,278,100	13,913,100	5.000	17,235,000	7,413,475	24,648,475
2037	4.000	12,110,000	1,803,200	13,913,200	5.000	18,055,000	6,598,000	24,653,000
2038	4.000	12,605,000	1,308,900	13,913,900	5.000	18,945,000	5,712,375	24,657,375
2039	4.000	13,125,000	794,300	13,919,300	5.000	19,885,000	4,782,625	24,667,625
2040	4.000	6,515,000	401,500	6,916,500	5.000	20,865,000	3,806,550	24,671,550
2041	4.000	6,780,000	135,600	6,915,600	5.000	21,895,000	2,782,025	24,677,025
2042	-	-	-	-	5.000	22,970,000	1,706,725	24,676,725
2043	-	-	-	-	5.000	24,105,000	578,050	24,683,050
2044	-	-	-	-	-	-	-	-
2045	-	-	-	-	-	-	-	-
Total	-	157,190,000	106,408,600	263,598,600	-	278,200,000	248,073,325	526,273,325
Bond (discount) premium	-	27,692,712	-	-	-	53,633,235	-	-
		\$ 184,882,712				\$ 331,833,235		

Maturity Date	Series 2016-C Bonds				Aggregate Debt Service			
	Rate	Principal	Interest	Total	Rate	Principal	Interest	Total
2018	3.000	\$ 5,305,000	544,218	\$ 5,849,218		\$ 20,495,000	41,161,532	\$ 61,656,532
2019	3.000	5,395,000	469,137	5,864,137		21,275,000	40,400,363	61,675,363
2020	3.000	5,470,000	379,530	5,849,530		21,805,000	39,576,979	61,381,979
2021	4.000	5,575,000	275,212	5,850,212		23,090,000	38,676,123	61,766,123
2022	5.000	5,695,000	157,380	5,852,380		23,765,000	37,706,417	61,471,417
2023	5.000	3,970,000	47,481	4,017,481		24,830,000	36,635,843	61,465,843
2024						26,020,000	35,456,900	61,476,900
2025						27,245,000	34,208,888	61,453,888
2026						24,360,000	33,000,733	57,360,733
2027						25,395,000	31,836,206	57,231,206
2028						26,615,000	30,631,074	57,246,074
2029						27,835,000	29,407,083	57,242,083
2030						33,315,000	28,012,830	61,327,830
2031						34,040,000	26,401,920	60,441,920
2032						36,575,000	24,690,978	61,265,978
2033						38,400,000	22,868,392	61,268,392
2034						41,060,000	21,064,585	62,124,585
2035						42,045,000	19,222,336	61,267,336
2036						44,005,000	17,261,050	61,266,050
2037						46,065,000	15,209,675	61,274,675
2038						48,210,000	13,062,500	61,272,500
2039						50,460,000	10,812,587	61,272,587
2040						47,375,000	8,523,900	55,898,900
2041						49,680,000	6,217,631	55,897,631
2042						45,025,000	3,957,150	48,982,150
2043						47,680,000	1,777,362	49,457,362
2044						6,565,000	509,375	7,074,375
2045						6,905,000	172,625	7,077,625
Total		<u>31,410,000</u>	<u>1,872,958</u>	<u>33,282,958</u>		<u>910,135,000</u>	<u>648,463,037</u>	<u>1,558,598,037</u>
Bond (discount) premium						<u>113,275,464</u>		
		<u>\$ 31,410,000</u>				<u>\$ 1,023,410,464</u>		

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF CHANGES IN UTILITY PLANT ASSETS
For the year ended December 31, 2017

Account Reference		Asset Account			
		Balance as of December 31, 2016	Plant Additions	Plant Retirements	Balance as of December 31, 2017
	Utility plant in service:				
	Land and land rights:				
103110	Reservoirs	\$ 3,280,021	\$ -	\$ -	\$ 3,280,021
103115	Other sources of supply	1,188,285	-	-	1,188,285
103120	Power and pumping	6,455,092	-	-	6,455,092
103125	Purification	2,284,564	177,036	-	2,461,600
103130	Transmission	65,724	-	-	65,724
103135	Distribution reservoirs and standpipes	734,720	-	-	734,720
103140	Distribution	5,626,920	(35)	-	5,626,885
103145	General land	1,114,253	-	-	1,114,253
103150	Office	3,995,395	109,988	-	4,105,383
103155	Stores, shop and garage	744,648	-	-	744,648
103160	Miscellaneous	<u>11,824,318</u>	<u>-</u>	<u>-</u>	<u>11,824,318</u>
	Total land and land rights	37,313,940	286,989	-	37,600,929
	Structures and improvements:				
103165	Land improvement	-	34,735	-	34,735
103210	Collecting and impounding reservoirs	14,536,191	-	-	14,536,191
103215	Lake, river and other intakes	20,977,320	13,082	-	20,990,402
103220	Infiltration galleries and tunnels	182,665	-	-	182,665
103225	Other water sources	1,981,662	-	-	1,981,662
103230	Power and pumping	15,015,419	47,323	-	15,062,742
103235	Purification building	35,410,694	235,238	-	35,645,932
103240	Distribution reservoirs and standpipes	69,097,737	4,974,575	-	74,072,312
103245	Office	23,282,964	577,304	(2,513)	23,857,755
103250	Stores, shop and garage	4,678,787	-	-	4,678,787
103255	Miscellaneous	<u>15,040,942</u>	<u>738,312</u>	<u>(102,578)</u>	<u>15,676,676</u>
	Total structures and improvements	200,204,381	6,620,569	(105,091)	206,719,859

Accumulated Depreciation

Balance as of December 31, 2016	Depreciation	Retirements	Balance as of December 31, 2017	Net Balance as of December 31, 2017
\$ -	\$ -	\$ -	\$ -	\$ 3,280,021
-	-	-	-	1,188,285
-	-	-	-	6,455,092
-	-	-	-	2,461,600
-	-	-	-	65,724
-	-	-	-	734,720
-	-	-	-	5,626,885
-	-	-	-	1,114,253
-	-	-	-	4,105,383
-	-	-	-	744,648
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>11,824,318</u>
-	-	-	-	37,600,929
-	528	-	528	34,207
8,676,869	512,136	-	9,189,005	5,347,186
4,272,985	267,514	-	4,540,499	16,449,903
134,532	753	-	135,285	47,380
551,659	57,530	-	609,189	1,372,473
7,317,179	411,542	-	7,728,721	7,334,021
16,860,095	1,231,833	-	18,091,928	17,554,004
23,783,274	1,457,785	-	25,241,059	48,831,253
11,531,883	723,336	(2,513)	12,252,706	11,605,049
2,553,988	150,769	-	2,704,757	1,974,030
<u>8,794,472</u>	<u>391,663</u>	<u>(29,797)</u>	<u>9,156,338</u>	<u>6,520,338</u>
84,476,936	5,205,389	(32,310)	89,650,015	117,069,844

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF CHANGES IN UTILITY PLANT ASSETS (CONT'D)
For the year ended December 31, 2017

		Asset Account			
Account Reference		Balance as of December 31, 2016	Plant Additions	Plant Retirements	Balance as of December 31, 2017
	Equipment:				
103310	Boiler	\$ 177,196	\$ -	\$ -	\$ 177,196
103315	Other power production equipment	447,833	-	-	447,833
103320	Steam pumping	423,108	-	(423,108)	-
103323	Electric pumping	36,915,998	1,139,912	(4,384,105)	33,671,805
103325	Oil engine pumping equipment	24,648	-	-	24,648
103327	Other power pumping	451,564	-	-	451,564
103330	Purification system	25,770,762	83,956	-	25,854,718
103332	Chemical treating plant - sewer	32,510,265	83,550	-	32,593,815
103333	Clean water basins	19,132,298	12,331	-	19,144,629
103335	Filter plant	133,864,561	2,141,175	(916,524)	135,089,212
103340	Softening plant	6,813	-	-	6,813
103345	Transmission mains and accessories	149,145,209	6,504,918	-	155,650,127
103350	Distribution mains and accessories	302,227,437	7,568,039	-	309,795,476
103355	Services	74,594,972	3,866,501	-	78,461,473
103360	Meters	49,400,497	1,930,957	(5,999,350)	45,332,104
103365	Hydrants	27,100,901	1,136,530	-	28,237,431
103370	Office furniture and equipment	50,974,726	2,006,614	(7,025,086)	45,956,254
103375	Transportation	13,431,189	1,705,110	(607,194)	14,529,105
103380	Stores	37,196	-	-	37,196
103383	Shop	200,158	28,609	-	228,767
103385	Laboratory	2,740,537	(8)	(781,305)	1,959,224
103387	Tool and work	14,112,736	305,038	(2,140,088)	12,277,686
103390	Communication	13,503,082	12,401	(7,579,743)	5,935,740
103393	Miscellaneous	7,665,146	2,655,234	(14,989)	10,305,391
103395	Other tangible property	22,025	-	-	22,025
	Utility plant not in service	-	-	-	-
	Total equipment	<u>954,880,858</u>	<u>31,180,865</u>	<u>(29,871,491)</u>	<u>956,190,232</u>
	Total utility plant in service	1,192,399,179	38,088,423	(29,976,582)	1,200,511,020
	Construction in progress	<u>39,706,676</u>	<u>22,117,121</u>	-	<u>61,823,796</u>
	Total utility plant	<u>\$ 1,232,105,855</u>	<u>\$ 60,205,544</u>	<u>\$ (29,976,582)</u>	<u>\$ 1,262,334,816</u>

Accumulated Depreciation

Balance as of December 31, 2016	Depreciation	Retirements	Balance as of December 31, 2017	Net Balance as of December 31, 2017
\$ 177,196	\$ -	\$ -	\$ 177,196	\$ -
171,489	19,567	-	191,056	256,777
423,108	-	(423,108)	-	-
17,421,695	1,294,538	(4,382,544)	14,333,689	19,338,116
21,383	146	-	21,529	3,119
266,715	17,685	-	284,400	167,164
9,833,001	550,515	-	10,383,516	15,471,202
15,133,508	597,982	-	15,731,490	16,862,325
4,487,485	440,537	-	4,928,022	14,216,607
20,016,389	2,991,200	(916,524)	22,091,065	112,998,147
4,097	80	-	4,177	2,636
24,234,434	1,565,559	-	25,799,993	129,850,134
98,518,812	4,352,070	-	102,870,882	206,924,594
17,113,600	1,618,363	-	18,731,963	59,729,510
19,109,957	1,967,776	(5,999,349)	15,078,384	30,253,720
9,256,419	550,373	5,526	9,812,318	18,425,113
19,027,175	4,371,111	(7,025,085)	16,373,201	29,583,053
9,113,151	648,374	(514,409)	9,247,116	5,281,989
33,005	686	-	33,691	3,505
198,407	2,267	-	200,674	28,093
2,249,708	76,689	(781,304)	1,545,093	414,131
9,352,888	789,385	(2,132,358)	8,009,915	4,267,771
10,754,358	505,502	(7,579,743)	3,680,117	2,255,623
5,619,101	427,098	(14,989)	6,031,210	4,274,181
22,025	-	-	22,025	-
<u>292,559,106</u>	<u>22,787,503</u>	<u>(29,763,887)</u>	<u>285,582,722</u>	<u>670,607,510</u>
377,036,042	27,992,892	(29,796,197)	375,232,737	825,278,283
<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>61,823,796</u>
<u>\$ 377,036,042</u>	<u>\$ 27,992,892</u>	<u>\$ (29,796,197)</u>	<u>\$ 375,232,737</u>	<u>\$ 887,102,079</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULES OF OPERATING EXPENSES
For the years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Operations:		
Sources of supply other	\$ 1,714,793	\$ 1,734,041
Power and pumping	9,536,229	9,686,333
Purification	10,490,323	11,601,421
Transmission and distribution	10,890,733	12,537,087
Customer's accounting and collection	7,840,508	6,417,631
Administrative and general	23,039,500	30,184,673
Payroll taxes	2,717,507	2,615,809
License fees - Birmingham	2,093,280	1,961,511
License fees - other	<u>2,380,429</u>	<u>2,254,811</u>
 Total operations	 70,703,302	 78,993,317
 Maintenance:		
Source of supply	475,626	434,833
Power and pumping	2,235,960	1,869,422
Purification	815,593	870,380
Transmission and distribution	11,125,978	9,702,540
Administrative and general	<u>2,561,553</u>	<u>3,645,931</u>
 Total maintenance	 <u>17,214,710</u>	 <u>16,523,106</u>
 Depreciation expense	 <u>27,992,890</u>	 <u>23,026,421</u>
 Total operating expenses	 <u>\$ 115,910,902</u>	 <u>\$ 118,542,844</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULES OF NONOPERATING REVENUES (EXPENSES)
For the years ended December 31, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Other income:		
Investment interest income	\$ 2,479,302	\$ 3,104,538
Other interest income	14,997	12,082
Land and timber sales	-	12,812
Commissions and other	534,951	468,787
Gain (loss) on disposal of property	<u>(285,814)</u>	<u>(287,427)</u>
Total other income	2,743,436	3,310,792
Interest expense:		
Interest on long-term debt and long-term obligations due To the City of Birmingham, including amortization of accounting loss on advance refunding and original issue discount	(40,246,334)	(47,245,265)
Interest paid on customers' guarantee deposits	<u>(4,721)</u>	<u>(3,679)</u>
Total interest expense	(40,251,055)	(47,248,944)
Total nonoperating revenues (expenses)	<u>\$ (37,507,619)</u>	<u>\$ (43,938,152)</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF AMOUNTS ON DEPOSIT WITH TRUSTEE BY FUND
December 31, 2017

<u>Fund Type</u>	<u>Fair Market Value</u>	<u>Accrued Interest</u>	<u>Carrying Value</u>
Revenue funds	\$ 98,387,161	\$ 25,716	\$ 98,412,877
Debt service funds	52,529,569	70,610	52,600,179
Debt service reserve funds	35,590,187	252,825	35,843,012
Development, renewal and replacement funds	<u>1,227,606</u>	<u>57</u>	<u>1,227,663</u>
	<u>\$ 187,734,523</u>	<u>\$ 349,208</u>	<u>\$ 188,083,731</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF MAJOR INDUSTRIAL/GOVERNMENTAL CUSTOMERS
(UNAUDITED)
For the year ended December 31, 2017

<u>Customer</u>	<u>Revenues</u>	<u>% Total of Operating Revenue</u>
University of Alabama at Birmingham	\$ 3,962,016	2.36%
ERP Compliant Coke	1,817,504	1.08%
Birmingham Housing Authority	1,643,658	0.98%
US Steel	1,374,972	0.82%
City of Birmingham Fire Hydrant	1,319,090	0.79%
Graysville Water Co.	1,217,553	0.72%
Buffalo Rock Co.	906,942	0.54%
Samford University	757,742	0.45%
Town of Mulga	661,008	0.39%
U S Steel	<u>640,711</u>	<u>0.38%</u>
	<u>\$ 14,301,196</u>	<u>8.52%</u>

THE WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF INSURANCE POLICIES
(UNAUDITED)

Coverage Period November 1, 2017 to November 1, 2018

Type of Coverage	Policy No.	Deductible	Policy Limits
Property:			
Primary property (TIV - \$5,532,686,791):	B0621TBWWB000117	\$250,000	\$50,000,000
Dams and structures		250,000	50,000,000
Flood and earthquake		250,000	50,000,000
Equipment breakdown coverage		250,000	50,000,000
Contractors' equipment		10,000	5,374,257
Accounts receivable		500	5,000,000
Contingent business income (named)		24 Hours	10,000,000
Contingent business income (unnamed)			5,000,000
Auto physical damage (No over the road coverage)		5,000	5,000,000
Excess property (Excludes Flood/Earthquake)	NHT902214	50M	(TIV) 486,608,812
Primary Liability:			
	292066-01		
General liability		100,000	10,000,000
Public Officials liability		100,000	10,000,000
Employment practice liability		100,000	10,000,000
Employee benefit liability		100,000	10,000,000
Automobile liability		50,000	10,000,000
Uninsured/Underinsured motorist		50,000	250,000
Hired and non-owned liability		50,000	10,000,000
Excess Liability	0310-4017	\$10,000,000	\$10,000,000
Pollution	PEC002469903	250,000	\$5,000,000
Fiduciary	106202793	\$25,000	\$3,000,000
Commercial Crime			
	106202793		
Employee theft		25,000	1,000,000
Forgery or Alteration		20,000	1,000,000
Inside premises - theft of money/securities		25,000	1,000,000
Inside premises - robbery/burglary		25,000	1,000,000
Outside premises		25,000	1,000,000
Computer fraud		25,000	1,000,000
Funds transfer fraud		25,000	1,000,000
Money orders and counterfeit money		25,000	1,000,000
Cyber	ASE16B000782	50,000	10,000,000
Specific Excess Worker Compensation and Workers Comp Liability	SP 4055868	500,000	Statutory \$2,000,000

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

To the Board of Directors of
The Water Works Board of the City of Birmingham
Birmingham, Alabama

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the accompanying financial statements of the business-type activities of the Water Works Board of the City of Birmingham ("the Board"), as of and for the year ended December 31, 2017, and the related notes to the financial statements, which collectively comprise the Board's basic financial statements, and have issued our report thereon dated June 29, 2018. Our report includes a reference to other auditors who audited the financial statements of the Retirement Plan for Employees of the Water Works Board of the City of Birmingham and the Other Post Employment Benefit Plan of the Water Works Board of the City of Birmingham ("the Plans") as described in our report on the Board's financial statements. This report does not include the results of the other auditors' testing of internal control over financial reporting or compliance and other matters that are reported on separately by those auditors. The financial statements of the Plans were not audited in accordance with *Government Auditing Standards*.

Internal Control Over Financial Reporting

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

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



To the Board of Directors of
The Water Works Board of the City of Birmingham
Birmingham, Alabama
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Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying schedules and responses that we consider to be significant deficiencies.

Compliance and Other Matters

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

Purpose of this Report

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

Birmingham, Alabama
June 29, 2018

Banks, Finley White & Co.

WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF FINDINGS AND RESPONSE TO FINDINGS
For the year ended December 31, 2017

Item 2017-001 – Preparation and Review of Bank Reconciliations

Condition: The Board's bank account reconciliations are not being performed nor reviewed by management on a timely basis

Criteria: Management's responsibility is to establish and maintain internal control on an ongoing basis. Management's monitoring of controls includes considering whether they are operating as intended and that they are being modified as appropriate for changes in conditions. Monitoring of controls should include activities such as management's review of whether bank reconciliations are being prepared on a timely basis. Per management internal control policy over bank accounts, reconciliations must be prepared and reviewed by the 12th business day following previous month end.

Cause of Condition: Procedures in place to ensure that reconciliations are completed on a timely basis were not followed.

Effect of Condition: Failure to prepare and review bank reconciliations in a timely manner could potentially result in financial institution or Board accounting errors not being discovered and corrected in a timely manner.

Auditor's Recommendation: We recommend that management takes steps to ensure that all account reconciliations are being performed timely, and that a management or its designee performs a review of those reconciliations.

Management's Response: The Board has a routine month-end close process in which the books for the previous month are closed on the 7th business day of the month. Reconciliations of general ledger/bank accounts are typically completed by the 12th business day of the month and reviewed by management by the 15th business day of the month. There are times when all reconciling items related to deposits for the bank account are not identified by the 12th business day, which delays completion of the reconciliation, however; all withdrawal items are identified prior to the 7th business day. Review of the bank account begins immediately after the previous month-end and the reconciliation is signed after all reconciling items have been identified, by the end of the month. The Accounting Manager is updated if there is a delay and reviews the account with the Cash Accountant as needed.

Going forward, management will ensure that bank reconciliations are prepared by the 12th business day following the previous month-end and reviewed by the 15th business day of the month.

Item 2017-002 – Review of Significant Accounts

Condition: During the course of the audit, we reviewed balances of a significant account relating to customer advances for construction and noted that were several projects that were still noted as open with advances received. After analysis of the account was performed by management, it was discovered that those projects were closed and advances were not correctly applied to projects.

WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF FINDINGS AND RESPONSE TO FINDINGS
For the year ended December 31, 2017

Also, we reviewed balances of significant accounts relating to accounts payable for goods and services received for which there were no invoices submitted by the vendor. We noted that there was an overstatement of the account due to the duplication of purchase order requests. Requestors were creating a new purchase order request whenever a change to an original request was necessary after goods were received against the original request.

Criteria: Management's responsibility is to ensure that all material transactions have been recorded in the accounting records and are reflected in the financial statements. Additionally, Management's responsibility is to establish and maintain internal control on an ongoing basis. Management's monitoring of controls includes considering whether they are operating as intended and that they are being modified as appropriate for changes in conditions.

Cause of Condition: The Board does not have proper procedures in place to ensure that customer advances are applied to projects appropriately and on a timely basis nor are there procedures in place to perform reconciliations of these accounts. Additionally, Management has not developed appropriate IT controls that would prevent the duplication of purchase orders. As such, management has failed in its responsibility to establish and maintain controls over customer advances for construction and accounts payable for goods and services received there were no invoices submitted by the vendor.

Effect of Condition: Failure to develop adequate controls and review significant account balances on a continuous basis could result in material misstatement of the Board's financial statements whether due to error or fraud.

Auditor's Recommendation: We recommend that management develop a policy to ensure that all customer advances for construction are applied appropriately and that timely reconciliations and review of those accounts are performed. We recommend that management develop a policy to ensure that purchase orders are not duplicated once goods are received against them.

Management's Response: For customer advances for construction, management has implemented a workflow process that allows the accounting team to ensure that customer advances are applied to projects appropriately. As a follow-up, the accounting team and management will perform quarterly analysis to identify customer advances for proper project application and make corrections as needed.

For accounts payable for goods and services, management has communicated with staff the importance of correcting purchase orders rather than creating new ones. In addition, the accounting team is actively reviewing the account and identifying duplicates for corrections as needed.

Item 2017-003 – Review of Capital Assets Records

Condition: During the course of the audit, we reviewed balances of significant accounts relating to capital assets and noted that there were several assets that were fully depreciated but no longer in use. These were still listed on the Schedule of Capital Assets.

Criteria: Management's responsibility is to ensure that all material transactions have been recorded in the accounting records and are reflected in the financial statements.

WATER WORKS BOARD OF THE CITY OF BIRMINGHAM
SCHEDULE OF FINDINGS AND RESPONSE TO FINDINGS
For the year ended December 31, 2017

Cause of Condition: The Board does not have proper procedures in place to ensure that aged assets that are removed from use are communicated to those responsible for the accounting records on a timely basis nor is there a policy to ensure that a count of fixed assets are performed frequently.

Effect of Condition: Failure to perform a count of fixed assets and communicate the removal of fixed assets from use on a timely basis could result in a misappropriation of the Board's assets and/or material misstatement of the Board's financial statements whether due to error or fraud.

Auditor's Recommendation: We recommend that management develops a policy to ensure that a count of fixed assets is performed and controls are in place to ensure timely identification of aged asset and removal from use.

Management's Response: When assets are no longer in service, the department manager initiates a retirement form and submits to accounting. The assets are then retired in the system and removed from the books. In addition, internal fixed asset audits are periodically performed by the accounting fixed asset team. During the audit, fixed assets that are no longer in use are retired. The fixed asset audits are typically conducted by department. Due to the volume of assets, it is not practical to audit every department every year with the current staffing.

Management will communicate to department managers the importance of submitting the retirement forms to accounting in a timely manner. In addition, management will change the current approach to the internal fixed asset audits and give more focus to aged assets. Going forward, management will also request retirement forms from department managers on a quarterly basis.