

**MURFREESBORO WATER AND
SEWER DEPARTMENT**

AUDITED FINANCIAL STATEMENTS

**FOR THE YEAR ENDED
JUNE 30, 2017**

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INTRODUCTORY SECTION

Board Members

Chairman.....John Sant Amour, Jr.
Board MemberBrian Kidd
Board MemberDr. Alphonse Carter, Jr.
Board MemberRon Crabtree
Board MemberKathy Nobles
Board MemberSandra Trail
Board MemberMadelyn Scales-Harris

Management Officials

DirectorDarren Gore
Assistant Director,
Finance & Administration.....Doug Swann

FINANCIAL SECTION



JOB, HASTINGS & ASSOCIATES

Certified Public Accountants

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James R. Jobe, CPA
Donna K. Hastings, CPA (*inactive*)
Joel H. Jobe (1944 – 2006)

INDEPENDENT AUDITOR'S REPORT

Board of Directors
Murfreesboro Water and Sewer Department

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Murfreesboro Water and Sewer Department, City of Murfreesboro, Tennessee, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Murfreesboro Water and Sewer Department'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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government 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, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the Murfreesboro Water and Sewer Department, City of Murfreesboro, Tennessee, as of June 30, 2017, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note A, the financial statements present only the Murfreesboro Water and Sewer Department and do not purport to, and do not present fairly the financial position of the City of Murfreesboro, Tennessee, as of June 30, 2017, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, pension data, and post-employment benefit data on pages 4-12 and 32-34 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing 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 audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Murfreesboro Water and Sewer Department's basic financial statements. The introductory section, and schedules on pages 35 through 45, are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedule of expenditures of federal awards is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* and is also not a required part of the basic financial statements.

The schedule of operating revenues, the schedule of operating and maintenance expenses and the schedules of expenditures of state and federal awards 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 schedule of operating revenues, the schedule of operating and maintenance expenses and the schedules of expenditures of state and federal awards are fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory schedule, customers and rate schedule, schedule of unaccounted for water and the schedule of debt service requirements by fiscal year 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 December 1, 2017 on our consideration of the Murfreesboro Water and Sewer Department'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 solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Murfreesboro Water and Sewer Department's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Governmental Auditing Standards* in considering the Murfreesboro Water and Sewer Department's internal control over financial reporting and compliance.

Jobe, Hastings & Associates

Certified Public Accountants

Murfreesboro, Tennessee
December 1, 2017

MANAGEMENT DISCUSSION AND ANALYSIS

The following Management Discussion and Analysis (MD & A) of the Murfreesboro Water and Sewer Department activities and financial performance provides the reader with an introduction and overview to the financial statements of the Murfreesboro Water and Sewer Department for the year ended June 30, 2017. As of July 1, 2017, the Murfreesboro Water and Sewer Department changed its name to the Murfreesboro Water Resources Department (Department). This information should be considered within the context of the accompanying financial statements and note disclosures.

FINANCIAL OPERATIONS HIGHLIGHTS

- ❖ The Department's capital assets increased by \$15,683,935 for the year ending June 30, 2017. This primarily resulted from utility and plant additions and current construction projects.
- ❖ The Department's net position increased by \$18,487,148 during the year ending June 30, 2017. Net position grew over last year due primarily to operating income and system connection fees.

OVERVIEW OF THE FINANCIAL STATEMENTS

Murfreesboro Water Resources Department (MWRD) is a proprietary fund of the City of Murfreesboro, Tennessee. Management Discussion and Analysis introduces the Department's basic financial statements. The basic financial statements include the statement of net position, statement of revenue, expenses and changes in net position, statement of cash flow and notes to the financial statements.

The statement of net position reports all of the Department's assets and deferred outflows of resources, and liabilities and deferred inflows of resources, with the difference being reported as net position. Over time increases or decreases typically give some indication of whether the financial position of the Department is improving or deteriorating. The majority of net position is invested in utility plant which is used to provide water and sewer service to the general public. Unrestricted net position gives a good indication of the earnings, exclusive of depreciation, that have been accumulated since inception that are available to support future operations, capital additions, or debt retirement.

The statement of revenues, expenses and changes in net position reports all revenues and expenses for the year, regardless of whether cash has been received or paid. This statement measures the success of operations over the past year and can be used to determine whether the Department has successfully recovered all its costs through water, sewer and other charges to the public. The statement also reconciles the beginning and ending amounts of net position.

The last statement is the statement of cash flow. The primary purpose of this statement is to provide information about the Department's cash receipts and cash payments for the year. This statement reports how much cash was generated from operations and then reflects uses of cash related to Capital/Financing and Investing.

CONDENSED FINANCIAL INFORMATION

Summary information regarding the Department's financial position is as follows:

	June 30, 2017	June 30, 2016 as restated
Current Assets	\$ 84,357,612	\$ 70,025,985
Capital Assets	416,976,867	401,292,932
Non-Current Other Assets	123,647	128,608
Deferred Outflows	4,034,092	2,925,491
Total Assets and Deferred Outflows	<u>\$ 505,492,218</u>	<u>\$ 474,373,016</u>
Current Liabilities	\$ 15,514,994	\$ 16,976,234
Non-current Liabilities	120,329,452	111,895,353
Deferred Inflows	392,307	329,354
Total Liabilities and Deferred Inflows	<u>\$ 136,236,753</u>	<u>\$ 129,200,941</u>
Net investment in capital assets	\$ 300,550,306	\$ 290,038,405
Restricted	123,647	128,608
Unrestricted	68,581,512	55,005,062
Total Net Position	<u>\$ 369,255,465</u>	<u>\$ 345,172,075</u>
Total Liabilities, Deferred Inflows and Net Position	<u>\$ 505,492,218</u>	<u>\$ 474,373,016</u>

Assets

Capital Assets increased to \$416,976,867 for the year ending June 30, 2017, which is an increase of \$15,683,935 (3.9% increase) from the fiscal year ending June 30, 2016. Restricted cash at June 30, 2017 was \$123,647.

Liabilities

Long term liabilities total \$120,329,452 as of June 30, 2017, an increase of \$8,433,099 (7.5%) from long-term liabilities as of June 30, 2016. This is primarily attributed to the additional debt related to the MWRD sewer plant expansion.

CONDENSED FINANCIAL INFORMATION (CONTINUED)

Summary information regarding the Department's operations is as follows:

	June 30, 2017	June 30, 2016
Operating revenues	\$ 43,840,996	\$ 42,353,657
Non-operating revenues	405,678	434,709
	<u>\$ 44,246,674</u>	<u>\$ 42,788,366</u>
Operating expenses	\$ 21,232,459	\$ 19,751,343
Maintenance expenses	108,023	789,848
Depreciation and amortization	13,790,895	12,026,209
Non-operating expenses	1,952,517	645,422
Loss (Gain) on disposal of utility plant assets	1,263,364	594,180
	<u>\$ 38,347,258</u>	<u>\$ 33,807,002</u>
Increase (decrease) in net assets, before capital contributions	\$ 5,899,416	\$ 8,981,364
Tap fees and special assessments	\$ 10,207,972	\$ 10,229,510
Developer contributions of systems	7,976,002	7,321,543
Increase (decrease) in net assets	<u>\$ 24,083,390</u>	<u>\$ 26,532,417</u>
Net position, beginning of year	\$ 350,768,317	\$ 330,661,975
Prior Period Adjustment **	(5,596,242)	(6,426,075)
Net position, beginning of year, as restated	<u>\$ 345,172,075</u>	<u>\$ 324,235,900</u>
Net position, end of year	<u>\$ 369,255,465</u>	<u>\$ 350,768,317</u>

** June 30, 2017 Prior Period Adjustment related to a cumulative adjustment of accumulated depreciation through June 30, 2016

** June 30, 2016 Prior Period Adjustment related to a disposition of assets from the June 30, 2000 fiscal year

Operating Revenues and Expenses

Operating revenues increased by \$1,487,339 (3.5%), over the previous year while operating expenses increased \$1,481,116 (7.5%). The increase in operating revenues is primarily attributed to increased growth in MWRD's sewer customer base. The increase in operating expenses can also primarily be attributed to sewer system operations. As seen in the next table, operating sales revenues exceeded FY17 budgeted amounts and operating expenses came in just under budget.

The increase in net position before capital contributions was \$5,899,416 for the year ending June 30, 2017, a decrease of \$3,081,948 from the year ending June 30, 2016. The decrease can be attributed to increased depreciation expense, interest expenses and loss on disposal of utility plant assets.

Non-operating revenues consist of grant revenue (\$300,454) and interest income (\$105,224) for the year ended June 30, 2017.

The capital contributions from developers, tap fees and special assessments total \$18,183,974 for the year ending June 30, 2017. This is an increase from the year ending June 30, 2016 of \$632,921. The increase in capital contributions is attributed to economic conditions and increased construction activity.

CONDENSED FINANCIAL INFORMATION (CONTINUED)

Summary information regarding the Department's budget of revenues and expenses to actual operations is as follows:

	June 30, 2017	Budget	Over (Under)	%
Operating revenues	\$ 43,840,996	\$ 43,394,500	\$ 446,496	1.03%
Non-operating revenues	405,678	370,454	35,224	9.51%
	<u>\$ 44,246,674</u>	<u>\$ 43,764,954</u>	<u>\$ 481,720</u>	1.10%
Operating expenses	\$ 21,232,459	\$ 21,606,754	\$ (374,295)	-1.73%
Maintenance expenses	108,023	123,000	(14,977)	-12.18%
Non-operating expenses	1,952,517	2,007,750	(55,233)	-2.75%
	<u>\$ 23,292,999</u>	<u>\$ 23,737,504</u>	<u>\$ (444,505)</u>	-1.87%
Increase in net assets, before capital contributions, loss on disposal of utility plant assets, and depreciation	<u>\$ 20,953,675</u>	<u>\$ 20,027,450</u>	<u>\$ 926,225</u>	4.62%

	June 30, 2017	June 30, 2016
Cash provided by operating activities	\$ 22,123,890	\$ 20,536,423
Cash used by capital and related financing activities	(10,360,788)	(13,542,535)
Cash provided by investing activities	<u>105,223</u>	<u>87,599</u>
Net increase in cash and equivalents	\$ 11,868,325	\$ 7,081,487
Cash and cash equivalents, beginning of year	<u>63,699,579</u>	<u>56,618,092</u>
Cash and cash equivalents, end of year	<u>\$ 75,567,904</u>	<u>\$ 63,699,579</u>

Cash flows from operating activities

The net cash provided from operating activities during the year ending June 30, 2017 totaled \$22,123,890, which was an increase of \$1,587,467 (7.7%) in comparison to the year ending June 30, 2016. The increase can be attributed to increased revenues and reduced payments to vendors/employees.

Cash for capital activities

The cash flow used by capital and related financing activities decreased by \$3,181,747, primarily due to lower capital asset acquisition/construction for the year ended June 30, 2017.

Cash flows from investing activities

Cash provided by investing activities includes interest income earned on cash and equivalents during the year ending June 30, 2017. There was an increase of \$17,624 in interest earned in comparison to year ending June 30, 2016 due to increased funds on hand. Interest rates continue to be at all-time lows.

ECONOMIC FACTORS AND A PROSPECTIVE LOOK AT FUTURE NEEDS

Several variables and factors influence the cost of water and sewer service which in turn results in increasing costs to customers. Commodity price increases in such items as electricity, chemicals, natural gas, and fuel continue. The rising cost for replacement of an aging infrastructure will continue to be a major liability. Pension and health care benefits increase labor costs.

All utilities incur a certain degree of expense just to operate, and will incur those expenses even if no water is sold. In general, usage is declining nationally as costs remain the same or increase. Most utility rate structures include a volume based charge. Declining usage revenues are being experienced as operating and capital expenses are increasing. The Department is realizing these pressures with declining water and sewer consumption usage resulting in less revenue as costs increase. However, the water and sewer rate designs have been modified to raise the minimum bill and reduce the minimum bill allowances over the past few years resulting in increased revenues while consumption declines and rates remain the same.

In preparing the fiscal year 2018 (FY18) budget, these trends were considered. Sales projections for water and sewer were shown to increase from the previous year. Growth within the City of Murfreesboro and Rutherford County has continued to afford MWRD a surplus in budgeted revenues. A rate structure change was recommended in developing the FY18 budget.

Since July 2008, a rate strategy has been implemented to reduce the consumption allowance for a minimum bill over multiple years. In FY14, the minimum monthly allowance for 5/8 inch meters was reduced to a zero minimum allowance per month. In FY16, customers with a 5/8 inch meter (primarily residential) were increased by \$0.50 on the sanitary sewer minimum monthly bill. Approximately 96% of MWRD’s customers have 5/8” meters. In FY18, staff is recommending no rate increase for customers with 5/8 inch meters. With no rate increase, the Department maintains AWWA’s affordability index (4% of a very low income earner as defined by the Department of Housing and Urban Development).

The proposed FY18 rate design also reduces the minimum monthly allowance for all meter sizes one (1”) inch and greater by one hundred (100%) percent. FY18 completes the reduction of all allowances for meters sizes one (1”) inch and greater. The minimum monthly monetary charges for all meter sizes remain the same. Table 1 provides the average monthly dollar increase for each size meter one (1”) inch and greater.

TABLE 1: Estimated FY16-20 Revenue Generated based on Average Monthly Bills by Meter Size

Fiscal Year	Estimated ↑ Revenue	Monthly Rate Increase for 5/8” Residential	Avg Monthly Increase for 1” & 1 1/2” Meters	Avg Monthly Increase for 2” & 3” Meters	Avg Monthly Increase for 4” & 6” Meters
July 1, 2015 (FY16)	\$1,153,676	\$0.50	\$6.39	\$29.07	\$184.78
July 1, 2016 (FY17)	\$1,304,951	\$0.00	\$6.39	\$29.07	\$184.78
July 1, 2017 (FY18)	\$360,227	\$0.00	\$6.39	\$29.07	\$184.78
July 1, 2018 (FY19)	(\$978,632)	\$0.00	\$0.00	\$0.00	\$0.00
July 1, 2019 (FY20)	(\$978,632)	\$0.00	\$0.00	\$0.00	\$0.00

5-yr Total

\$860,453

5-yr Pro Forma Requirement

\$3,180,495

These rate adjustments are consistent with the recommendations made by Jackson Thornton in the Cost of Service Studies (COSS) conducted in 2007, 2011, 2013, and 2015 which identify that the Department should be increasing the minimum monthly charges to cover the fixed costs (e.g., admin, payroll, debt, etc.) of service by class of customer.

The water and sewer rate has been changed to \$ per 1,000 gallons instead of \$ per 100 cubic feet. Since all allowances are being eliminated as part of the FY18 proposed rate ordinance, the 90 cents per 100 cubic feet Operation and Maintenance Fee can be incorporated into the sewer rate.

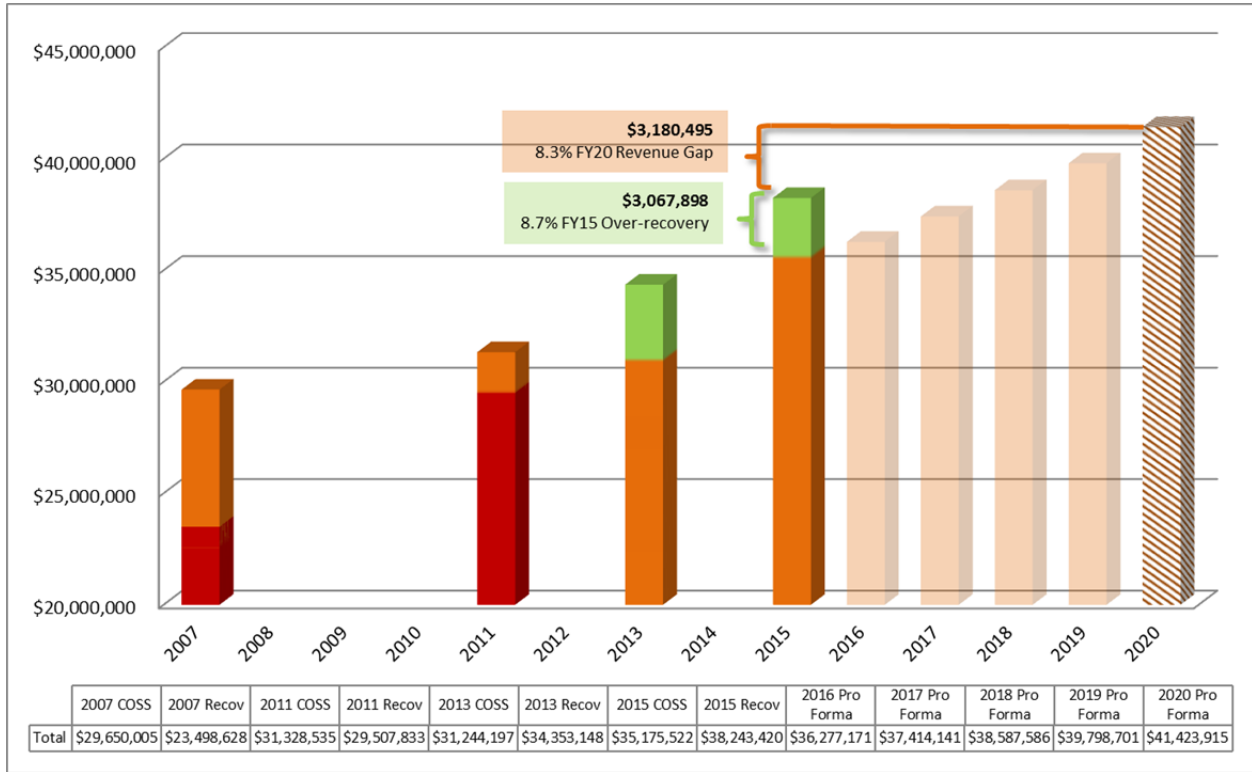
The water rate is recommended at \$3.66 per 1,000 gallons (\$0.00366 per gallon) and the sewer rate is recommended at \$5.67 per 1,000 gallons (\$.00567 per gallon). The average monthly bill for an MWRD customer that uses 5,200 gallons per month for water and 4,800 gallons per month of sewer will remain the same, or \$66.70 per month.

There are no increases recommended to the water and sewer connection fees. Based on findings in the Cost of Service Study by Jackson Thornton Utilities in 2007, water and sewer connection fees were scheduled to increase annually until the water connection fee reached \$1,700 and the sewer connection fee \$3,300. The Study identifies connection fees that can be justified based on utility assets. However, when setting these fees, the regional market and economy are taken into account. These increases are recommended to be suspended and considered again next year.

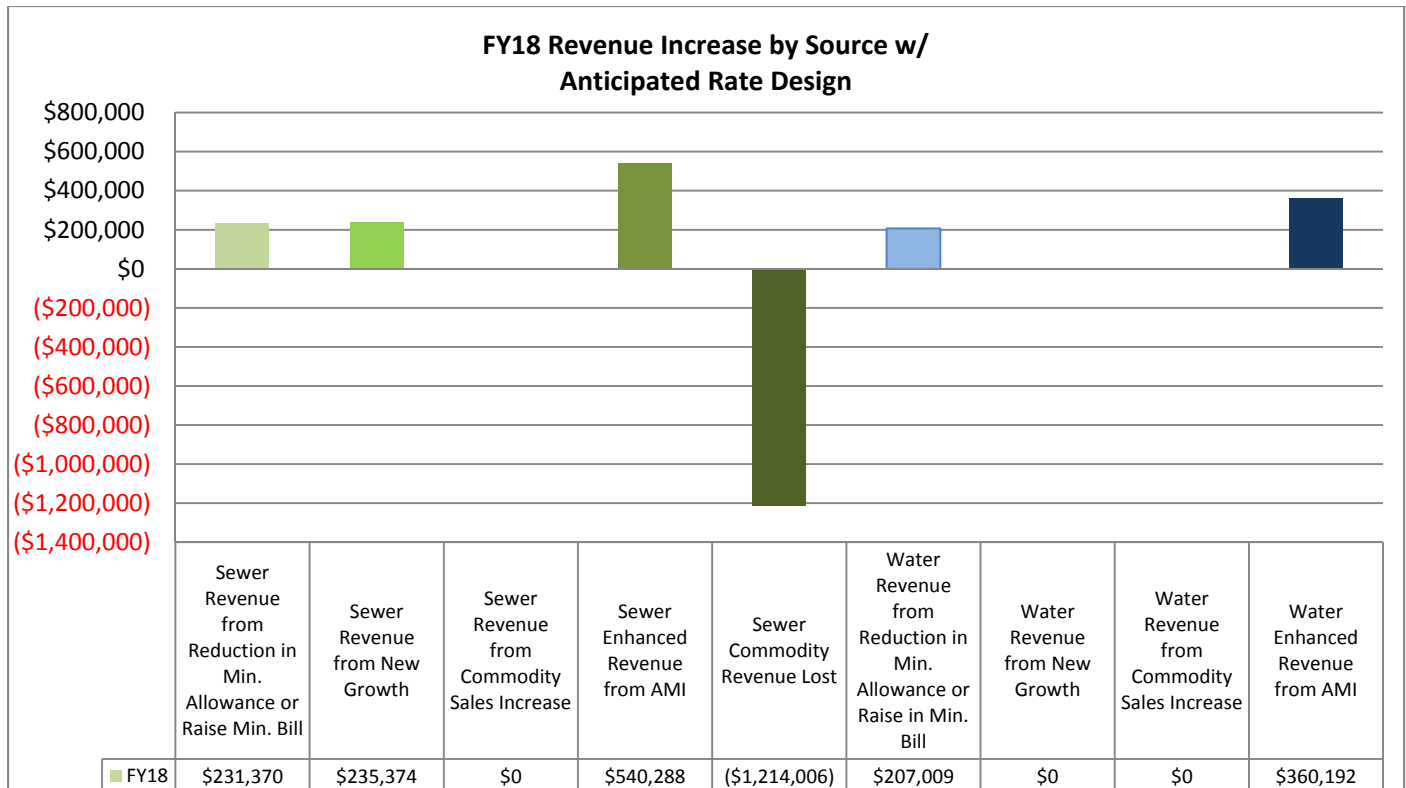
The FY18 total operating expenses, including benefits and payroll, decreased \$(329,641), or -1.52% under the FY17 budgeted amount.

Based on the FY15 Cost of Service Study (COSS) and FY20 Pro Forma developed by Jackson Thornton Financial Consultants, the following chart identifies the revenue deficit projected for the water resources enterprise funds as it relates to the over-recovery that was experienced in FY15.

Chart 1: Historical COS Studies and FY20 Pro Forma Revenue Requirements



The rate adjustments anticipated for FY18 yield approximately \$360,227 in increased revenue; the sources of that increased revenue are broken down in the following chart:



Most of the additional revenue will be sewer sales since the water customer base is not increasing. Additional revenue attributed to growth is from additional sewer customers that are CUD water customers. This trend is expected to continue. Rate designs for upcoming years will involve adjustments to the minimum bill or commodity rate (i.e., \$ per 100 cubic feet). Inclining block rates in which commodity rates increase as consumption reaches certain levels are becoming a national trend to encourage water conservation efforts; however, Murfreesboro has not committed to this rate design philosophy thus far.

An adjustment in the rate design as well as an anticipated reduction in sewer commodity revenue due to General Mills / Yoplait land applying approximately 550,000 gallons per day on the Indian Hills Golf Course. The combination of the rate design increasing revenue and the aforementioned revenue decrease results in an estimated net increase of \$360,000.

\$1,766,254 of sinking funds are being earmarked to assign the excess revenue for future construction or repair and replacement. The sinking funds identified below have been assigned rate revenue since FY15. The total FY18 earmarked amounts and FY15-17 “banked” amounts are as tabulated below:

	<u>FY18 Budget</u>	<u>FY15-17 Budget</u>
1. Water Plant Membrane Replace (Funding Complete)	\$ -	\$800,000
2. Lift Station Replacement (Ongoing)	\$250,000	\$910,000
3. Biosolids Storage & Processing Equipment	\$500,000	\$1,300,000
4. NE Regional P.S. & FM (10-yrs for \$10.0M)	\$890,000	\$1,500,000
5. Walter Hill Dam Remediation/Rehabilitation	\$125,000	\$ -

The sinking funds will be sustained until such time that the entire anticipated debt service hits in the first quarter of 2018 and potentially eliminates the opportunity to continue supporting sinking funds for cash funded projects. The use of sinking funds reduces the need to incur debt thereby alleviating the need for future rate increases.

Table 2 itemizes the projects that will ultimately equal an approximate annual debt service of \$3.4M. Approximately \$3.2M of that annual debt service payment is built into the Department’s FY18 budget; based on the completion of the Southwest regional pumping station, force main, and Sinking Creek headworks and plant expansion projects.

Table 2: Water Resources Department Debt Funded CIP (FY14-18)

Project	Funding Source	Total Estimated Project Cost	Principal Forgiveness	Total Estimated Loan
Southwest Regional Pump Station	SRF	\$8.6 M	\$2.1M	\$6.5 M
Fournier Presses and related equipment	SRF	\$1.4 M	\$400 k	\$1.0
Southwest Regional Force Main	SRF	\$8.9 M	\$400k	\$8.5M
SCWWTP Headworks	SRF	\$9.1 M	\$0	\$9.1 M
SCWWTP Plant Expansion	SRF	\$34.0M	\$0	\$34.0M
TOTAL		\$61.9M	\$2.9M	\$59.0M

The FY18 total operating expenses, including benefits and payroll, decreased \$(329,641), or -1.52% under the FY17 budgeted amount.

The FY18 personnel budget is expected to increase by 1.25% or \$134,346. There are a total of 164 full time and four (4) part time positions budgeted for FY17. Included in the full time positions are seven (7) positions in the Stormwater department. There are three (3) new positions requested for the FY18 personnel budget:

1. Administration/Finance – One (1) position is anticipated to be cut from MWRD’s payroll budget. The position of Admin Aide II is no longer deemed necessary.
2. Engineering – Two (2) new Full Time Equivalents are requested for the Engineering Division. One (1) full-time GIS Technician and one of the following options:
 - a. Two (2) part-time Engineering Support Specialists (Cooperative Students), or
 - b. One (1) full-time Engineer-in-Training (EIT).

The GIS position is necessary to increase the effectiveness of the GIS Coordinator to allow elevated duties in conjunction with the new CIS and AMI systems, as well as start development of the new Computerized Maintenance Management System (CMMS). The new GIS Technician will take over the more routine GIS functions of Data Entry of Easements, Geocoding, Subdivisions, Addressing, Impervious Surfaces, Water Infrastructure, Stormwater Infrastructure, Reclaimed Water Infrastructure, etc. The part-time Engineering Support Specialists (Coop Students) or EIT are deemed necessary to aid in the development plans review process and development of plan of service responses for Planning Commission. The additional engineering support would be groomed for potential backfill of a hard to fill position.

3. Operations & Maintenance – O&M is requesting two (2) new internal promotions that will culminate in two (2) new entry level hires as W/WW Laborers. The two (2) new internal promotions are requested as CCTV Technicians. Since the creation of the Department’s off-road sonar/CCTV crew in 2014 (FY15), the CCTV Vans operating in the road right-of-way have been down to one (1) FTE each. Their production has gone down by 50% and safety is a concern with only one (1) employee working in the road right-of-way. This request would bring the CCTV vans back to full operational output and increase safety with two (2) FTE’s in each van. The other internal promotion is the creation of a new W/WW Foreman. This position would be in charge of the New Construction Crew and would take over a portion of the duties that the Line Construction Coordinator position had previously been accountable for.

The rate funded capital budget is \$5,928,620, which is a decrease of (\$724,945) from the FY17 budget. MWRD’s goal is a minimum of \$5 million per year in rate-funded capital purchases. With increased projected revenues from FY17 factored into the FY18 budget, staff is investing more into the Department’s sinking funds for future major repair and replacement projects. Debt service expense increased \$1,239,271 as compared to the FY17 budget. This increase is due to the Sinking Creek plant expansion being around 85% complete and the full debt service for the \$30.5M improvements hitting the books in FY18.

MURFREESBORO WATER AND SEWER DEPARTMENT

Statement of Net Position

June 30, 2017

ASSETS

Current Assets -

Cash	\$ 75,444,257
Accounts receivable - net	1,757,073
Due from other funds	5,714,785
Material and supply inventories	788,808
Prepaid insurance and maintenance fees	652,689
TOTAL CURRENT ASSETS	\$ <u>84,357,612</u>

Noncurrent Assets -

Restricted cash	\$ 123,647
Capital assets -	
Land and construction in progress	\$ 53,907,801
Other capital assets, net of depreciation	363,069,066
TOTAL NONCURRENT ASSETS	\$ <u>416,976,867</u>
TOTAL ASSETS	\$ <u>501,458,126</u>

DEFERRED OUTFLOWS OF RESOURCES

Deferred outflows on refunding	\$ 1,358,067
Deferred outflows of resources related to pensions	2,676,025
TOTAL DEFERRED OUTFLOWS OF RESOURCES	\$ <u>4,034,092</u>
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	\$ <u>505,492,218</u>

LIABILITIES

Current Liabilities -

Accounts payable	\$ 1,865,619
Accrued and withheld liabilities	665,007
Due to other funds	135,832
Developer deposits	696,494
Compensated absences - current	1,290,046
Bonds and loans payable - current	10,861,996
TOTAL CURRENT LIABILITIES	\$ <u>15,514,994</u>

Noncurrent Liabilities -

Compensated absences	\$ 488,645
Net pension liability	3,664,111
Post-employment benefit obligation	9,254,064
Payable from restricted assets - waterworks and sewer improvement bonds	36,000
State of Tennessee revolving loans	50,785,488
Revenue and tax refunding bonds	36,450,000
Tennessee municipal bond fund loans	28,270,000
Premium on the issuance of revenue and tax refunding bonds	2,243,140
Less: current maturities of long-term debt	(10,861,996)
TOTAL NONCURRENT LIABILITIES	\$ <u>120,329,452</u>
TOTAL LIABILITIES	\$ <u>135,844,446</u>

DEFERRED INFLOWS OF RESOURCES

Deferred inflows of resources related to pensions	\$ 392,307
TOTAL DEFERRED INFLOWS OF RESOURCES	\$ <u>392,307</u>

NET POSITION

Net investment in capital assets	\$ 300,550,306
Restricted for capital activity	66,982
Restricted for employee benefits	19,647
Restricted for matured bonds	37,018
Unrestricted	68,581,512
TOTAL NET POSITION	\$ <u>369,255,465</u>
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION	\$ <u>505,492,218</u>

See notes to financial statements.

MURFREESBORO WATER AND SEWER DEPARTMENT

Statement of Revenues, Expenses, and Changes in Net Position

Year Ended June 30, 2017

Operating Revenues	\$ <u>43,840,996</u>
Operating Expenses -	
Operating expenses	\$ 21,232,459
Maintenance expenses	108,023
Depreciation	13,790,895
Total operating expenses	\$ <u>35,131,377</u>
Operating Income (Loss)	\$ <u>8,709,619</u>
Non-operating Revenues (Expenses) -	
Interest revenue	\$ 105,224
Grant revenue	300,454
Bond costs	(26,980)
Interest expense	(1,925,537)
Loss on disposal of utility plant assets	(1,263,364)
Total non-operating revenues (expenses)	\$ <u>(2,810,203)</u>
Increase in net position, before capital contributions	\$ <u>5,899,416</u>
Capital contributions -	
Tap fees and special assessments	\$ 10,207,972
Developer contributions of systems	7,976,002
Total capital contributions	\$ <u>18,183,974</u>
Increase in net position	\$ <u>24,083,390</u>
Net Position at beginning of year, as previously stated	\$ 350,768,317
Prior period adjustment	(5,596,242)
Net Position at beginning of year, as restated	\$ <u>345,172,075</u>
Net Position at end of year	\$ <u><u>369,255,465</u></u>

See notes to financial statements.

MURFREESBORO WATER AND SEWER DEPARTMENT

Statement of Cash Flows

Year Ended June 30, 2017

Cash Flows from Operating Activities -	
Receipts from customers	\$ 44,487,903
Payments to suppliers	(12,611,973)
Payments to employees	<u>(9,752,040)</u>
Net Cash Provided by Operating Activities	<u>\$ 22,123,890</u>
Cash Flows from Capital and Related Financing Activities -	
Proceeds from state revolving loans	\$ 16,943,522
Principal paid on bonds and notes	(9,881,122)
Interest paid on bonds and notes	(2,172,925)
Proceeds from capital grant	405,050
Proceeds from tap fees and special assessments	10,207,972
Proceeds from sale of capital assets	93,406
Bond costs and debt service expenses	(26,980)
Acquisition and construction of capital assets	<u>(25,929,711)</u>
Net Cash Used by Capital and Related Financing Activities	<u>\$ (10,360,788)</u>
Cash Flows From Investing Activities -	
Interest revenue	<u>\$ 105,223</u>
Net Cash Provided by Investing Activities	<u>\$ 105,223</u>
Net Increase in cash	\$ 11,868,325
Cash at beginning of year	63,699,579
Cash at end of year	<u>\$ 75,567,904</u>
Reconciliation to Cash Presented in Statement of Net Position -	
Cash	\$ 75,444,257
Cash - Restricted	123,647
	<u>\$ 75,567,904</u>
Reconciliation of Operating Income to Net Cash	
Provided by Operating Activities:	
Operating income	\$ 8,709,619
Adjustments to reconcile operating income to net	
cash provided by operating activities -	
Depreciation	13,790,895
Provision for doubtful accounts	125,000
Construction in progress expensed in current year	273,396
Changes in assets and liabilities -	
(Increase) decrease in accounts receivable	413,557
(Increase) decrease in due from other funds	(2,991,179)
(Increase) decrease in material and supplies inventory	85,091
(Increase) decrease in prepaid insurance and maintenance fees	(195,406)
(Increase) decrease in deferred outflows of resources related to pensions	(1,366,127)
Increase (decrease) in accounts payable	456,965
Increase (decrease) in accrued and withheld liabilities	177,855
Increase (decrease) in due to other funds	(68,169)
Increase (decrease) in developer deposits	108,350
Increase (decrease) in compensated absences	(226,350)
Increase (decrease) in net pension liability	1,674,036
Increase (decrease) in post-employment benefit obligations	1,093,404
Increase (decrease) in deferred inflows of resources related to pensions	62,953
Net Cash Provided by Operating Activities	<u>\$ 22,123,890</u>

MURFREESBORO WATER AND SEWER DEPARTMENT

Statement of Cash Flows (continued)

Year Ended June 30, 2017

Non-Cash Capital and Related Financing Activities -	
Developer contributions of systems	\$ 7,976,002
Construction in progress included in accounts payable	835,891
Deferred outflows on refunding of Series 2009 Tax and Revenue Refunding Bonds	(1,615,593)

See notes to financial statements.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements

June 30, 2017

Note A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

This summary of significant accounting policies of the Murfreesboro Water and Sewer Department (the Department) is presented to assist in understanding the Department's financial statements. The financial statements and notes are representations of the Department's management who is responsible for their integrity and objectivity. These accounting policies conform to generally accepted accounting principles.

Financial Reporting - The Murfreesboro Water and Sewer Department is considered a proprietary fund of the City of Murfreesboro (the City) and its financial statements are included in the general purpose financial statements of the City. The Department was created to provide water and sewer services to the residents of the City.

Basis of Presentation - The Department is an enterprise fund and utilizes the accrual basis of accounting. The activities of this fund are accounted for with a separate set of self-balancing accounts that comprise the Department's assets, liabilities, net position, revenues and expenses. Enterprise Funds account for activities (i) that are financed with debt that is secured by a pledge of the net revenues from fees and charges of the activity, or (ii) that are required by laws or regulations that the activity's costs of providing services, including capital costs (such as depreciation or debt service), be recovered with fees and charges, rather than with taxes or similar revenues; or (iii) that the pricing policies of the activity establish fees and charges designed to recover its costs, including capital costs (such as depreciation or debt service).

The accounting and financial reporting treatment applied to the Department is determined by its measurement focus. The transactions of the Department are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the balance sheet. Net position (i.e. total assets plus net deferred outflows net of total liabilities and net deferred inflows) is segregated into net investment in capital assets, restricted, and unrestricted components.

Operating Revenues and Expenses - The Department's operating revenues and expenses consist of revenues earned and expenses incurred relating to the operation and maintenance of its principal ongoing operations. All other revenues and expenses are reported as non-operating revenues and expenses and consist of those revenues and expenses that are related to financing and investing types of activities and result from non-exchange transactions or ancillary activities.

Contributed Capital - Construction and acquisition of water and sewer systems are financed in part by contributions in aid of construction from property owners and developers. Contributed capital represents the total value of donated water systems.

Cash and Equivalents - For purposes of the statement of cash flows, the Department considers all demand deposits to be either cash for operations or restricted cash.

Accounts Receivable - Accounts receivable primarily consist of amounts due from the customers of the Department which under normal terms require payment within 30 days from the billing date with invoice dates over 30 days are considered past due accounts. The Department charges a late payment fee and charges interest on past due accounts. An allowance for uncollectible accounts receivable balances is estimated and recorded based on the Department's historical bad debt experience and management's judgment. As of June 30, 2017 the Department has estimated the allowance to be \$137,961.

Material and Supply Inventories - Inventories are stated at average cost on a first-in, first-out basis. Inventories consist of various pipes and chemicals utilized in the plant maintenance and operations.

Utility Plant - Utility plant in service is recorded on the basis of cost. Cost includes material, direct labor, and other indirect items such as engineering, supervision, and transportation expenses. The threshold for capital assets is \$5,000. The cost of repairs and maintenance is charged to expense when incurred whereas the cost of renewals and betterments is capitalized.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Interest costs incurred that relate to construction of capital assets acquired with tax-exempt debt are capitalized. There was no interest cost charged to capital assets in the fiscal year ended June 30, 2017.

Depreciation expense is provided for functional groups of plant accounts on the straight-line method. Rates assigned to utility plant are intended to distribute the cost of the depreciable property over their estimated useful lives. The estimated useful lives by general classification are as follows:

Structures and improvements	20-50 years
Transmissions and distribution mains	15-50 years
Equipment	4-20 years

When depreciable assets are disposed of, the related costs and accumulated depreciation are removed from the respective accounts. Gain or loss is generally recognized on the disposition or retirement of transportation equipment equal to the differences in the proceeds from sale, if any, and the net book value of the individual item. When portions of utility plant as a whole are retired, sold or abandoned a gain or loss is recognized equal to the difference in the net book value and sales price or estimated realizable value.

Pensions - For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense (income), information about the fiduciary net position of the Department's participation in the City of Murfreesboro Employees' Pension Plan (the Pension Plan), and additions to/deductions from the Pension Plan's fiduciary net position have been determined on the same basis as they are reported by the Pension Plan. For this purpose, benefits (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms of the Pension Plan. Investments are reported at fair value.

Deferred inflows/outflows of resources - In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflow of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Department reports deferred charges on refunding and deferred outflows related to pensions. A deferred charge on refunding results from the difference in the carrying amount of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt using the effective interest method. Deferred outflows related to pension plans are discussed in detail in Note G.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The department has one type of item applying for reporting in this category. This item relates to certain amounts related to pensions that must be deferred. Deferred inflows related to pension plans are discussed in detail in Note G.

Net Position Flow Assumption - When both restricted and unrestricted resources are available for use, it is the Department's policy to use restricted resources first and then unrestricted resources as they are needed.

Long-term Debt - Long-term debt and other long-term obligations are reported as liabilities in the statement of net position. Bond premiums are amortized over the life of the bonds using the effective interest method. Issuance costs are reported as expenditures when incurred.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Compensated absences - Department employees accrue personal leave, sick leave or compensated absences, by prescribed formulas based on length of service. The value of accumulated benefits earned by employees, that may be used in subsequent years or paid upon resignation, termination or retirement, is recorded as long-term debt in the Department's financial statements. The current portion of this debt is estimated based on historical trends.

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

Reclassifications - Certain reclassifications have been made to the prior year financial statements in order to conform to the current year presentation.

Note B - UTILITY PLANT

Components of utility plant at June 30, 2017 are summarized as follows:

	(as restated)			
	Balance		Adjustments	Balance
	June 30, 2016	Increases	Decreases	June 30, 2017
Utility plant not being depreciated -				
Land and land rights	\$ 14,325,669	\$ 156,854	\$ 676	\$ 14,481,847
Construction in progress	34,818,689	29,792,885	25,185,620	39,425,954
Subtotal	<u>\$ 49,144,358</u>	<u>\$ 29,949,739</u>	<u>\$ 25,186,296</u>	<u>\$ 53,907,801</u>
Utility plant being depreciated -				
Structures and improvements	\$ 112,963,264	\$ 385,339	\$ 2,044,175	\$ 111,304,428
Transmission and distribution mains	344,987,006	18,236,643	2,501,791	360,721,858
Equipment	57,712,703	7,481,498	1,251,947	63,942,254
Subtotal	<u>\$ 515,662,973</u>	<u>\$ 26,103,480</u>	<u>\$ 5,797,913</u>	<u>\$ 535,968,540</u>
Less accumulated depreciation for -				
Structures and improvements	\$ (37,646,612)	\$ (2,989,543)	\$ (1,936,880)	\$ (38,699,275)
Transmission and distribution mains	(95,499,091)	(6,914,464)	(1,335,261)	(101,078,294)
Equipment	(30,368,696)	(3,886,888)	(1,133,679)	(33,121,905)
Subtotal	<u>\$ (163,514,399)</u>	<u>\$ (13,790,895)</u>	<u>\$ (4,405,820)</u>	<u>\$ (172,899,474)</u>
Utility plant, being depreciated, net	\$ 352,148,574	\$ 12,312,585	\$ 1,392,093	\$ 363,069,066
Utility plant, net	<u>\$ 401,292,932</u>	<u>\$ 42,262,324</u>	<u>\$ 26,578,389</u>	<u>\$ 416,976,867</u>

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note C – RESTRICTED CASH

Certain amounts received from outside sources whose use is limited by that source or amounts required to be deposited in a separate bank account for a specific use by an outside party have been classified as restricted assets. At June 30, 2017, the Department had the following restricted cash.

Restricted for employee benefits	\$ 19,647
Restricted for capital project	66,982
Cash held by fiscal agent for matured bonds	37,018
	<u>\$ 123,647</u>

Note D - DESIGNATED CASH AND UNRESTRICTED NET POSITION

The Department has designated certain funds for planning purposes. Designated cash consists of the following as of June 30, 2017:

Water and sewer connection fees	\$ 16,977,553
Reserve sinking fund	397,484
Interest income reserve	2,756,076
Repair and replacement sinking fund	4,376,232
Future debt reserve	5,438,099
	<u>\$ 29,945,444</u>

The Department's management has established a repair and replacement sinking fund to be used for specifically approved capital improvements, both current and anticipated expansions, and major repairs and replacements of existing plant to include emergency contingencies for major catastrophes and acts of God (lightning, wind, etc.). The water and sewer connection fees as set up by February 13, 1987 amendments to the City Code are designated for new development and construction. The funds are to be appropriated at the recommendation by the Water and Sewer Board to the City Council. The reserve sinking fund represents amounts set aside by management related to future costs anticipated to be paid to the Corp of Engineers to pump water from Percy Priest Lake.

In addition, the governing board has established the following fund designations in connection with the rate setting process. The interest income reserve was set up by the Water and Sewer Board to reserve interest earned on non-operational funds so it would not be used in the rate structure and can be used to fund future construction upon board approval. The amount of future debt reserve was established by the Water and Sewer Board for payments of principal and interest on debt.

Designated net position takes into account amounts accrued at year end to be paid in the following fiscal year. Designated net position consists of the following as of June 30, 2017.

Water and sewer connection fees	\$ 16,623,295
Reserve sinking fund	397,484
Interest income reserve	2,756,076
Repair and replacement sinking fund	4,376,232
Future debt reserve	5,438,099
	<u>\$ 29,591,186</u>

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note D - DESIGNATED CASH AND UNRESTRICTED NET POSITION (continued)

Unrestricted net position at June 30, 2017 consists of the following:

Designated net position	\$ 29,591,186
Undesignated net position	38,990,326
Total unrestricted net position	<u>\$ 68,581,512</u>

Note E - PUBLIC FUNDS COLLATERALIZED BY FINANCIAL INSTITUTIONS

Interest rate risk - The Department has adopted a policy to minimize the risk that the market value of securities in the portfolio will fall due to changes in general interest rate by: structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations thereby avoiding the need to sell securities on the open market prior to maturity and investing operating funds primarily in short-term securities, money market mutual funds, or similar investment pools.

Custodial credit risk - deposits and investments - This is the risk that in the event of a bank failure, the Department's deposits may not be returned to it. The Department has adopted a deposit and investment policy for custodial credit risk, which allows for deposits and investments to only be held with authorized financial dealers and institutions. All financial institutions who desire to become qualified for investment transactions must supply annual audited financial statements or be an active member of the State Collateral Pool. If the financial institution is not an active member of the State Collateral Pool, the deposits must be covered by either collateral securities held by the institution in the Department's name or Federal Depository Insurance. As of June 30, 2017, the carrying amount of the Department's deposits and bank balances were as follows:

	<u>Book Balance</u>	<u>Bank Balance</u>
Unrestricted deposits	\$ 75,442,638	\$ 77,057,499
Restricted deposits	123,647	123,647
Cash on hand	1,619	
	<u>\$ 75,567,904</u>	<u>\$ 77,181,146</u>

At year end, the Department's bank balances were fully collateralized.

Credit Risk - The Department has adopted a policy to minimize the risk of loss due to the failure of the security issuer or backer by: limiting investments to the safest types of securities; pre-qualifying the financial institutions, broker/dealers, intermediaries, and advisers with which the Department will do business; diversifying the investment portfolio so that potential losses on individual securities will be minimized.

Investments - State statutes authorize the Department to invest operating funds in bonds, notes, or treasury bills of the United States or any of its agencies, certificates of deposit at Tennessee state chartered banks and savings and loan associations, repurchase agreements utilizing the obligations of the United States or its agencies as the underlying securities, and state pooled investment fund. Statutes also require that securities underlying repurchase agreements must have a market value at least equal to the amount of funds invested in the repurchase transaction. The Department has no such investments at June 30, 2017.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note F - LONG-TERM DEBT

The long-term debt consists of the following as of June 30, 2017:

Matured bonds payable - 1959	\$	1,000
Matured bonds payable - 1972		15,000
Matured bonds payable - 1972		20,000
Total bonds payable	\$	<u>36,000</u>
State revolving loans		50,785,488
Revenue and tax refunding bonds		36,450,000
Tennessee Municipal Bond Fund loans		28,270,000
Total long-term debt	\$	<u><u>115,541,488</u></u>

State Revolving Loans - The Department has five revolving loan agreements with the State of Tennessee for various capital projects. During the year ended June 30, 2017, the Department borrowed a total of \$16,943,522 from the State of Tennessee on three of these revolving loans. Under the terms of the debt agreement the Department will have a portion of the loans forgiven by the State of Tennessee. During the current year \$405,050 of the borrowings on the revolving loans was forgiven. The total outstanding balance of the revolving loans at June 30, 2017 is \$50,785,488. These loans bear interest at annual interest rates ranging from .93% to 1.30%. Interest is due and payable on a monthly basis. Under terms of the revolving loans the Department has agreed to defer principal payments until the projects are substantially completed. One of the projects was not considered substantially completed as of June 30, 2017. Related to this project, at June 30, 2017, \$24,950,375 had been drawn on this loan. Subsequent to year end, the loan was converted to a term loan with repayment to be made over a 20 year period; therefore, the debt service requirements for this loan are included in the schedule below.

Annual principal maturities and interest payments, related to the State of Tennessee revolving loans are due as follows:

<u>State Revolving Loans</u>			
<u>Year Ended</u>			
<u>June 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2018	\$ 2,233,996	\$ 526,396	\$ 2,760,392
2019	2,738,592	637,224	3,375,816
2020	2,770,236	605,580	3,375,816
2021	2,802,264	573,552	3,375,816
2022	2,834,688	541,128	3,375,816
2023 - 2027	14,673,240	2,205,840	16,879,080
2028 - 2032	15,543,240	1,335,840	16,879,080
2033 - 2035	7,189,232	218,551	7,407,783
	<u>\$ 50,785,488</u>	<u>\$ 6,644,111</u>	<u>\$ 57,429,599</u>

Revenue and tax refunding bonds - Revenue and tax refunding bonds are collateralized by an irrevocable first lien on and pledge of the income and revenues derived and to be derived from the operation of the system after deducting them from the amount necessary to pay all operating, maintenance, replacement, and betterment charges of the system as required by the applicable bond ordinances. The system is also required to maintain rates sufficient to: (a) pay all maintenance, replacement, betterments, and interest charges; (b) to establish and maintain bond funds; (c) to pay in addition all outstanding debt against the system other than bonds.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note F - LONG-TERM DEBT (continued)

Advance Refunding/Defeasance - During the year ended June 30, 2010 the Department refinanced certain of its Tennessee Municipal Bonds by issuing \$40,860,000 in tax and refunding bonds (2009 Tax and Revenue Refunding Bonds) in conjunction with the City of Murfreesboro with maturity dates the same dates as the original bonds ranging from 2015 through 2026 and bear interest rates ranging from 2.00% to 4.00%. These refunding bonds (2009 Tax and Revenue Refunding Bonds) were partially refunded in advance on June 15, 2016 with a 2016 Tax and Refunding Bonds in the amount of \$17,015,000 leaving an unrefunded balance on the 2009 Tax and Revenue Refunding Bonds of \$7,105,000 which mature in the fiscal year end 2019.

During the year ended June 30, 2013, the Department borrowed \$28,610,000 in revenue and tax refunding bonds and paid off State of Tennessee revolving loans. The 2013 revenue and refunding bonds are payable through 2021 at a fixed rate of 1.31%.

The future maturities dates for the Department's revenue and tax refunding bonds are as follows:

Revenue and Tax Refunding Bonds				
Year Ended June 30,	2009 Series	2013 Series	2016 Series	Total
Principal				
2018	\$ 2,370,000	\$ 3,600,000	\$ 100,000	\$ 6,070,000
2019	2,475,000	3,650,000	100,000	6,225,000
2020		3,695,000	2,470,000	6,165,000
2021		3,745,000	2,585,000	6,330,000
2022			2,705,000	2,705,000
2023 - 2026			8,955,000	8,955,000
	<u>\$ 4,845,000</u>	<u>\$ 14,690,000</u>	<u>\$ 16,915,000</u>	<u>\$ 36,450,000</u>

Annual interest payments for the Revenue and Tax Refunding Bonds are as follows:

Revenue and Tax Refunding Bonds				
Year Ended June 30,	2009 Series	2013 Series	2016 Series	Total
Interest				
2018	\$ 242,250	\$ 192,439	\$ 662,000	\$ 1,096,689
2019	123,750	145,279	657,000	926,029
2020		97,464	652,000	749,464
2021		49,060	528,500	577,560
2022			399,250	399,250
2023 - 2026			481,800	481,800
	<u>\$ 366,000</u>	<u>\$ 484,242</u>	<u>\$ 3,380,550</u>	<u>\$ 4,230,792</u>

Tennessee Municipal Bond Fund Loans - The Department had two 15 year variable rate loans from the Tennessee Municipal Bond Fund Loan Program as of June 30, 2017. The interest rate on these loans are variable and are set by the remarketing agent and are based on the market price of the bonds underlying the note.

The Department participated in the Tennessee Municipal Bond Fund Loan program and entered in to loan agreements from the Public Building Authority of the City of Clarksville, Tennessee.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note F - LONG-TERM DEBT (continued)

Annual debt service requirements to maturity are as follows:

<u>Tennessee Municipal Bond Fund Loans</u>			
<u>Year Ended</u> <u>June 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Principal</u> <u>and Interest</u>
2018	\$ 2,522,000	\$ 392,837	\$ 2,914,837
2019	2,630,000	357,403	2,987,403
2020	2,742,000	320,453	3,062,453
2021	2,859,000	281,929	3,140,929
2022	2,980,000	241,761	3,221,761
2023 - 2027	14,537,000	595,387	15,132,387
	<u>\$ 28,270,000</u>	<u>\$ 2,189,770</u>	<u>\$ 30,459,770</u>

Maturities dates for the Tennessee Municipal Bond Fund Loans are as follows:

<u>Year Ended</u> <u>June 30,</u>	<u>2003 Series</u>	<u>2006 Series</u>	<u>Total</u>
Principal			
2018	\$ 471,000	\$ 2,051,000	\$ 2,522,000
2019	486,000	2,144,000	2,630,000
2020	502,000	2,240,000	2,742,000
2021	518,000	2,341,000	2,859,000
2022	534,000	2,446,000	2,980,000
2022 - 2027	552,000	13,985,000	14,537,000
	<u>\$ 3,063,000</u>	<u>\$ 25,207,000</u>	<u>\$ 28,270,000</u>

Annual interest payments for the Tennessee Municipal Bond Fund Loans are as follows:

<u>Year Ended</u> <u>June 30,</u>	<u>2003 Series</u>	<u>2006 Series</u>	<u>Total</u>
Interest			
2018	\$ 42,332	\$ 350,505	\$ 392,837
2019	35,721	321,682	357,403
2020	28,898	291,555	320,453
2021	21,852	260,077	281,929
2022	14,581	227,180	241,761
2023 - 2027	7,084	588,303	595,387
	<u>\$ 150,468</u>	<u>\$ 2,039,302</u>	<u>\$ 2,189,770</u>

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note F - LONG-TERM DEBT (continued)

Long-term liability activity for the year ended June 30, 2017, was as follows:

	Balance June 30, 2016	Increases	Decreases	Balance June 30, 2017	Due Within One Year
Matured bonds payable	\$ 36,000			\$ 36,000	\$ 36,000
Revenue and tax refunding bonds	42,365,000		\$ 5,915,000	36,450,000	6,070,000
Add: premium on refunding	2,775,439		532,299	2,243,140	
	\$ 45,176,439		\$ 6,447,299	\$ 38,729,140	\$ 6,106,000
State revolving loans Tennessee Municipal Bond Fund Loans	35,389,088	\$ 16,943,522	1,547,122	50,785,488	2,233,996
Compensated absences	30,689,000		2,419,000	28,270,000	2,522,000
Net pension liability	2,005,041	142,386	368,736	1,778,691	1,290,046
Post-employment benefit obligation	1,990,075	1,674,036		3,664,111	
	8,160,660	1,338,205	244,801	9,254,064	
	<u>\$ 123,410,303</u>	<u>\$ 20,098,149</u>	<u>\$ 11,026,958</u>	<u>\$ 132,481,494</u>	<u>\$ 12,152,042</u>

Note G - PENSION PLAN

General Information about the Pension Plan

Plan Description - Employees of the Department are provided a defined benefit pension plan through the City of Murfreesboro Employees' Pension Plan (the Pension Plan). The Pension Plan covers all City employees except those employees of the school system, the Evergreen Cemetery Commission and electric department. All other departments of the City, including the water and sewer department and stormwater fund, are covered by the Pension Plan. The funds of the Pension Plan are invested in trust funds managed by Pinnacle Financial Partners who serves as trustees for the Pension Plan.

In accordance with the City Code, subject to approval by the City Council, Pension Plan provisions may be established or amended by the pension committee. The pension committee is an eight-member board appointed by City Council to oversee the City's Pension Plan. At least two of the board members must be participants in the Pension Plan. The current pension committee is comprised of three city employees, and one City Council member. The remaining board members have backgrounds in banking, investment advising and insurance.

The City issues a publicly available financial report that includes the required supplementary information for the Pension Plan. For more information regarding this Pension Plan contact the City Recorder's office:

Melissa B. Wright
City Recorder/Finance Director
111 West Vine Street, P.O. Box 1139
Murfreesboro, TN 37133-1139,
615-893-5210
mwright@murfreesborotn.gov

The June 30, 2017 City of Murfreesboro comprehensive audited financial statements, including the Pension Plan, will be posted to the City's website at www.murfreesborotn.gov, once it is available.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note G - PENSION PLAN (continued)

General Information about the Pension Plan (continued)

Employees who were regularly employed for at least 30 hours per week for at least six months of the year became eligible to participate upon completion of ninety days of employment.

Employees hired after June 30, 2010 are not eligible to participate in this plan.

Employment shall be the period of a participant's continuous and uninterrupted employment since his late date of employment with the City; certain authorized leaves of absence do not interrupt continuous employment.

Benefits provided - The Pension Plan provides for a basic monthly pension beginning at normal retirement age which is based upon the monthly compensation of the participant. The normal retirement date for general employees is the participant's 65th birthday or the participant's attainment of age 55 and completion of 30 years of service. The normal retirement date for firefighters and police officers is the participant's 55th birthday.

The normal retirement benefit, one twelfth of which is payable monthly for life, with the first 60 payment guaranteed, is equal to 2% of average earnings, multiplied by the total years of employment not in excess of 30 years. "Average earnings" is the average annual basic earnings of a participant for the five consecutive years of employment which produce the highest average.

A participant other than a firefighter or police officer may retire early after attaining age 55 and completion of 25 years of credited service, or upon attaining age 62 and completion of 20 years of credited service. The early retirement benefit, to commence immediately, is computed in the same manner as the normal retirement above using compensation and credited service to the date of early retirement, but is reduced actuarially for each year the participant's date of early retirement precedes his normal retirement date.

A participant may postpone their retirement beyond their normal retirement date provided that participant is physically and mentally capable of performing the duties and responsibilities of the participant's job. The benefit is computed in the same manner as for normal retirement, with the compensation being made as the participant's actual retirement date.

In the event of the death of a married participant after becoming vested, a monthly survivorship benefit shall be paid to the participant's surviving spouse. In the event of the death of a single participant after becoming vested, a lump sum benefit shall be payable to the participant's beneficiary.

In the event of the death of a married vested former employee before age 65 with the spouse surviving, a monthly survivorship benefit shall be payable to the participant's surviving spouse.

If the employment of a participant is terminated after completing at least 5 years of participation, the participant is entitled to a deferred vested benefit. The deferred benefit, to commence at age 65, is computed in the same manner as in normal retirement using compensation and credited service to the date of termination. The participant shall be vested in his accrued benefit. A participant may elect to receive a return of employee contributions accumulated with interest at a rate of 7.5% per annum in lieu of a deferred vested benefit.

Contributions - The Pension Plan was amended on July 1, 1988 to make it noncontributory whereby the employer contributes the entire amount necessary to fund the Pension Plan. Contribution rates are recommended by the pension committee based on the annual actuarial valuation report, and must also be approved by City Council. The contribution rate for the fiscal year ended June 30, 2016, the actuarial valuation date, was 12.32%. The contribution rate for the fiscal year ended June 30, 2017 was 12.32%.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note G - PENSION PLAN (continued)

Net Pension Liabilities (Assets), Pension Expense (Income) and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

Pension Liability - At June 30, 2017, the Department reported liability of \$3,664,111 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016, and the total pension liability used to calculate the net pension asset was determined by an actuarial valuation as of that date. The actuarial report is divided into two parts, one representing the Department of which the Stormwater Fund is part and all other city employees. The Department's proportion of the net pension liability was based on the Department's contributions to the pension plan relative to the contributions of the Murfreesboro Stormwater Fund. At the measurement date of June 30, 2016, the Department's proportion relative to the Murfreesboro Stormwater Fund was 94.14 percent. The proportion measured as of June 30, 2015 was 95.46 percent.

Pension Expense - For the year ended June 30, 2017, the Department recognized pension expense of \$971,445.

Deferred Outflows of Resources and Deferred Inflows of Resources - For the year ended June 30, 2017, the Department reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Outflows of Resources</u>	<u>Inflows of Resources</u>
Differences between expected and actual experience	\$ 82,991	\$ 392,307
Net difference between projected and actual earnings on pension plan investments	2,006,477	
Contributions subsequent to the measurement date of June 30, 2016	<u>586,557</u>	
Total	<u>\$ 2,676,025</u>	<u>\$ 392,307</u>

The Department's employer contributions of \$586,557, reported as pension related deferred outflows of resources subsequent to the measurement date, will be recognized as a decrease of net pension liability (asset) in the year ended June 30, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

<u>Year Ended June 30:</u>	
2018	\$ 363,299
2019	363,299
2020	695,651
2021	336,779
2022	(61,867)
Thereafter	-

In the table shown above, positive amounts will increase pension expense while negative amounts will decrease pension expense.

Actuarial Assumptions - The total pension liability as of the June 30, 2016 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial cost method	Entry age normal
Inflation	None
Salary Increases	4.00%
Investment Rate of Return	7.25 percent, net of investment expenses, including inflation
Cost-of-Living Adjustment	None
Mortality	RP 2000 Combined Mortality Table with mortality improvement through the valuation date

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note G - PENSION PLAN (continued)

The actuarial assumptions used in the June 30, 2016 actuarial valuation were based on the review of plan experience in conjunction with the July 1, 2011 actuarial valuation report. The actuary annually reviews the assumptions and methods for reasonableness.

Investment Rate of Return - The investment rate of return is 7.25% per annum, compounded annually. The long-term expected rate of return on pension plan investments was determined using a modified 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 a 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 forward-looking rates of return for each major asset class included in the pension plan's target asset allocation are summarized in the following table:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>
US Small/MidCap Equity	8.40%
US Large Cap Equity	7.83%
International Equity	7.64%
Emerging Markets Equity	8.69%
Cash Equivalent	3.23%
Core US Bonds	4.42%
Global Bonds	3.47%
High Yield Bonds	6.20%
Natural Resources	5.02%
Global Real Estate	6.69%

Discount rate - The discount rate used is 7.25% per annum, compounded annually.

Paragraph 29 of Statement No. 68 *Accounting and Financial Reporting for Pensions* provides for an alternative method to be used other than the projection of the pension plan's fiduciary net position based on projected contributions, benefit payments and investment earnings. The current contribution policy requires contributions of the normal cost plus a closed amortization of the unfunded liabilities (not to exceed 30 years from when the unfunded liability was created). Based on these assumptions and the actuarial methodology adopted, the Department's fiduciary net position is expected to remain positive and to be available to make projected future benefit payments of current active and inactive members and to cover administrative expenses. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Proportionate Share of Net Pension Liability (Asset) to Changes in the Discount Rate - The following presents the Department's proportionate share of the net pension liability (asset) of the City's Pension Plan calculated using the discount rate of 7.25 percent, as well as what the Department's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	<u>1% Decrease (6.25%)</u>	<u>Discount Rate (7.25%)</u>	<u>1% Increase (8.25%)</u>
Murfreesboro Water and Sewer Department's proportionate share of the net pension liability (asset)	\$ 6,459,201	\$ 3,664,111	\$ 1,277,691

Pension Plan Fiduciary Net Position - Detailed information about the pension plan's fiduciary net position is available in a separately issued City of Murfreesboro report.

Payable to the Pension Plan

At June 30, 2017, the Department reported no outstanding contributions to the Pension Plan required at the year ended June 30, 2017.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note H - INTERFUND TRANSACTIONS

The outstanding balances between funds result mainly from the time lag between the dates that (1) interfund goods and services are provided or reimbursable expenditures occur, (2) transactions are recorded in the accounting system, and (3) the payments between funds are made.

Interfund receivable and payable balances at June 30, 2017, arising from these transactions were as follows:

	<u>Due From</u>	<u>Due To</u>
Water and Sewer Fund -		
General fund		\$ 135,685
Insurance fund		147
Stormwater fund	\$ 5,714,785	
Total	<u>\$ 5,714,785</u>	<u>\$ 135,832</u>

Note I - DEFINED CONTRIBUTION PLAN

Effective July 1, 2010, a defined contribution plan has been implemented by the City. In accordance with the City of Murfreesboro's city code, pension plan provisions (including contribution requirements) may be established or amended by the pension committee.

The defined contribution plan covers all full-time employees hired on or after July 1, 2010. The provisions of this plan require a 3% mandatory employee contribution. The Department will match 100% of the employee contributions up to 8%. Employees are immediately vested in the employee contributions plus actual earnings thereon. Employees become 100% vested in the match contribution after 5 years of full-time employment. Employer contributions and expense for the year ended June 30, 2017 totaled \$70,573. During the fiscal year ended June 30, 2017, employees made \$132,931 in contributions to the plan. For the year ended June 30, 2017, forfeited balances of terminated participant's nonvested accounts were used to reduce the Department's contributions in the amount of \$31,095.

Note J - CAPITAL CONTRIBUTIONS

The Department receives contributions from contractors/developers who bear the costs of laying water and sewer lines to newly developed areas. These assets become the property of the Department. Total contributions received in the years ended June 30, 2017 totaled \$7,976,002.

Note K - CURRENT YEAR WATER AND SEWER TAPS CONTRIBUTIONS

Fees related to the physical connection to the utility system were recorded by the Department as operating income determined by related costs, which were expensed.

Note L - FINANCIAL INSTRUMENTS

The carrying values of the Department's financial instruments (cash and cash equivalents, investments, receivables, notes and accounts payable, and accrued expenses) approximate fair value due to their current availability, relatively short maturities and/or current market interest rates.

Note M - RISK MANAGEMENT

The Department is subject to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Department participates in the City of Murfreesboro Risk Management Fund in which workers compensation, general liability, property and automobile claims are self-insured. The Department pays an annual premium to the risk management fund. The risk of loss is transferred to the risk management fund.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note N - POST-EMPLOYMENT BENEFITS

Plan Description

In addition to pension benefits described in Note G, the City provides certain health care benefits for retired employees (the Plan). The current retiree's share of premiums is 20%. The Department employees are eligible to retire at age 65 with a minimum of five (5) years of participation in the Plan, or at 55 with thirty (30) years of pension eligible service, or at age 62 with twenty (20) years of pension eligible service, or at age 55 with twenty-five (25) years of pension eligible service with actuarially reduced retirement benefits.

Each year, as part of the budgeting process, the City Council decides whether to provide eligible retiree and dependent medical coverage for the upcoming fiscal year. It adopts a resolution describing the benefit it intends to provide. Whether the benefit is offered, and the value and terms of the benefit, are subject to change at any time as the benefit has never been adopted by ordinance with any employee group so as to create any vested right to it. The City may alter, amend or discontinue this benefit at any time.

The Plan does not issue separate financial statements.

Funding Policy and Annual OPEB Cost

Contribution requirements of the Department and plan members are determined by the City Council. The benefits of the Department's other postemployment benefits other than pensions are funded on a pay-as-you go basis. The Department funds on a cash basis as benefits are paid. No assets have been segregated and restricted to provide for postretirement benefits. For the year ended June 30, 2017, the Department paid \$339,422 under the Plan.

The Department's other post-employment benefit (OPEB) cost is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a funding level that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years.

The following table shows the Department's annual OPEB cost for the year, and amount actually contributed to the Plan, and the changes in the Department's net OPEB obligation for the years ending June 30, 2017 are as follows:

Annual required contribution	\$	1,268,821
Interest on net OPEB obligation		367,230
Adjustment to annual required contribution		<u>(297,846)</u>
Annual OPEB cost	\$	1,338,205
Contributions made		<u>(244,801)</u>
Increase in net OPEB obligation	\$	1,093,404
Net OPEB obligation at beginning of year		<u>8,160,660</u>
Net OPEB obligation at end of year	\$	<u><u>9,254,064</u></u>

As of July 1, 2016, the most recent actuarial valuation, the Plan was 0% funded.

The annual OPEB cost, the percentage of annual OPEB cost contributed to the Plan, and the net OPEB obligation for the current year and the preceding two years is as follows:

<u>Year End</u>	<u>Annual OPEB Cost</u>	<u>Annual OPEB Cost Contributed</u>	<u>Net OPEB Obligation at Year-end</u>
06/30/15	\$ 1,345,833	19.0%	\$ 7,216,410
06/30/16	\$ 1,255,269	24.8%	\$ 8,160,660
06/30/17	\$ 1,338,205	25.4%	\$ 9,254,064

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Financial Statements (continued)

June 30, 2017

Note N - POST EMPLOYMENT BENEFITS (continued)

The actuarial accrued unfunded liability (UAAL) for benefits was \$14,456,136. The projected payroll (annual payroll of active employees covered by the Plan) was \$7,167,093 and the ratio of the UAAL to the covered payroll was 201.7%.

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 healthcare cost trends. Amounts determined regarding the funded status of the Plan 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 funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of Plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Projections of benefits for financial reporting purposes are based on the substantive Plan as understood by the employer and included the types of benefits provided at the time of each valuation. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities.

The OPEB was set at \$0 at the transition to GASB 45. The actuarial method used was the entry age normal cost method. The Plan was assumed to be unfunded. Health care cost trend rate assumes an 8% increase graded uniformly to 5% over 6 years for medical costs, with a 5% per annum increase for administration expenses and a 10% increase per annum for stop loss expenses. Pre-65 non-medicare claims are assumed to increase 3% each attained age from ages 55-65. Similarly post-65 Medicare claims are assumed to increase by 3% each attained age from 65-75. A discount rate of 4.5% was used.

Note O - COMMITMENTS

The Department has commitments for construction contracts at June 30, 2017 in the amount of \$2,728,453.

Note P - PRIOR PERIOD ADJUSTMENT

A prior period adjustment to net position and accumulated depreciation was required in the amount of \$5,596,242 to decrease net position and increase accumulated depreciation. The prior period adjustment was required for the correction of an error in the classification of certain capital assets as non-depreciable capital assets and other corrections made to reconcile the financial statements to the capital asset subsidiary ledger.

REQUIRED SUPPLEMENTARY INFORMATION

MURFREESBORO WATER AND SEWER DEPARTMENT

Required Supplementary Information

**Schedule of Murfreesboro Water and Sewer Department's
Proportionate Share of the Net Pension Liability
Participation in the City of Murfreesboro Employees' Pension Plan
Last 10 Fiscal Years ending June 30 (1)***

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Murfreesboro Water and Sewer Department's proportion of the net pension liability	17.83%	14.83%	14.49%
Murfreesboro Water and Sewer Department's proportionate share of the net pension liability	\$ 920,819	\$ 1,990,075	\$ 3,664,111
Murfreesboro Water and Sewer Department's covered payroll	\$ 5,910,336	\$ 6,786,642	\$ 6,254,427
Murfreesboro Water and Sewer Department's proportionate share of the net pension liability as a percentage of its covered payroll	15.58%	29.32%	58.58%
Plan fiduciary net position as a percentage of the total pension liability	95.93%	89.96%	82.25%

* *The amounts presented were determined as of June 30 of the prior fiscal year.*

(1) *This is a 10-year schedule; however, the information in this schedule is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.*

MURFREESBORO WATER AND SEWER DEPARTMENT

Required Supplementary Information

Schedule of Murfreesboro Water and Sewer Department's Pension Contributions
City of Murfreesboro Employees' Pension Plan
Last 10 Fiscal Years ending June 30 (1)

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Actuarially determined contribution (ADC)	\$ 838,821	\$ 769,605	\$ 709,252	\$ 586,557
Contributions in relation to the actuarially determined contribution	838,821	769,605	764,291	586,557
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (55,039)</u>	<u>\$ -</u>
Covered payroll	\$ 5,910,336	\$ 6,786,642	\$ 6,254,427	\$ 4,761,010
Contributions as a percentage of covered payroll	14.19%	11.34%	12.22%	12.32%

Notes to Schedule -

Valuation date: Actuarially determined contribution rates for 2017 were calculated based on the July 1, 2015 actuarial valuation

Methods and assumptions used to determine contribution rates are:

Actuarial cost method	Entry age normal
Amortization method	Level dollar, closed, not to exceed 30 years
Remaining amortization period	26 years
Asset valuation method	Five year smoothing method
Inflation	None
Salary increases	4.00%
Investment rate of return	7.25%, net of investment expense, including inflation
Retirement age	Graded scale starting at age 55 with 100% at age 67
Mortality	RP 2000 Combined Mortality Table with Mortality Improvement to the Valuation Date
Cost of living adjustments	None

(1) *This is a 10-year schedule; however, the information in this schedule is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.*

MURFREESBORO WATER AND SEWER DEPARTMENT

Required Supplementary Information
Other Post-Employment Benefits

Schedule of Funding Progress

June 30, 2017

<u>Actuarial Valuation Date</u>	<u>Actuarial Value of Assets (a)</u>	<u>Actuarial Accrued Liability (b)</u>	<u>Unfunded AAL (UAAL) (b-a)</u>	<u>Funded Ratio (a/b)</u>	<u>Annual Covered Payroll (c)</u>	<u>UAAL as a Percentage of Covered Payroll ((b-a)/c)</u>
07/01/11	-0-	13,289,514	13,289,514	0.0	6,728,128	211.7
07/01/13	-0-	13,904,243	13,904,243	0.0	6,730,185	206.6
06/30/16	-0-	13,370,802	13,370,802	0.0	6,891,736	194.0

SUPPLEMENTAL SECTION

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Operating Revenues

Year Ended June 30, 2017

	<u>Combined</u>	<u>Water</u>	<u>Sewer</u>
Metered sales and charges to general customers	\$ 37,429,214	\$ 14,675,810	\$ 22,753,404
Tap fees - operations	364,326	210,252	154,074
Private fire protection service	91,493	91,493	
Forfeited discounts	708,062	708,062	
Other revenue	515,378	181,140	334,238
Extra surcharge	310,875	217,745	93,130
Operations maintenance fee	4,209,930		4,209,930
Returned check charges	12,280	12,280	
Cross connection fees	131,255	131,255	
Repurified water sales	27,442	27,442	
Miscellaneous income	201,446	64,732	136,714
Less: allowances and adjustments	(160,705)	(54,439)	(106,266)
	<u>\$ 43,840,996</u>	<u>\$ 16,265,772</u>	<u>\$ 27,575,224</u>

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Operating and Maintenance Expenses

Year Ended June 30, 2017

	<u>Total</u>	<u>Operating</u>	<u>Maintenance</u>
Water			
Source operations	\$ 180,988	\$ 180,988	\$
Treatment	4,022,148	4,022,148	
Storage	32,830	32,830	
Transmission and distribution	1,154,142	1,154,142	
Cross connection	244,727	244,727	
Meter field services	671,321	671,321	
Field Inspectors	338,112	338,112	
Taps	210,252	210,252	
Administration	774,167	774,167	
	<u>\$ 7,628,687</u>	<u>\$ 7,628,687</u>	<u>\$ -</u>
Sewer			
Collections	\$ 1,344,100	\$ 1,343,606	\$ 494
Rehabilitation	133,261	133,261	
Pump stations	684,477	683,811	666
Industrial surveillance	296,417	296,417	
Private laterals	3,316	3,316	
House services	62,372	62,372	
Treatment	2,760,823	2,653,960	106,863
Disposal	609,457	609,457	
Taps	154,074	154,074	
Administration	818,370	818,370	
	<u>\$ 6,866,667</u>	<u>\$ 6,758,644</u>	<u>\$ 108,023</u>
Repurification			
Treatment	\$ 71,630	\$ 71,630	
Distribution	75,822	75,822	
Disposal	121,901	121,901	
	<u>\$ 269,353</u>	<u>\$ 269,353</u>	
Administrative and General			
Operations and maintenance	\$ 867,655	\$ 867,655	
Billing and collections	1,200,163	1,200,163	
Engineering	723,860	723,860	
General administration	3,784,097	3,784,097	
	<u>\$ 6,575,775</u>	<u>\$ 6,575,775</u>	
Total Operating and Maintenance Expenses	<u>\$ 21,340,482</u>	<u>\$ 21,232,459</u>	<u>\$ 108,023</u>

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Debt Service Requirements by Fiscal Year

June 30, 2017

Fiscal Year Ended June 30,	Issue	Interest Rate	Principal	Interest	Total Principal and Interest
2018	Tennessee Municipal Bond Fund (1)		\$ 471,000	\$ 42,332	\$ 513,332
2019			486,000	35,721	521,721
2020			502,000	28,898	530,898
2021			518,000	21,852	539,852
2022			534,000	14,581	548,581
2023			552,000	7,084	559,084
				<u>\$ 3,063,000</u>	<u>\$ 150,468</u>
2018	Tennessee Municipal Bond Fund (1)		\$ 2,051,000	\$ 350,505	\$ 2,401,505
2019			2,144,000	321,682	2,465,682
2020			2,240,000	291,555	2,531,555
2021			2,341,000	260,077	2,601,077
2022			2,446,000	227,180	2,673,180
2023			2,556,000	192,808	2,748,808
2024			2,671,000	156,890	2,827,890
2025			2,792,000	119,355	2,911,355
2026			2,917,000	80,121	2,997,121
2027			3,049,000	39,129	3,088,129
			<u>\$ 25,207,000</u>	<u>\$ 2,039,302</u>	<u>\$ 27,246,302</u>
2018	2009 Tax and Revenue Refunding Bonds	2.00-5.00 %	\$ 2,370,000	\$ 242,250	\$ 2,612,250
2019			2,475,000	123,750	2,598,750
			<u>\$ 4,845,000</u>	<u>\$ 366,000</u>	<u>\$ 5,211,000</u>
2018	2013 Tax and Revenue Refunding Bonds	1.31 %	\$ 3,600,000	\$ 192,439	\$ 3,792,439
2019			3,650,000	145,279	3,795,279
2020			3,695,000	97,464	3,792,464
2021			3,745,000	49,060	3,794,060
			<u>\$ 14,690,000</u>	<u>\$ 484,242</u>	<u>\$ 15,174,242</u>
2018	2016 Tax and Revenue Refunding Bonds	1.31 %	\$ 100,000	\$ 662,000	\$ 762,000
2019			100,000	657,000	757,000
2020			2,470,000	652,000	3,122,000
2021			2,585,000	528,500	3,113,500
2022			2,705,000	399,250	3,104,250
2023			2,830,000	264,000	3,094,000
2024			2,960,000	122,500	3,082,500
2025			1,565,000	63,300	1,628,300
2026			1,600,000	32,000	1,632,000
			<u>\$ 16,915,000</u>	<u>\$ 3,380,550</u>	<u>\$ 20,295,550</u>

(Continued)

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Debt Service Requirements by Fiscal Year (continued)

June 30, 2017

Fiscal Year Ended June 30,	Issue	Interest Rate	Principal	Interest	Total Principal and Interest
2018	State Revolving Loans - CW1 13-317	0.93 %	\$ 168,552	\$ 28,776	\$ 197,328
2019			170,124	27,204	197,328
2020			171,708	25,620	197,328
2021			173,316	24,012	197,328
2022			174,936	22,392	197,328
2023			176,568	20,760	197,328
2024			178,212	19,116	197,328
2025			179,880	17,448	197,328
2026			181,560	15,768	197,328
2027			183,252	14,076	197,328
2028			184,968	12,360	197,328
2029			186,696	10,632	197,328
2030			188,436	8,892	197,328
2031			190,200	7,128	197,328
2032			191,976	5,352	197,328
2033			193,764	3,564	197,328
2034			195,576	1,752	197,328
2035	82,038	197	82,235		
			\$ <u>3,171,762</u>	\$ <u>265,049</u>	\$ <u>3,436,811</u>
2018	State Revolving Loans - CW0 12-303	0.93 %	\$ 340,932	\$ 62,880	\$ 403,812
2019			344,112	59,700	403,812
2020			347,328	56,484	403,812
2021			350,568	53,244	403,812
2022			353,844	49,968	403,812
2023			357,144	46,668	403,812
2024			360,480	43,332	403,812
2025			363,852	39,960	403,812
2026			367,248	36,564	403,812
2027			370,680	33,132	403,812
2028			374,136	29,676	403,812
2029			377,640	26,172	403,812
2030			381,156	22,656	403,812
2031			384,720	19,092	403,812
2032			388,320	15,492	403,812
2033			391,944	11,868	403,812
2034			395,604	8,208	403,812
2035	399,300	4,512	403,812		
2036	268,382	936	269,318		
			\$ <u>6,917,390</u>	\$ <u>620,544</u>	\$ <u>7,537,934</u>

(Continued)

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Debt Service Requirements by Fiscal Year (continued)

June 30, 2017

<u>Fiscal Year Ended June 30,</u>	<u>Issue</u>	<u>Interest Rate</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Principal and Interest</u>
2018	State Revolving Loans - SRF 12-306	0.93 %	\$ 591,972	\$ 109,200	\$ 701,172
2019			597,504	103,668	701,172
2020			603,084	98,088	701,172
2021			608,712	92,460	701,172
2022			614,400	86,772	701,172
2023			620,136	81,036	701,172
2024			625,932	75,240	701,172
2025			631,776	69,396	701,172
2026			637,680	63,492	701,172
2027			643,632	57,540	701,172
2028			649,644	51,528	701,172
2029			655,716	45,456	701,172
2030			661,836	39,336	701,172
2031			668,016	33,156	701,172
2032			674,256	26,916	701,172
2033			680,556	20,616	701,172
2034			686,916	14,256	701,172
2035			693,324	7,848	701,172
2036			466,153	1,635	467,788
			<u>\$ 12,011,245</u>	<u>\$ 1,077,639</u>	<u>\$ 13,088,884</u>
2018	State Revolving Loans - CG2 14-338	1.30 %	\$ 179,748	\$ 47,484	\$ 227,232
2019			182,100	45,132	227,232
2020			184,476	42,756	227,232
2021			186,888	40,344	227,232
2022			189,336	37,896	227,232
2023			191,808	35,424	227,232
2024			194,328	32,904	227,232
2025			196,860	30,372	227,232
2026			199,440	27,792	227,232
2027			202,044	25,188	227,232
2028			204,684	22,548	227,232
2029			207,360	19,872	227,232
2030			210,072	17,160	227,232
2031			212,820	14,412	227,232
2032			215,604	11,628	227,232
2033			218,424	8,808	227,232
2034			221,280	5,952	227,232
2035			224,184	3,048	227,232
2036			113,260	401	113,661
			<u>\$ 3,734,716</u>	<u>\$ 469,121</u>	<u>\$ 4,203,837</u>

(Continued)

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Debt Service Requirements by Fiscal Year (continued)

June 30, 2017

Fiscal Year Ended June 30,	Issue	Interest Rate	Principal	Interest	Total Principal and Interest
2018	State Revolving Loans - SRF 14-339	1.30 %	\$ 952,792	\$ 278,056	\$ 1,230,848
2019			1,444,752	401,520	1,846,272
2020			1,463,640	382,632	1,846,272
2021			1,482,780	363,492	1,846,272
2022			1,502,172	344,100	1,846,272
2023			1,521,816	324,456	1,846,272
2024			1,541,724	304,548	1,846,272
2025			1,561,884	284,388	1,846,272
2026			1,582,308	263,964	1,846,272
2027			1,602,996	243,276	1,846,272
2028			1,623,960	222,312	1,846,272
2029			1,645,200	201,072	1,846,272
2030			1,666,716	179,556	1,846,272
2031			1,688,508	157,764	1,846,272
2032			1,710,600	135,672	1,846,272
2033			1,732,968	113,304	1,846,272
2034			225,559	11,646	237,205
			<u>\$ 24,950,375</u>	<u>\$ 4,211,758</u>	<u>\$ 29,162,133</u>
Total			<u>\$ 115,505,488</u>	<u>\$ 13,064,673</u>	<u>\$ 128,570,161</u>

(1) Interest payments are subject to fluctuation since interest is accrued based on an adjustable rate. For purposes of this schedule, an interest rate of 1.40% was used.

ORGANIZATIONAL DATA

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Customers and Rate Structure

Year Ended June 30, 2017

As of June 30, 2017, Murfreesboro Water and Sewer Department serves approximately 26,152 water customers and 43,923 sewer customers of which 18,272 are in the Consolidated Utility District (“CUD”) water service area. The following rate structure was in place during the 2016/2017 fiscal year:

Water:

The water rate is \$2.74 per 100 cubic feet (\$0.0274 per cubic foot) of consumption over the stated allowances per meter size. The minimum monthly bills applicable to all customers are based upon the following table:

<u>Meter Size</u>	<u>Charge</u>	<u>Allowance</u>
5/8"	\$ 8.22	- cubic feet
1"	19.18	60 cubic feet
1.5"	41.10	220 cubic feet
2"	65.76	400 cubic feet
3"	164.40	1,125 cubic feet
4"	328.80	2,330 cubic feet
6"	685.00	4,945 cubic feet

Sewer:

Section 33-1(G) Sewer Rates. Each customer served by or having access to sanitary sewer service shall be charged sanitary sewer service and operation and maintenance fees. Section 33-1 (G) 1. The sewer rate shall be \$3.34 per 100 cubic feet of metered water consumption (\$0.0334 per cubic foot) over stated allowance per meter size. In addition to the sanitary sewer service charge, each customer will be charged an operation and maintenance fee equal to ninety cents (\$0.90) per one hundred cubic feet of all metered water usage.

The minimum monthly bills applicable to all customers are based upon the following table:

<u>Meter Size</u>	<u>Charge*</u>	<u>Allowance</u>
5/8"	\$ 10.22	- cubic feet
1"	27.98	60 cubic feet
1.5"	61.90	220 cubic feet
2"	100.06	400 cubic feet
3"	252.70	1,125 cubic feet
4"	507.10	2,330 cubic feet
6"	1,058.30	4,945 cubic feet

One cubic foot equals seven and one-half gallons.

* Not including O&M charge

The above rates are net. The gross rate, 10% higher, will apply to accounts not paid by the due date. Rates for service outside the City limits are 50% higher than the above inside City limit rates. Each residential sewer customer utilizing an unmetered water supply shall be charged a \$19.70 flat monthly rate. Effective on bills printed July 1, 2016.



AWWA Free Water Audit Software: Reporting Worksheet

WAS v5.0
American Water Works Association
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? Click to access definition
+ Click to add a comment

Water Audit Report for: Murfreesboro Water and Sewer Department
Reporting Year: 2017 7/2016 - 6/2017

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

----- Enter grading in column 'E' and 'J' ----->

Volume from own sources:	+ ?	9	4,216.566	MG/Yr
Water imported:	+ ?	10	0.000	MG/Yr
Water exported:	+ ?	10	0.000	MG/Yr

Master Meter and Supply Error Adjustments

Pcnt:	Value:	MG/Yr
+ ? 7	<input checked="" type="radio"/> <input type="radio"/>	
+ ?	<input type="radio"/> <input checked="" type="radio"/>	
+ ?	<input type="radio"/> <input checked="" type="radio"/>	

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: **4,216.566** MG/Yr

AUTHORIZED CONSUMPTION

Billed metered:	+ ?	8	3,098.909	MG/Yr
Billed unmetered:	+ ?	9	0.000	MG/Yr
Unbilled metered:	+ ?	8	166.902	MG/Yr
Unbilled unmetered:	+ ?		52.707	MG/Yr

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: **3,318.518** MG/Yr

Click here: ?
for help using option buttons below

Pcnt:	Value:	MG/Yr
1.25%	<input checked="" type="radio"/> <input type="radio"/>	

Use buttons to select percentage of water supplied OR value

Pcnt:	Value:	MG/Yr
0.25%	<input checked="" type="radio"/> <input type="radio"/>	

2.00%	<input checked="" type="radio"/> <input type="radio"/>	MG/Yr
0.25%	<input checked="" type="radio"/> <input type="radio"/>	MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption)

898.048 MG/Yr

Apparent Losses

Unauthorized consumption: + ? **10.541** MG/Yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	+ ?	8	66.649	MG/Yr
Systematic data handling errors:	+ ?		7.747	MG/Yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: **84.938** MG/Yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: ? **813.110** MG/Yr

WATER LOSSES: **898.048** MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: ? **1,117.657** MG/Yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	+ ?	9	442.0	miles
Number of <u>active AND inactive</u> service connections:	+ ?	9	26,818	
Service connection density:	?		61	conn./mile main

Are customer meters typically located at the curbside or property line? No Yes (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line: + ? 10 3.0 ft

Average operating pressure: + ? 10 68.0 psi

COST DATA

Total annual cost of operating water system:	+ ?	8	\$16,349,418	\$/Year
Customer retail unit cost (applied to Apparent Losses):	+ ?	10	\$2.74	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	+ ?	8	\$941.87	\$/Million gallons <input type="checkbox"/> Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 82 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources

2: Unauthorized consumption

3: Systematic data handling errors



AWWA Free Water Audit Software: System Attributes and Performance Indicators

WAS v5.0

American Water Works Association.
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Water Audit Report for: Murfreesboro Water and Sewer Department
 Reporting Year: 2017 7/2016 - 6/2017

*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 82 out of 100 ***

System Attributes:

	Apparent Losses:	84.938	MG/Yr
+	Real Losses:	813.110	MG/Yr
=	Water Losses:	898.048	MG/Yr

? Unavoidable Annual Real Losses (UARL): 162.03 MG/Yr

Annual cost of Apparent Losses: \$311,115

Annual cost of Real Losses: \$765,844 Valued at **Variable Production Cost**

Return to Reporting Worksheet to change this assumption

Performance Indicators:

Financial:	{	Non-revenue water as percent by volume of Water Supplied:	26.5%	
		Non-revenue water as percent by cost of operating system:	7.9%	Real Losses valued at Variable Production Cost

Operational Efficiency:	{	Apparent Losses per service connection per day:	8.68	gallons/connection/day
		Real Losses per service connection per day:	83.07	gallons/connection/day
		Real Losses per length of main per day*:	N/A	
		Real Losses per service connection per day per psi pressure:	1.22	gallons/connection/day/psi

From Above, Real Losses = Current Annual Real Losses (CARL): 813.11 million gallons/year

? Infrastructure Leakage Index (ILI) [CARL/UARL]: 5.02

* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline

SINGLE AUDIT SECTION

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Expenditures of Federal Awards

June 30, 2017

<u>Program Name</u>	<u>CFDA Number</u>	<u>Contract/Grant Number</u>	<u>Balance June 30, 2016 (Receivable)/ Deferred Revenue</u>	<u>Receipts</u>	<u>Expenditures</u>	<u>Balance June 30, 2017 (Receivable)/ Deferred Revenue</u>
ENVIRONMENTAL PROTECTION AGENCY						
Passed through the Tennessee Department of Environment & Conservation						
Capitalization Grants for Clean Water State Revolving Funds	66.458	CS470001 SRF 14-339		\$ 3,499,281	\$ 3,499,281	
			\$ <u>- 0 -</u>	\$ <u>3,499,281</u>	\$ <u>3,499,281</u>	\$ <u>- 0 -</u>

See notes to the schedule of expenditures of federal awards.

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Expenditures of State Awards

June 30, 2017

<u>Program Name</u>	<u>Contract/Grant Number</u>	<u>Balance June 30, 2016 (Receivable)/ Deferred Revenue</u>	<u>Receipts</u>	<u>Expenditures</u>	<u>Adjustments</u>	<u>Balance June 30, 2017 (Receivable)/ Deferred Revenue</u>
TENNESSEE DEPARTMENT OF TRANSPORTATION						
Capitalization Grants for Clean Water State Revolving Funds	CS470001 CWO 12-303	\$ (423,465)	\$ 1,639,879	\$ 1,216,414		
Capitalization Grants for Clean Water State Revolving Funds	CS470001 SRF-12-306	(3,396)	3,326		\$ 70	
Capitalization Grants for Clean Water State Revolving Funds	CS470001 SRF-14-339	(3,905,701)	12,206,086	11,264,227		\$ (2,963,842)
		\$ <u>(4,332,562)</u>	\$ <u>13,849,291</u>	\$ <u>12,480,641</u>	\$ <u>70</u>	\$ <u>(2,963,842)</u>

See notes to the schedule of expenditures of state awards.

MURFREESBORO WATER AND SEWER DEPARTMENT

Notes to Schedules of Federal and State Awards

June 30, 2017

Note A - BASIS OF PRESENTATION

The accompanying schedules of expenditures of federal and state awards include the grant activity of the Murfreesboro Water and Sewer Department.

The receivable balance accrued June 30, 2016, represents grant funds earned during the prior period, but not received prior to the end of that period.

Cash receipts represent the actual cash received from the grantor agency during the current period.

Federal and state expenditures represent current period expenses charged to the grant as well as current period revenues recognized from the grant, recorded on the accrual basis of accounting.

The receivable balance accrued June 30, 2017, represents grant revenue earned which was not received from the grantor agency during the current period. The receivable balance on the schedule of expenditures of state awards includes a receivable to be drawn from loan proceeds as well as an amount to be forgiven by the grantor. The grants receivable reported on the Statement of Net Position only includes the amount to be forgiven by the grantor and not the amount reimbursable from loan proceeds in accordance with generally accepted accounting principles.



JOB, HASTINGS & ASSOCIATES

Certified Public Accountants

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Joel H. Jobe (1944 – 2006)

**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**

Board of Directors
Murfreesboro Water and Sewer Department

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities of the Murfreesboro Water and Sewer Department, as of and for the year ended June 30, 2017 and the related notes to the financial statements, which collectively comprise the Murfreesboro Water and Sewer Department's basic financial statements and have issued our report thereon dated December 1, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Murfreesboro Water and Sewer Department'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 opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Murfreesboro Water and Sewer Department's internal control. Accordingly, we do not express an opinion on the effectiveness of the Murfreesboro Water and Sewer Department's internal control.

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs that we consider to be material weaknesses. [2017-001 and 2017-002]

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Murfreesboro Water and Sewer Department's financial statements are free from 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*.

Murfreesboro Water and Sewer Department's Response to Findings

Murfreesboro Water and Sewer Department's response to the findings identified in our audit is described in the accompanying schedule of findings and questioned costs. Murfreesboro Water and Sewer Department's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

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.

Jobe, Hastings & Associates

Certified Public Accountants

Murfreesboro, Tennessee
December 1, 2017



JOB, HASTINGS & ASSOCIATES

Certified Public Accountants

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INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE

Board of Directors
Murfreesboro Water and Sewer Department

Report on Compliance for Each Major Federal Program

We have audited the Murfreesboro Water and Sewer Department's compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the Murfreesboro Water and Sewer Department's major federal programs for the year ended June 30, 2017. The Murfreesboro Water and Sewer Department's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, contracts, and terms and conditions of its federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for the Murfreesboro Water and Sewer Department's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Murfreesboro Water and Sewer Department's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of the Murfreesboro Water and Sewer Department's compliance.

Opinion on the Major Federal Program

In our opinion, the Murfreesboro Water and Sewer Department, complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2017.

Report on Internal Control over Compliance

Management of the Murfreesboro Water and Sewer Department, is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Murfreesboro Water and Sewer Department's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Murfreesboro Water and Sewer Department's internal control over compliance.

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

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

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Jobe, Hastings & Associates

Certified Public Accountants

Murfreesboro, Tennessee
December 1, 2017

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Audit Findings and Questioned Costs

June 30, 2017

A - SUMMARY OF AUDITOR'S RESULTS

1. The auditor's report expresses an unmodified opinion on whether the financial statements of the Murfreesboro Water and Sewer Department were prepared in accordance with GAAP.
2. No significant deficiencies and two material weakness relating to the audit of the financial statements are reported in the *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*.
3. No instances of noncompliance material to the financial statements of the Murfreesboro Water and Sewer Department, which would be required to be reported in accordance with *Government Auditing Standards*, were disclosed during the audit.
4. No significant deficiencies relating to the audit of the major federal award programs are reported in the *Independent Auditor's Report On Compliance For Each Major Program And On Internal Control Over Compliance Required By The Uniform Guidance*.
5. The auditor's report on compliance for the major federal award programs for the Murfreesboro Water and Sewer Department expresses an unmodified opinion on its major federal program.
6. No audit findings that are required to be reported in accordance with 2 CFR section 200.516(a) are reported in this Schedule.
7. The program tested as a major program was the Capitalization Grants for Clean Water State Revolving Loans CFDA No. 66.458.
8. The threshold used for distinguishing between Type A and B programs was \$750,000.
9. The Murfreesboro Water and Sewer Department did not qualify as a low-risk auditee.

B - FINDINGS - FINANCIAL STATEMENT AUDIT

CURRENT YEAR FINDINGS

2017-001 Capital Asset Records

Condition: During our prior year audit, we discovered that detailed depreciation balances were not being maintained for each individual capital asset. In response, management updated the records recorded in the depreciation program. However, the depreciation program was not utilized as a subsidiary ledger to record transactions in the general ledger. As a result, the accumulated depreciation recorded in the general ledger was materially different than the amount produced by the depreciation program.

Criteria: Detail records should be maintained for each individual asset and its associated accumulated depreciation to reflect the correct book value of each individual capital asset, and used as a subsidiary ledger for the activity recorded in the general ledger.

Cause of Condition: A listing of capital assets is maintained with costs, asset descriptions, dates of service, useful lives, and accumulated depreciation. However, these records were not used to record the depreciation entries in the current fiscal year's general ledger activity. An estimate of depreciation is calculated each month by taking the prior month's depreciation expense and adjusting the amount by depreciation on assets purchased or placed in service that month and taking into account the retirements during that period.

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Audit Findings and Questioned Costs

June 30, 2017

B - FINDINGS - FINANCIAL STATEMENT AUDIT (continued)

CURRENT YEAR FINDINGS (continued)

2017-001 Capital Asset Records (continued)

Effect: A material adjustment was required for the general ledger to accurately reflect the accumulated depreciation balance as of the end of the fiscal year. Until the detailed depreciation schedule is being properly maintained and used as the subsidiary ledger to record transactions in the general ledger, there is a potential for the material misstatement of the carrying value of capital assets.

Recommendation: The depreciation program should be utilized as the subsidiary ledger to record transaction in the general ledger.

Views of Responsible Officials and Planned Corrective Actions: This condition existed at June 30, 2016. The “fix” implemented with the FY17 audit (accumulated depreciation at June 30, 2016 and 2017 and FY17 depreciation expense) could have been done last year, thereby eliminating this finding for FY17. At this time last year, the city of Murfreesboro was planning to convert city and MWSD fixed assets from COBOL to new software during FY17. Due to a variety of reasons outside MWSD’s control, the conversion of MWSD fixed assets did not happen, resulting in the same issues existing at June 30, 2017. The fixed asset conversion for the city has occurred. The conversion for MWSD is scheduled for January 2018. This condition should be remedied for the fiscal year ending June 30, 2018.

2017-002 Material Journal Entries

Condition: During the performance of our audit procedures, we noted management had not recorded certain material transactions related to long-term debt. Also, since a detailed depreciation schedule was not utilized as a subsidiary ledger, a material adjustment was required to correct the accumulated depreciation recorded in the general ledger.

Criteria: The design and operation of the internal control system should be sufficient to provide reasonable assurance that all account balances are accurate and complete.

Cause of Condition: Certain entries related to an advanced refunding of debt, completed at the end of the prior fiscal year, were not made in the current fiscal year in order to accurately reflect the activity of long-term debt. As mentioned in finding 2017-001, detailed capital assets records were not utilized as a subsidiary ledger for posting transactions in the general ledger.

Effect: The financial statements were materially misstated prior to audit and material adjustments were required to fairly state the net position, capital asset and long-term debt balances at June 30, 2017.

Recommendation: As part of the year end closing process, the long-term debt activity should be reconciled to the detailed amortization schedules. Capital asset balances should agree to the detail depreciation schedule maintained by the client as recommended in finding 2017-001.

Views of Responsible Officials and Planned Corrective Actions: COBOL has never been used (in place since 1980’s) to create monthly depreciation entries. The depreciation and accumulated depreciation calculated during the FY17 audit was done via Excel from a download of fixed asset information from COBOL. In addition, please see the above response for finding 2017-001 for explanation regarding the depreciation journal entries.

With regard to debt-related entries, in June of 2016 MWSD received an Advance Refunding Loan to prepay a 2009 bond issuance. Staff failed to add the monthly amortization of the Advanced Refunding Loan premium to the recurring standard monthly journal entries. This issue has been rectified.

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Audit Findings and Questioned Costs

June 30, 2017

C - FINDINGS AND QUESTIONED COSTS – MAJOR FEDERAL AWARD PROGRAM AUDIT

No matters were reported.

MURFREESBORO WATER AND SEWER DEPARTMENT

Schedule of Prior Audit Findings and Questioned Costs

June 30, 2017

FINDINGS - FINANCIAL STATEMENT AUDIT

2016-001 Capital Asset Records

Current Status: See finding 2017-001.

2016-002 Material Journal Entries

Current Status: See finding 2017-002.

2016-003 Accounts Receivable Reconciliation

Current Status: Resolved

2016-004 Segregation of Duties

Current Status: Resolved



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Corrective Action Plan

The Murfreesboro Water and Sewer Department respectfully submits the following corrective action plan for the year ended June 30, 2017.

Cognizant agency:
Environmental Protection Agency

Name and address of independent public accounting firm:

Jobe, Hastings & Associates
745 South Church Street, Suite 105
Murfreesboro, Tennessee 37130

Audit Period:

June 30, 2017

The findings from the June 30, 2017, schedule of findings and questioned costs are discussed below. The findings are numbered consistently with the numbers assigned in the schedule.

2017-001 Capital Asset Records

Recommendation: The depreciation program should be utilized as the subsidiary ledger to record transaction in the general ledger.

Corrective Action: This condition existed at June 30, 2016. The “fix” implemented with the FY17 audit (accumulated depreciation at June 30, 2016 and 2017 and FY17 depreciation expense) could have been done last year, thereby eliminating this finding for FY17. At this time last year, the city of Murfreesboro was planning to convert city and MWSD fixed assets from COBOL to new software during FY17. Due to a variety of reasons outside MWSD’s control, the conversion of MWSD fixed assets did not happen, resulting in the same issues existing at June 30, 2017. The fixed asset conversion for the city has occurred. The conversion for MWSD is scheduled for January 2018. This condition should be remedied for the fiscal year ending June 30, 2018.

2017-002 Material Journal Entries

Recommendation: As part of the year end closing process, the long-term debt activity should be reconciled to the detailed amortization schedules. Capital asset balances should agree to the detail depreciation schedule maintained by the client as recommended in finding 2017-001.

Corrective Action: COBOL has never been used (in place since 1980’s) to create monthly depreciation entries. The depreciation and accumulated depreciation calculated during the FY17 audit was done via Excel from a download of fixed asset information from COCOL. In addition, please see the above response for finding 2017-001 for explanation regarding the depreciation journal entries.

Respectfully submitted,

Doug Swann
Assistant Director - Finance & Administration