

City of Huntsville, Alabama Electric, Natural Gas, and Water Systems

Component Unit Financial Statements

September 30, 2018



Table of Contents

	Page (s)
Independent Auditors' Report on Financial Statements	1 - 2
Management's Discussion and Analysis	3 - 9
City of Huntsville Electric, Natural Gas System, and Water Systems (a component unit)	
Statements of Net Position	10 - 11
Statements of Revenues, Expenses, and Changes in Net Position	12
Statements of Cash Flows	13 - 14
Statements of Fiduciary Net Position	15
Statements of Changes in Fiduciary Net Position	15
Notes to the Financial Statements	16 - 51
Required Supplementary Information	52- 62
Supplementary Information	63-76



Independent Auditor's Report on Financial Statements

The Board of Directors City of Huntsville Electric, Natural Gas, and Water Systems Huntsville, Alabama

Report on the Financial Statements

We have audited the accompanying financial statements of the City of Huntsville Electric, Natural Gas, and Water Systems (the Utilities), component units of the City of Huntsville, Alabama which comprise the statements of net position as of September 30, 2018, the related statements of revenues, expenses, and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements.

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. 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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Utilities, as of September 30, 2018, and the results of their operations and their cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.



Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 9, the schedules of changes in the net pension liability and employer contributions for the defined benefit plan on pages 52 through 57, and the schedule of changes in net OPEB liability and utilities' contributions on pages 58 through 62 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 (GASB), 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 inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquires, 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 basic financial statements as a whole. The supplementary information, presented on pages 63 through 76 is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The supplementary information has 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 it.

Change in Accounting Principle

As discussed in Note 16 to the financial statements, the Utilities adopted new accounting guidance, GASB Statement No. 74, Financial Reporting for Postemployment Benefits Other than Pension Plans, and GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions. Our opinion is not modified with respect to this matter.

Restatement of Beginning Net Position

As discussed in Note 16 to the financial statements, the Board restated beginning net position for the adoption of the new accounting guidance noted above, for revisions to previously stated pension obligations, and for bond premiums, discounts, gains, and losses. Our opinion is not modified with respect to these matters.

Jackson Thornton & Co. PC.
Montgomery, Alabama

December 14, 2018

2

Years Ending September 30, 2018 and 2017



The following Management Discussion and Analysis (MD&A) for Huntsville Utilities (Utilities) is intended as an introduction and should be read in conjunction with the financial statements and the notes that follow this section.

Overview of the Financial Statements

The Utilities financial statements are comprised of the Statements of Net Position; the Statements of Revenues, Expenses, and Changes in Net Position; the Statements of Cash Flows; and the accompanying notes. This report also contains required supplementary information in addition to the basic financial statements.

The Statement of Net Position reports the assets and deferred outflows of resources, less liabilities and deferred inflows of resources, with the difference being the net position. Net position will be displayed in three components: net investment in capital assets, restricted, and unrestricted. Over time, increases or decreases in net position may serve as an indicator of whether the financial position is improving or declining. The Statements of Revenues, Expenses, and Changes in Net Position show how net position changed during each year based on revenues and expenses. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. The Statements of Cash Flows report changes in cash and cash equivalents summarized by net changes from operating, capital, related financing, and investing activities. The Notes provide additional detailed information to support the financial statements. The statements present the current year and preceding year for comparison. The report also includes Statistical Highlights. These highlights convey significant data that affords the readers a better historical perspective and assists in assessing the current financial status and trends of the Utilities. The highlights present a two-year comparison beginning with the current year and preceding year for the electric, gas, and water systems.

The Utilities is a Component Unit of the City of Huntsville, Alabama. The Utilities' statements are provided to the City of Huntsville and reformatted to conform to the City's format for Component Units. The City of Huntsville incorporates the Utilities statements ending September 30 into its statements ending September 30.

By City Ordinance, the Utility is required to account separately for its electric, natural gas, and water systems. Costs are allocated to the three systems in a manner that ensures results of operations and changes in financial position are presented fairly and consistently from year to year.

Years Ending September 30, 2018 and 2017



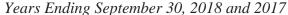
City of Huntsville Electric System
Table A-1

Condensed Statements of Net Position

(In Thousands)			Restated	
(iii Tilousanus)	2018	2017		
	2010		2017	
Assets				
Current and other assets	\$ 160,123	\$	167,789	
Capital assets (net)	 327,663		292,053	
Total assets	487,786		459,842	
Deferred Outflows of Resources				
Deferred Pension and Debt Refunding	5,797		5,934	
Total Assets and Deferred Outflows of Resources	\$ 493,583	\$	465,776	
Liabilities				
Current and other liabilities	\$ 66,192	\$	54,988	
Long-term liabilities	 187,356		190,731	
Total liabilities	253,548		245,719	
Deferred Inflows of Resources				
Deferred Pension Plan Earnings Difference	 1,109			
Net Position				
Invested in capital assets, net of related debt	233,983		197,990	
Restricted assets	70,405		84,411	
Unrestricted assets	 (65,463)		(62,344)	
Total net position	238,925		220,057	
Total Liabilities, Deferred Inflows of Resources and Net Position	\$ 493,582	\$	465,776	

2018 Compared to **2017**:

As of September 30, 2018 the Electric System's total assets were \$489 million, an increase of 6%, compared to September 30, 2017. This is primarily due to a net increase in acquisition and construction of capital assets of \$36 million. As of September 30, 2018 the Electric System's liabilities were \$255 million, an increase of 4%, compared to September 30, 2017. This increase was primarily due to an increase in accounts payable of \$8 million. As of September 30, 2018 the Electric System's net position was \$239 million, an increase of \$19 million or 9%, compared to September 30, 2017. This increase is primarily due to an increase in invested in capital assets related to Fiber and AMI projects.





City of Huntsville Electric System

Table A-2

Condensed Statement of Revenues, Expenses, and Changes in Net Position
(In Thousands)

		R	estated
	 2018		
Operating revenues	\$ 525,422	\$	486,073
Nonoperating revenues	 441		97
Total revenues	525,863		486,170
Operating expense	473,654		443,310
Depreciation expense	18,775		17,039
Nonoperating expense	 3,468		2,028
Total expenses	495,897		462,377
Income before transfers	29,966		23,793
Transfers out - tax equivalents	 (11,098)		(11,297)
Change in net position	 18,868		12,496
Beginning net position	 220,057		207,561
Ending net position	\$ 238,925	\$	220,057

2018 *Compared to 2017:*

As of September 30, 2018 the Electric System's total revenues were \$526 million, an increase of 8%, compared to September 30, 2017. This increase is primarily due to an 11% increase in consumption from the prior year. The Electric System's operating expenses were \$496 million which was 7% increase from the previous year due to a 7% increase in purchased power. We also note that before 2017 restatement, Operating Expenses were up 6%, after restatement, Operating Expenses are up 11% due to OPEB new GASB requirement.

Years Ending September 30, 2018 and 2017



City of Huntsville Gas System
Table A-1
Condensed Statements of Net Position
(In Thousands)

(In Thousands)			Restated		
		2018		2017	
Assets					
Current and other assets	\$	28,722	\$	25,969	
Capital assets (net)		118,466		116,409	
Total assets		147,188		142,378	
Deferred Outflows of Resources					
Deferred Pension and Debt Refunding		6,870		5,738	
Total Assets and Deferred Outflows of Resources	\$	154,058	\$	148,116	
Liabilities					
Current and other liabilities	\$	6,916	\$	7,102	
Long-term liabilities		45,115		45,815	
Total liabilities		52,031		52,917	
Deferred Inflows of Resources					
Deferred Pension Plan Earnings Difference		1,942			
Net Position					
Invested in capital assets, net of related debt		118,465		116,409	
Restricted assets		3,689		3,443	
Unrestricted assets		(22,069)		(24,653)	
Total net position		100,085		95,199	
Total Liabilities, Deferred Inflows of Resources and Net Position	\$	154,058	\$	148,116	

2018 Compared to **2017**:

As of September 30, 2018 the Gas System's total assets were \$147 million, an increase of 3%, compared to September 30, 2017. This is primarily due to the increase in capital assets of \$2 million. As of September 30, 2018 the Gas System's total liabilities were \$52 million, a decrease of 4%, compared to September 30, 2017. This decrease is a result of OPEB and Pension liability decreasing. As of September 30, 2018 the Gas System's net position is \$10 million, an increase of 5%, compared to September 30, 2017. This increase is primarily due to the operating income of \$7.2 million which was due to colder than normal winter weather.





City of Huntsville Gas System

Table A-2

Condensed Statement of Revenues, Expenses, and Changes in Net Position
(In Thousands)

		R	estated
	 2018		2017
Operating revenues	\$ 48,149	\$	35,467
Nonoperating revenues	(388)		(13)
Total revenues	47,761		35,454
Operating expense	36,421		31,390
Depreciation expense	4,507		4,421
Nonoperating expense	(45)		(1,529)
Total expenses	40,883		34,282
Income before transfers	6,878		1,172
Capital Contributions	682		511
Transfers out - tax equivalents	(2,674)		(1,982)
Change in net position	4,886		(299)
Beginning net position	 95,199		95,498
Ending net position	\$ 100,085	\$	95,199

2018 *Compared to 2017:*

As of September 30, 2018 the Gas System's total revenues were \$48 million, an increase of 35%, compared to September 30, 2017. This is primarily due to an increase in natural gas MCF sold of 27% because of the colder than normal winter weather.

As of September 30, 2018 the Gas System's expenses were \$41 million which are up 19% compared to September 30, 2017 which is due to the increase in natural gas MCF purchased of 34%. We also note that before 2017 restatement, Operating Expenses were up 8%, after restatement, Operating Expenses are up 16% due to OPEB new GASB requirement.

Years Ending September 30, 2018 and 2017



City of Huntsville Water System
Table A-1
Condensed Statements of Net Position
(In Thousands)

(In Thousands)			Restated			
		2018		2017		
Assets						
Current and other assets	\$	70,246	\$	77,589		
Capital assets (net)		277,701		277,069		
Total assets		347,947		354,658		
Deferred Outflows of Resources						
Deferred Pension and Debt Refunding		4,025		4,151		
Total Assets and Deferred Outflows of Resources	\$	351,972	\$	358,809		
Liabilities						
Current and other liabilities	\$	16,771	\$	18,428		
Long-term liabilities		133,508		149,735		
Total liabilities		150,279		168,163		
Deferred Inflows of Resources						
Deferred Pension Plan Earnings Difference		630				
Net Position						
Invested in capital assets, net of related debt		168,252		152,029		
Restricted assets		10,894		18,666		
Unrestricted assets		21,917		19,951		
Total net position		201,063		190,646		
Total Liabilities, Deferred Inflows of Resources and Net Position	\$	351,972	\$	358,809		

2018 Compared to **2017**:

As of September 30, 2018 the Water System's total assets were \$348 million, a decrease of 2%, compared to September 30, 2017. The decrease was a result of paying off revenue warrants. As of September 30, 2018 the Water System's total liabilities were \$150 million, a decrease of 11%, compared to September 30, 2017. This decrease was a result of paying off revenue warrants. As of September 30, 2018 the Water System's net position is \$201 million, an increase of 6%, compared to September 30, 2017.





City of Huntsville Water System

Table A-2

Condensed Statement of Revenues, Expenses and Changes in Net Position (In Thousands)

		2018		
Operating revenues	S	45,149	s	45,758
Non-operating revenues		(607)		45
Total revenues		44,542		45,803
Operating expense		23,228		20,910
Depreciation expense		9,696		
Non-operating expense		3,002		319
Total expenses		35,926		28,381
Income before transfers		8,616		17,422
Capital Contributions		4,358		3,376
Transfers out - tax equivalents		(2,557)		(2,624)
Change in net position		10,417		18,174
Beginning net position		190,646		172,472
Ending net position	\$	201,063	\$	190,646

2018 Compared to 2017:

As of September 30, 2018 the Water System's total revenues were \$45 million, a decrease of 3%, compared to September 30, 2017. This decrease is primarily due to consumption dropping by 3%. As of September 30, 2018 the Water System's expenses were \$36 million. An increase of 27% compared to September 30, 2017 due to an increase in Southeast Water Treatment Plant depreciation and \$4 million dollar more interest expense compared to September 30, 2017 due to a full year of interest on 2017 bonds. We also note that before 2017 restatement, Operating Expenses were up 12%, after restatement, Operating Expenses are up 17% due to OPEB new GASB requirement.

Wes Kelley, Chief Executive Officer

Ted Phillips, Chief Financial Officer



Component Unit
Financial Statements
Required and Supplemental
Information

September 30, 2018

City of Huntsville Electric, Natural Gas, and Water Systems Statements of Net Position Year Ending September 30, 2018



(Dollars in Thousands)		Electric Gas 2018 2018		Water 2018		
Assets and Deferred Outflows of Resources						
Current Assets						
Cash and Cash Equivalents	\$	211	\$	4,799	\$	20,765
Investments		-		750		11,210
Board Designated Funds						
Investments		15,338		12,660		15,858
Restricted Funds						
Cash and Cash Equivalents		6,998		681		866
Accounts Receivable - Trade, Net of Allowance		53,564		2,060		8,072
Inventories - Materials and Supplies		11,502		3,984		1,917
Prepaid Expenses		87		25		30
Accrued Interest, Rent and Other Receivables		3,124		74		139
Total Current Assets	\$	90,824	\$	25,033	\$	58,857
Noncurrent Assets						
Restricted Assets						
Customer Deposits						
Cash and Cash Equivalents	\$	37,888	\$	3,689	\$	4,690
Warrant Funds						
Cash and Cash Equivalents		2,979		-		-
Investments		27,985		-		6,203
Cash, Cash Equivalents, and Investments	\$	68,852	\$	3,689	\$	10,893
Other Assets						
Regulatory Asset - Revenue Warrant Expense	\$	447	\$	-	\$	496
Utility Plant						
Plant in service	\$ 6	501,272	\$	191,855	\$	406,806
Construction in progress		40,813	·	2,798	·	10,751
Total Utility Plant	\$ 6	542,085	\$	194,653	\$	417,557
Less: Accumulated depreciation	(3	314,422)		(76,187)		(139,856)
Total Utility Plant		327,663	\$	118,466		277,701
Total Non-Current Assets		396,962		122,155		289,090
Total Assets	\$ 4	187,786	\$	147,188	\$	347,947
Deferred Outflows of Resources						
Deferred Amount on Debt Refunding	\$	980	\$	-	\$	1,339
Deferred Amount on Pension Employer Contributions	•	4,816	•	6,870	•	2,686
Total Deferred Outflows of Resources	\$	5,796	\$	6,870	\$	4,025
Total Assets and Deferred Outflows of Resources	\$ 4	193,582	\$	154,058	\$	351,972

City of Huntsville Electric, Natural Gas, and Water Systems Statements of Net Position Year Ending September 30, 2018



(Dollars in Thousands)	Flootuio	Coo	Motor
(Continued)	Electric 2018	Gas 2018	Water 2018
Liabilities and Deferred Inflows of Resources			
Current Liabilities			
Accounts Payable - Trade	\$ 44,332	\$ 1,628	\$ 1,563
Accounts Payable - Other Utility Departments	2,156	-	4,472
Compensated Absences	3,252	1,159	1,194
Accrued Payroll	648	195	308
Net Pension Liability, Current Portion	2,862	2,976	1,290
Other Current Liabilities	2,760	277	469
Total Current Liabilities Payable From Current Assets	\$ 56,010	\$ 6,235	\$ 9,296
Liabilities Payable From Restricted Assets			
Customer Deposits, Current Portion	6,998	681	866
Revenue Warrants, Current Portion	1,865	-	4,770
Interest Payable	1,319_	<u></u> _	1,839
Total Liabilities Payable From Restricted Assets	\$ 10,182	\$ 681	\$ 7,475
Noncurrent Liabilities			
Net Pension Liability, Less Current Portion	\$ 28,708	\$ 29,125	\$ 12,791
Net OPEB Liability	29,817	12,301	12,692
Customer Deposits, Less Current Portion	37,888	3,689	4,690
Revenue Warrants, Less Current Portion	77,575	-	91,780
Unamortized Bond Premium	13,368	-	11,555
Total Non-Current Liabilities	\$ 187,356	\$ 45,115	\$ 133,508
Total Liabilities	\$ 253,548	\$ 52,031	\$ 150,279
Deferred Inflows of Resources			
Deferred Pension Plan Earnings Difference	\$ 1,109	\$ 1,942	\$ 630
Net Position			
Invested in Capital Assets, Net of Related Debt	\$ 233,983	\$ 118,465	\$ 168,252
Restricted	70,405	3,689	10,894
Unrestricted	(65,463)	(22,069)	21,917
Total Net Position	\$ 238,925	\$ 100,085	\$ 201,063
Total Liabilities, Deferred Inflows and Net Position	\$ 493,582	\$ 154,058	\$ 351,972

City of Huntsville Electric, Natural Gas, and Water Systems Statements of Revenues, Expenses, and Changes in Net Position Year Ending September 30, 2018



(Dollars in Thousands)								
,		Electric				Water		
O		2018		2018		2018		
Operating Revenue	¢	260 775	¢	20.002	,	24.006		
Residential	\$	260,775	\$	20,882	\$	24,806		
Large commercial and industrial		200,216		2,101		2,002		
Small commercial		42,398		21,617		12,362		
Government sales		-		-		2,586		
Public street and highway lighting		4,777		-		-		
Other sales		-		-		591		
Other operating income		17,256		3,548	_	2,802		
Total Operating Income	\$	525,422	\$	48,148	\$	45,149		
Operating Expenses								
Purchased commodity	\$	424,966	\$	22,744	\$	-		
Purification		-		-		2,138		
Pumping		_		_		4,388		
Transmission		339		_		_		
Distribution		16,728		5,544		5,367		
Customer accounting		6,730		1,127		1,490		
Administrative and general		24,891		7,005		9,845		
Depreciation		18,775		4,507		9,696		
Total Operating Expenses	\$	492,429	\$	40,927	\$	32,924		
Operating Income	\$	32,993	\$	7,221	\$	12,225		
Nonoperating (Revenues) Expenses								
Gain or loss on sale of assets	\$	(112)	\$	(86)	\$	(50)		
Interest income	Y	(329)	Y	474	Y	657		
Interest expense		4,812		(45)		4,846		
Amortization of bond discount		27		(13)		52		
Amortization of bond premium		(1,371)		_		(1,896)		
Total Other (Revenue) Expenses	\$	3,027	\$	343	\$	3,609		
Incomo Potoro Transforo	<u>,</u>	20.066	ċ	6 979	<u> </u>	9.616		
Income Before Transfers	\$	29,966	\$	6,878	\$	8,616		
Capital contributions		-		(682)		(4,358)		
Transfers out - tax equivalent		11,098		2,674		2,557		
Increase (Decrease) in Net Position	\$	18,868	\$	4,886	\$	10,417		
Net Position - Beginning (restated)		220,057		95,199		190,646		
Net Position - Ending	\$	238,925	\$	100,085	\$	201,063		

City of Huntsville Electric, Natural Gas, and Water Systems Statements of Cash Flows

Year Ending September 30, 2018

Cash and Cash Equivalents - End of Year



(Dollars in Thousands) Electric Gas Water 2018 2018 2018 **Operating Activities Received from Customers** 517,300 \$ 47,971 \$ 44,908 Paid to Suppliers for Goods and Services (435,848)(26,092)(10,896)Paid to Employees for Salaries and Wages (30,322)(9,772)(12,118)Net Cash Provided By (Used For) Operating Activities 51,130 12,107 21,894 **Noncapital Financing Activities** Transfers Out - Tax Equivalent (11,098)(2,674)(2,557)**Capital and Related Financing Activities** Payment of Principal on Long-Term Debt (50)(15,133)Additions to Plant in Service (10,329)(54,385)(6,564)**Capital Contributions** 682 4,358 Interest Expense (4,797)(4,780)45 Net Cash Provided By (Used For) Capital and Related Financing Activities (59,215)(5,836)(25,901) **Investing Activities Purchase of Investment Securities** (28,513)(3,386)(1,338)**Proceeds from Investments Securities** 9,157 Interest Income Earned on Investments 329 (474)(657)Net Cash Provided By (Used For) Investing Activities (28,184)(3,860)7,162 Increase (Decrease) in Cash and Cash Equivalents (47,367)598 (262)Cash and Cash Equivalents - Beginning of Year 95,443 25,723 9,431

48,076

\$

9,169

26,321

City of Huntsville Electric, Natural Gas, and Water Systems Statements of Cash Flows Year Ending September 30, 2018



(Dollars in Thousands) (Continued)		Electric		Gas		Water
		2018		2018		2018
Reconciliation of Operating Income to Net Cash Provided By (Used For) Operating Activities						
Operating Income	\$	32,993	\$	7,221	\$	12,225
Adjustments to Reconcile Operating Income to Net Cash	<u> </u>	,	<u> </u>		<u> </u>	, -
Provided By (Used For) Operating Activities:						
Depreciation and Amortization		18,775		4,507		9,696
Gain or Loss on Sale of Assets		112		86		49
Change in Accounts Receivable - Customer		(8,123)		(177)		(240)
Change in Accrued Interest, Rent and Other Receivables		44		(29)		22
Change in Inventories		(3,131)		575		(30)
Change in Prepaid Expenses		(3)		(1)		(1)
Change in Deferred Outflow of Resources		105		(1,132)		77
Change in Accounts Payable		6,865		12		(385)
Change in Pension Liability		(534)		(380)		(361)
Change in OPEB		577		(136)		43
Change in Deferred Inflow of Resources		1,109		1,941		630
Change in Customer Deposits		225		263		142
Change in Accrued Expenses and Other Current Liabilities		2,117		(644)		27
Total Adjustments		18,138		4,886		9,669
Net Cash Provided By (Used For) Operating Activities	\$	51,130	\$	12,107	\$	21,894
Cash and Cash Equivalent - End of Year						
Current assets:						
Cash and Cash Equivalents	\$	211	\$	4,799	\$	20,764
Investments	•	-		,		-
Cash and Cash Equivalents - Restricted - Customer Deposits		6,998		681		866
	\$	7,209	\$	5,480	\$	21,630
Noncurrent assets:						
Cash and Cash Equivalents - Restricted - Customer Deposits	\$	37,888	\$	3,689	\$	4,691
Bond Trustee Funds		2,979		_		
	\$	40,867	\$	3,689	\$	4,691
Total Cash and Cash Equivalents	\$	48,076	\$	9,169	\$	26,321

City of Huntsville Electric, Natural Gas, and Water Systems Statements of Fiduciary Net Position Statements of Changes in Fiduciary Net Position



Year Ending September 30, 2018

Statements of Fiduciary Net Position							
		Electric 2018		Gas 2018	Water 2018		
Assets							
Cash and cash equivalents	\$	3,693,610	\$	1,765,792	\$	1,739,379	
Investments at fair value							
Fixed income securities							
US Government obligations		1,067,055		510,124		502,493	
Mortgage backed securities		1,033,222		493,949		486,561	
Mututal Funds - fixed income		696,990		333,208		328,223	
		2,797,267		1,337,281		1,317,277	
Total Assets	\$	6,490,877	\$	3,103,073	\$	3,056,656	
Net Position							
Net position restricted for OPEB	\$	6,490,877	\$	3,103,073	\$	3,056,656	
Statements of Changes in Fiduciary Net Position	1						
		Electric		Gas		Water	
		2018		2018		2018	
Additions							
Employer contributions		\$ 1,354,4	87	\$ 647,535	\$	637,849	
Investment income							
Interest and dividends		86,3				40,648	
Net (depreciation) appreciation in FV of investments		(22,8	<u> </u>	(10,942)		(10,779)	
Net investment income		63,4	29	30,324	_	29,869	
Total additions		1,417,9	16_	677,859		667,718	
Deductions							
Administrative expenses		19,9	77	9,550		9,408	
Total deductions		19,9		9,550		9,408	
Total deddectoris				3,330		3,100	
Net increase in net position		1,397,9	39	668,309		658,310	
Net position restricted for OPEB beginning of year		5,092,9	39	2,434,764		2,398,345	
Net position restricted for OPEB end of year		\$ 6,490,8	78	\$ 3,103,073	\$	3,056,655	

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies

The financial statements of the City of Huntsville Electric, Natural Gas, and Water Systems (the "Utilities" or "HU") have been prepared in accordance with generally accepted accounting principles of the United States of America ("GAAP") as applied to government units. The Governmental Accounting Standards Board ("GASB") is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the Utilities' accounting principles are described below.

Reporting Entity

The definition of the reporting entity is based primarily on the notion of financial accountability. A primary Government is financially accountable for agencies that make up its legal entity. It is also financially accountable for a legally separate agency if its officials appoint a voting majority of that agency's governing body and either it is able to impose its will on that agency or there is a potential for the agency to provide specific financial benefits to, or to impose specific financial burdens on, the primary government. There are no component units which should be included as part of the financial reporting entity of the Utilities. However, the Utilities are a component unit of the City of Huntsville, Alabama.

The Utilities has a fiduciary fund for which it is responsible. The Utilities established the fiduciary fund to provide assets in trust to meet future other postemployment benefit (OPEB) obligations.

Financial Presentation

The Utilities are operated by separate Boards for the electric, natural gas, and water systems (collectively, the "Boards"). The Boards are responsible for the day-to-day operations of the Utilities and for making recommendations to the City for major capital outlays and rate revisions. The Electric Board consists of three members appointed by the Huntsville City Council for staggered three year terms. The Natural Gas and Water Boards are made up of the same three members who serve on each Board, simultaneously. The Boards have hired a President and CEO to administer all three utilities. Financial statements are presented for each Board. The notes are presented separately for each Board, where applicable, and jointly for areas where common descriptions exist.

Basis of Accounting

The Utilities use the accrual basis of accounting under which revenues are recognized when earned and expenses are recognized when incurred, even though actual payment or receipt may not occur until after the period ends.

Generally Accepted Accounting Principles (GAAP) are set by the Governmental Accounting Standards Board (GASB), not the FASB as the private sector. The industry as a whole is a regulated industry that follows the Federal Energy Regulatory Commission (FERC) mandates. The Huntsville Electric System's regulatory body is the Tennessee Valley Authority which has adopted most of these directives as published in the Federal Code of Regulations Title 18. These statements offer short and long-term financial information about their activities. The Statements of Net Position include all of the individual System's assets and liabilities and provide information about the nature and amounts of investments in resources (assets) and the obligations to creditors (liabilities). It also provides the basis for evaluating the capital structure of the System and assessing the liquidity and financial flexibility of the System.

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies (continued)

Basis of Accounting (Continued)

The Utilities prepares its financial statements in accordance with the provisions of GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, paragraphs 476-500, for regulated operations. These paragraphs recognize that accounting for rate regulated enterprises should reflect the relationship of costs and revenues introduced by rate regulation.

Cash and Cash Equivalents

For purposes of the Statements of Cash Flows, the Utilities consider all highly liquid temporary cash investments with low interest rate risk to be cash equivalents. Cash purchases and sales of these investments generally are part of the entity's cash management activities rather than part of its operating, investing and financing activities, and details of these transactions are not reported in the Statements of Cash Flows.

The Boards have designated that cash assets be set aside in each System to fund construction and renewal and replacement activity. The designations are segregated in the Statements of Net Position as Board Designated Funds. Designations are relieved once the Board has approved expenditures from those funds. The designated balances are fully funded and are not separately stated in the net assets portion of the balance sheets at September 30, 2018.

Investments

Investments in U.S. Treasury, government agency, and state and local government securities are recorded at fair value, as determined by quoted market prices. Investments in overnight repurchase agreements and commercial paper are recorded at cost, which approximates fair value.

Accounts Receivable - Trade

The Electric and Water Systems act as billing and collection agents for other City of Huntsville, City of Madison, and Madison County utility departments. Current earnings are charged with an allowance for doubtful accounts based on age of account. Receivables are due 15 days after the issuance of the invoice and are considered delinquent when more than 18 days past due. Accounts considered uncollectible throughout the year are charged against the allowance. The allowance for doubtful accounts at September 30, 2018 was:

	Elec	tric System	Gas	Systems	Wate	er Systems
Accounts Receivable	\$	260,201	\$	4,390	\$	13,528
Other Receivables		548,509		113,846		69,338

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies (continued)

Materials and Supplies Inventories

Materials and supplies inventories are stated at the lower of cost (average cost) or market using the first-in, first-out consumption method of inventory accounting.

Stored Gas Inventory

The stored inventory is reflected at the aggregate amount of the lower of cost (average cost) or market.

Fuel Management Program

In connection with the purchase of natural gas, the Natural Gas System has developed and implemented a procurement program intended to manage the risk of changes in the market place of natural gas. Pursuant to this program, the Utilities may execute fixed price and options contracts from time to time to help manage fluctuations in the market prices of natural gas.

Utility Plant

The Utilities maintain a \$5,000 capitalization threshold for equipment, land, buildings, and improvements. Utility plant and construction in progress are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful life of the assets ranging from five to 55 years. Retirements of units of property from service are credited against plant in service at the original cost of the units and accumulated depreciation is debited at the date of retirement. Improvements that extend the useful life of the assets are capitalized and depreciated over the remaining useful life of the asset. The cost of maintenance, repairs, and replacement of minor items of property are charged to operations and maintenance accounts. An allowance for funds used during construction is capitalized during the construction period.

Regulatory Accounting

Regulatory accounting allows a regulated utility to defer a cost (a regulatory asset) or recognize an obligation (a regulatory liability) if it is probable that through the rate making process, there will be a corresponding increase or decrease in future revenues. Accordingly, Huntsville Utilities has recognized certain regulatory assets in the accompanying Statements of Net Position. In the event Huntsville Utilities no longer meets the criteria for regulated operations under GASB Statement No. 62, Huntsville Utilities would be required to recognize the effects of any regulatory change in assets or liabilities in its Statements of Revenues, Expenses, and Changes in Net Position. The following are the regulatory assets included in the Statements of Net Position:

	Electric System		Gas S	Gas Systems		er Systems
Regulatory Assets		_				
Noncurrent						
Unamortized Debt Expense	\$	447,114			\$	495,624
Total Noncurrent	\$	447,114	\$	-	\$	495,624

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies (continued)

Accounts Receivable/Payable from/to Other Utilities

Included in other receivables are amounts due from the other utility systems for services rendered to them by the Utilities. The payable includes the amounts owed to the City of Huntsville and other utilities for services rendered by them to the Utilities.

Recognition of Revenues

Revenues are recognized from meters read on a daily basis. Service that has been rendered from the latest date of each meter-reading cycle to month end is estimated and accrued as unbilled revenue receivable.

Operating Revenues and Expenses

The Utilities consider all revenues and expenses associated with utility sales to be operating revenues and expenses. Any revenues or expenses not meeting this definition are considered to be nonoperating revenues or expenses.

Taxes

The Utilities are not subject to federal and state income taxes. The Utilities collects utility tax from its customers on behalf of the State of Alabama. Revenue is presented net of taxes and collected in the statement of revenues and expenses.

Grants in Aid to Construction

It is the Electric System's policy not to record amounts as grants in aid of construction, in accordance with guidelines established by FERC. The substance of this accounting treatment is to reduce the cost of operating the Electric System by reducing depreciation expense.

It is the Water and Natural Gas System's policy to record grants in aid of construction and other amounts received as capital contributions in the Statements of Revenues, Expenses, and Changes in Net Position.

Amortization

Amortization of bond discounts and premiums is computed on the effective interest method.

Amortization of regulatory assets is computed on a straight-line basis over the expected recovery of such costs in future rates, estimated to be 20 years.

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies (continued)

Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting period. Accordingly, actual results could differ from those estimates.

Environmental Costs

Huntsville Utilities expenses, on a current basis, certain known costs incurred in complying with environmental regulations and conducting remediation activities.

Pensions

The Employees' Retirement System of Alabama (the Plan) financial statements are prepared using the economic resources measurement focus and accrual basis of accounting. Contributions are recognized as revenues when earned, pursuant to the Plan requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan. Expenses are recognized when the corresponding liability is incurred, regardless of when the payment is made. Investments are reported at fair value. Financial statements are prepared in accordance with requirements of the Governmental Accounting Standards Board (GASB). Under these requirements, the Plan is considered a component unit of the State of Alabama and is included in the State's Comprehensive Annual Financial Report.

Adoption of New Accounting Pronouncements - GASB Pronouncements that have been issued and were effective for the Utilities' year ended September 30, 2018

GASB Statement No. 74 replaces GASB Statement No. 43, as amended, and GASB Statement No. 57. It includes requirements for defined contribution OPEB plans that replace the requirements for those OPEB plans in GASB Statement No. 25, as amended, GASB Statement No. 43, and GASB Statement No. 50.

GASB Statement No. 75 (GASB 75) establishes standards of accounting and financial reporting, but not funding or budgetary standards, for Other Postemployment Benefits (OPEB) that are provided to the employees of state and local governmental employers through OPEB Plans that are administered through trusts or equivalent arrangements meeting certain criteria. This statement also establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditure. It replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended, and No. 57, OPEB Measurement by Agent Employers and Agent Multiple- Employer Plans. For defined benefit OPEB plans the statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information are addressed...

GASB Statement 85 (GASB 85) addresses practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB].

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies (continued)

GASB Statement 86 (GASB 86) improves the consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources - resources other than the proceeds of refunding debt - are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance.

Recent Accounting Pronouncements

GASB has issued the following pronouncements that may affect future financial position, results of operations, cash flows, or financial presentation of the Utilities upon implementation. Management has not yet evaluated the effect of implementation of these standards.

GASB		Effective Fiscal
Statement No.	GASB Accounting Standard	Year
81	Irrevocable Split-Interest Agreements	2019
83	Certain Asset Retirement Obligations	2019
84	Fiduciary Activities	2020
87	Leases	2021

GASB Statement No. 81 (GASB 81) requires that a government that receives resources pursuant to an irrevocable split-interest agreement recognize assets, liabilities, and deferred inflows of resources at the inception of the agreement.

GASB 81 also provides expanded guidance for circumstances in which the government holds the assets. The requirements of GASB 81 are effective for periods beginning after December 15, 2017.

GASB Statement 83 (GASB 83) addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. GASB 83 establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. This Statement requires that recognition occur when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates a government to perform asset retirement activities. Laws and regulations may require governments to take specific actions to retire certain tangible capital assets at the end of the useful lives of those capital assets, such as decommissioning nuclear reactors and dismantling and removing sewage treatment plants. Other obligations to retire tangible capital assets may arise from contracts or court judgments. Internal obligating events include the occurrence of contamination, placing into operation a tangible capital asset that is required to be retired, abandoning a tangible capital asset before it is placed into operation, or acquiring a tangible capital asset that has an existing ARO. This Statement requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred.

Year Ending September 30, 2018



Note 1 - Summary of Significant Accounting Policies (continued)

The best estimate should include probability weighting of all potential outcomes, when such information is available or can be obtained at reasonable cost. If probability weighting is not feasible at reasonable cost, the most likely amount should be used. This Statement requires that a deferred outflow of resources associated with an ARO be measured at the amount of the corresponding liability upon initial measurement. This Statement requires the current value of a government's AROs to be adjusted for the effects of general inflation or deflation at least annually. In addition, it requires a government to evaluate all relevant factors at least annually to determine whether the effects of one or more of the factors are expected to significantly change the estimated asset retirement outlays. A government should remeasure an ARO only when the result of the evaluation indicates there is a significant change in the estimated outlays. The deferred outflows of resources should be reduced and recognized as outflows of resources (for example, as an expense) in a systematic and rational manner over the estimated useful life of the tangible capital asset. A government may have a minority share (less than 50 percent) of ownership interest in a jointly owned tangible capital asset in which a nongovernmental entity is the majority owner and reports it's ARO in accordance with the guidance of another recognized accounting standards setter. Additionally, a government may have a minority share of ownership interest in a jointly owned tangible capital asset in which no joint owner has a majority ownership, and a nongovernmental joint owner that has operational responsibility for the jointly owned tangible capital asset reports the associated ARO in accordance with the guidance of another recognized accounting standards setter. In both situations, the government's minority share of an ARO should be reported using the measurement produced by the nongovernmental majority owner or the nongovernmental minority owner that has operational responsibility, without adjustment to conform to the liability measurement and recognition requirements of this Statement. In some cases, governments are legally required to provide funding or other financial assurance for their performance of asset retirement activities. This Statement requires disclosure of how those funding and assurance requirements are being met by a government, as well as the amount of any assets restricted for payment of the government's AROs, if not separately displayed in the financial statements.

This Statement also requires disclosure of information about the nature of a government's AROs, the methods and assumptions used for the estimates of the liabilities, and the estimated remaining useful life of the associated tangible capital assets. If an ARO (or portions thereof) has been incurred by a government but is not yet recognized because it is not reasonably estimable, the government is required to disclose that fact and the reasons therefor. This Statement requires similar disclosures for a government's minority shares of AROs. The requirements for this Statement are effective for reporting periods beginning after June 15, 2018.

GASB Statement 84 (GASB 84) establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. An activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or equivalent arrangement that meets specific criteria. This Statement also provides for recognition of a liability to the beneficiaries in a fiduciary fund when an event has occurred that compels the government to disburse fiduciary resources.

Year Ending September 30, 2018



Events that compel a government to disburse fiduciary resources occur when a demand for the resources has been made or when no further action, approval, or condition is required to be taken or met by the beneficiary to release the assets. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018.

The objective of GASB Statement 87 (GASB 87) is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of GASB 87 are effective for reporting periods beginning after December 15, 2019.

Note 2 - Cash, Cash Equivalents, and Investments

At September 30, 2018 and 2017, all cash and cash equivalents of the Utilities are entirely insured or collateralized as provided by the Security for Alabama Funds Enhancement Act ("SAFE") as prescribed in section 41-14A of the code of the state of Alabama with a Qualified Public Fund Depository. Funds held by the banks' trust departments or agents are invested in U.S. governmental securities or are secured by U.S. government securities.

Year Ending September 30, 2018



Note 2 - Cash, Cash Equivalents, and Investments (continued)

A summary of cash and investments for the years ended September 30, 2018 are as follows:

	Electric	Gas	Water
	System	System	System
Carrying amounts of:			
Cash and Cash Equivalents			
Unrestricted	\$ 210,663	\$ 4,799,078	\$ 20,763,756
Customer Deposits - Restricted	44,885,279	4,370,580	5,556,335
Bond Funds - Restricted	2,978,551	-	-
Board Designated Funds	-	-	1,341
Investments			
Unrestricted	-	750,000	11,209,996
Customer Deposits - Restricted	-	-	-
Board Designated Funds	15,337,591	12,661,113	15,858,405
Bond Funds - Restricted	27,984,853		6,202,239
Total	\$ 91,396,937	\$ 22,580,771	\$ 59,592,072
Cash and Cash Equivalents			
Unrestricted	\$ 210,663	\$ 4,799,078	\$ 20,763,756
Customer Deposits - Restricted	44,885,279	4,370,580	5,556,335
Bond Funds - Restricted	2,978,551	-	-
Investments	2,370,001	750,000	11,209,996
Investments - Bond Funds - Restricted		, 55,555	11,203,330
Customer Deposits	-	_	_
Bond Construction Funds	27,984,853	_	6,202,239
Sinking Funds	-	_	-
Debt Service Funds	-	_	-
Board Designated Accounts			1,341
Investments			
Insurance Fund	1,537,487	964,034	966,286
Worker's Comp Fund	1,922,298	1,902,359	1,763,163
Construction Fund	9,218,674	7,379,008	5,784,207
Emergency Fund	2,659,132	-	-
Rate Stabalization Fund	-	2,415,712	-
System Development			7,344,749
	\$ 91,396,937	\$ 22,580,771	\$ 59,592,072

Year Ending September 30, 2018



Note 2 - Cash, Cash Equivalents, and Investments (continued)

At September 30, 2018, the Utilities had the following investments:

		Maturity		
Investment	<1	1-5	6 - 10	Total
Money Market Funds - U.S. Treasury Obligations	\$ 26,755,566	\$ 53,951,091	\$ -	\$ 80,706,657
Certificate of Deposits	1,500,000	-	-	1,500,000
U.S. Treasury Notes	7,797,540	-	-	7,797,540
Totals	\$ 36,053,106	\$ 53,951,091	\$ -	\$ 90,004,197

Interest Rate risk - is the risk of fixed-maturity investments fluctuating in response to changes in market interest rates. The Utilities manage exposure to declines in fair values by limiting the weighted average maturity of its investment portfolio in the bond funds to such stated maturities as will assure the availability of cash sufficient to pay, on a timely basis, the interest, and principal of the bonds coming due.

Credit risk - The Utilities' bond indentures for the outstanding Electric System Revenue Warrants and the Water System Revenue Warrants limit the investments of the various restricted bond funds to the following: (a) securities that are direct obligations of the United States and any securities that are with respect to which the payment of the principal thereof and the interest thereon is unconditionally and irrevocably guaranteed by the United States; (b) custodial receipts evidencing ownership in United States Treasury obligations; and (c) demand or time deposits in domestic banks rated no less than "AA" by Standard & Poor's Ratings Services or "Aa" by Moody's Investors Service.

At September 30, 2018, the Utilities' investments other than the restricted bond funds consisted of Money Market Funds - U.S. Treasury Obligations with no maturity, U.S. Treasury Notes and Certificates of Deposits with various due dates. In addition, the Utilities have invested in a repurchase agreement which is collateralized by U.S. Treasury Obligations.

Custodial Credit risk - For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Utilities will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. Each of the investments listed above are in the possession of an outside party.

GASB Codification Section 3100: Fair Value Measurements, establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements)

Year Ending September 30, 2018



Note 2 - Cash, Cash Equivalents, and Investments (continued)

The three levels of the fair value hierarchy under the codification are described as follows:

Level 1 (L1): Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the plan has the ability to access.

Level 2 (L2): Inputs to the valuation methodology include:

- quoted prices for similar assets or liabilities in active markets;
- quoted prices for identical or similar assets or liabilities in inactive markets;
- inputs other than quoted prices that are observable for the asset or liability;
- inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 (L3): Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

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

The fair value measurements of the Utilities' investments at September 30, 2018 are as follows:

2018	 Level 1	 Total
Money Market Funds - U.S. Treasury Obligations	\$ 80,706,657	\$ 80,706,657
Certificate of Deposits	1,500,000	1,500,000
U.S. Treasury Notes	 7,797,540	7,797,540
	\$ 90,004,197	\$ 90,004,197

There have been no changes in the methodologies used at September 30, 2018.

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

Concentration of Credit risk - Concentration of credit risk is the risk of loss attributable to the quantity of the Utilities' investment in a single issuer. Investments in single issuers that equal or exceed 5% of total investments have a reportable concentration of credit risk. Each of the investments listed above as held by a trustee represent greater than 5% of total investments.

Year Ending September 30, 2018



Note 3 - Utility Plant in Service

Capital asset activity by System for fiscal year 2018 is as follows:

Electric System

	Balance			Balance
	 10/1/2017	Increases	Decreases	9/30/2018
Land and land rights	\$ 4,934,528	\$ 69,396	\$ -	\$ 5,003,924
Structures and improvements	468,045,676	61,670,971	(2,328,728)	527,387,919
Furniture, fixtures and other	53,152,495	16,296,952	(569,067)	68,880,380
Total	\$ 526,132,699	\$ 78,037,319	\$ (2,897,795)	\$ 601,272,223
Less accumulated depreciation	(296,436,301)	(20,883,007)	2,897,794	(314,421,514)
Construction in progress	 62,357,039	88,198,246	(109,742,177)	40,813,108
Total	\$ 292,053,437	\$ 145,352,558	\$ (109,742,178)	\$ 327,663,817

Natural Gas System

	Balance			Balance
	 10/1/2017	Increases	Decreases	9/30/2018
Land and land rights	\$ 1,803,038	\$ -	\$ -	\$ 1,803,038
Structures and improvements	161,604,385	15,626,158	(334,367)	176,896,176
Furniture, fixtures and other	 13,738,429	388,407	(971,348)	13,155,488
Total	\$ 177,145,852	\$ 16,014,565	\$ (1,305,715)	\$ 191,854,702
Less accumulated depreciation	(72,400,774)	(5,059,475)	1,273,298	(76,186,951)
Construction in progress	 11,663,578	2,969,280	(11,835,224)	2,797,634
Total	\$ 116,408,656	\$ 13,924,370	\$ (11,867,641)	\$ 118,465,385

Water System

	Balance			Balance
	 10/1/2017	Increases	Decreases	9/30/2018
Land and land rights	\$ 1,845,971	\$ 400,787	\$ -	\$ 2,246,758
Structures and improvements	384,362,736	11,309,639	(5,610,757)	390,061,618
Furniture, fixtures and other	14,315,798	775,843	(594,061)	14,497,580
Total	\$ 400,524,505	\$ 12,486,269	\$ (6,204,818)	\$ 406,805,956
Less accumulated depreciation	(133,968,310)	(10,203,347)	4,315,377	(139,856,280)
Construction in progress	10,511,181	4,879,409	(4,639,477)	10,751,113
Total	\$ 277,067,376	\$ 7,162,331	\$ (6,528,918)	\$ 277,700,789

Year Ending September 30, 2018



Note 4 - Long-Term Debt

The Utilities has numerous outstanding debt obligations. A summary of the current year principal activity and a detailed description of each debt instrument follows.

	10/1/2017	Inc	creases	Decreases		9/30/2018
Electric Systems	\$ 80,350,000	\$	-	\$	(910,000)	\$ 79,440,000
Natural Gas Systems	-		-		-	-
Water Systems	111,525,000		-		(14,975,000)	96,550,000
Totals	\$ 191,875,000	\$	-	\$	(15,885,000)	\$ 175,990,000

Electric System

City of Huntsville, Alabama Electric System Revenue and Term Warrants, Series 2017 A - Electric System Revenue Warrants, Series 2017 A, were issued in the original amount of \$59,160,000. The warrants mature serially on December 1 each year and bear interest according to stated maturity dates as follows:

Bond Issue Series 2017-A

Year	Principal	Interest	Rate
2019	-	2,958,000.00	5.00%
2020	1,795,000.00	2,913,125.00	5.00%
2021	1,890,000.00	2,821,000.00	5.00%
2022	1,985,000.00	2,724,125.00	5.00%
2023	1,615,000.00	2,634,125.00	5.00%
2024	2,170,000.00	2,539,500.00	5.00%
2025	2,280,000.00	2,428,250.00	5.00%
2026	2,400,000.00	2,311,250.00	5.00%
2027	2,520,000.00	2,188,250.00	5.00%
2028	2,650,000.00	2,059,000.00	5.00%
2029	2,785,000.00	1,923,125.00	5.00%
2030	2,930,000.00	1,780,250.00	5.00%
2031	3,080,000.00	1,630,000.00	5.00%
2032	3,240,000.00	1,472,000.00	5.00%
2033	3,405,000.00	1,305,875.00	5.00%
2034	3,580,000.00	1,131,250.00	5.00%
2035	3,760,000.00	947,750.00	5.00%
2036	3,955,000.00	754,875.00	5.00%
2037	4,155,000.00	552,125.00	5.00%
2038	4,370,000.00	339,000.00	5.00%
2039	4,595,000.00	114,875.00	5.00%
Total	59,160,000.00	37,527,750.00	
Current	-		
	59,160,000.00		

Year Ending September 30, 2018



Note 4 - Long-Term Debt (continued)

The 2017-A issue contained issuance cost of \$364,297 that are classified as regulatory asset and amortized over 20 years. At September 30, 2018, the unamortized regulatory asset is \$326,884. The 2017-A issue also contained a premium of \$11,204,297 that is being amortized over 20 years. At September 30, 2018, the unamortized premium is \$10,229,065. The 2017-A Warrants are secured by the net revenues from the operations of the Electric System after payment of operating expenses. The 2017-A Warrants were issued to pay for the costs of capital improvements to the Electric System.

Optional Redemption: Those of the Series 2017-A Warrants having a stated maturity on and after December 1, 2027, shall be subject to redemption and payment, at the option of the City, on June 1, 2027, and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of \$5,000 or any integral multiple thereof with those of the maturities to be redeemed to be selected by the City, and if less than all the Series 2017-A Warrants of a single maturity are to be redeemed, those (or portions thereof)) of that maturity to be redeemed to be selected by the Trustee by lot), at and for Redemption Price with respects to each such Series 2017-A Warrants (or potion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the Redemption Date.

Year Ending September 30, 2018



Note 4 - Long-Term Debt (continued)

City of Huntsville, Alabama Electric System Revenue and Term Warrants, Series 2017 B - Electric System Revenue Warrants, Series 2017 B, were issued in the original amount of \$21,190,000. The warrants mature serially on December 1 each year and bear interest according to stated maturity dates as follows:

Bond Issue Series 2018-B

Year	Principal	Interest	Rate
2019	1,865,000.00	953,725.00	5.00%
2020	1,005,000.00	881,975.00	5.00%
2021	1,050,000.00	830,600.00	5.00%
2022	1,105,000.00	776,725.00	5.00%
2023	1,625,000.00	708,475.00	5.00%
2024	1,240,000.00	636,850.00	5.00%
2025	1,300,000.00	573,350.00	5.00%
2026	1,365,000.00	513,550.00	5.00%
2027	1,425,000.00	450,625.00	5.00%
2028	1,500,000.00	377,500.00	5.00%
2029	1,575,000.00	300,625.00	5.00%
2030	1,655,000.00	219,875.00	5.00%
2031	1,740,000.00	135,000.00	5.00%
2032	1,830,000.00	45,750.00	5.00%
2033	-	-	5.00%
2034	-	-	5.00%
2035	-	-	5.00%
2036	-	-	5.00%
2037	-	-	5.00%
2038	-	-	5.00%
2039	-	-	5.00%
Total	20,280,000.00	7,404,625.00	
Current	1,865,000.00		
	18,415,000.00		

The 2017-B issue contained issuance cost of \$130,370 that are classified as a regulatory asset and amortized over 15 years. At September 30, 2018, the unamortized regulatory asset is \$120,230. The 2017-B issue also contained a premium of \$3,669,067 that is being amortized over 15 years. At September 30, 2018, the unamortized premium is \$3,139,080.

Optional Redemption: Those of the Series 2017-B Warrants having stated maturity on and after December 1, 2027, shall be subject to redemption and payment, at the option of the City, on June 1, 2027, and on any date thereafter, as a whole or in part (but if redeemed in part, only in installments of \$5,000 or any integral multiple thereof with those of maturities to be redeemed to be selected by the City, and if less than all the Series 2017-B Warrants of a single maturity are to be redeemed, those (or portions thereof of that maturity to be redeemed

Year Ending September 30, 2018



Note 4 - Long-Term Debt (continued)

selected by the Trustee by lot) at and for Redemption Price with respect to each such Series 2017-B Warrants (or potion thereof) redeemed equal to the principal amount redeemed, plus accrued interest to the Redemption Date.

The 2017-B Warrants were issued to advance refund \$23,335,000 of the outstanding Series 2011 Warrants and \$4,140,000 of the outstanding Series 2007 Warrants As a result, the 2011 and 2007 series bonds are considered defeased and the Utilities has removed the liabilities from its accounts. The City deposited the proceeds along with other resources into two separate escrow funds to provide for maturing installments of principal and interest on the old warrants. These funds were subsequently invested by the trustee in U S Treasury Notes with varying maturities. The escrow funds are to provide for all installments due through and including December 1, 2017 (2007 Warrants) and December 1, 2021 (2011 Warrants). The outstanding principal on the 2011 and 2007 defeased bonds is \$23,335,000 and \$4,140,000, respectively at September 30, 2018.

As required by GASB Statement No. 23, the difference between the reacquisition price (funds required to refund the old debt) and the net carrying amount of the old debt is carried as deferred amount on debt refunding. The amounts deferred on the reacquisition of the 2011 and 2007 Warrants were \$724,573 and \$128,551, respectively. The deferred amount on the 2007 Warrants includes \$81,860 of previous unamortized issuance costs and is net of \$31,187 of an unamortized premium. The deferred amount on the 2011 Warrants includes \$99,245 of previous unamortized refunding costs and is net of \$2,150,002 of an unamortized premium. The deferred amount of the 2007 Warrants is being amortized over the remaining life of the 2007 Warrants using the straight line method. The deferred amount of the 2011 Warrants is being amortized over the life of the 2017-B Warrants. Amortization expense on these deferred amounts was \$399,313 for the year ended September 30, 2018.

The City refunded the 2011 and 2007 Warrants to reduce the annual debt service requirements. The refunding decreased the total debt service payments over the next fifteen years by approximately \$7,350,000 and resulted in an economic gain (difference between the present values of the debt service payments on the old and new debt) for the City of approximately \$6,604,690.

Year Ending September 30, 2018



Note 4 - Long-Term Debt (continued) Water System

City of Huntsville, Alabama Water System Revenue and Term Warrants, Series 2008

The 2008 Warrants were paid off during Fiscal Year 2018.

City of Huntsville, Alabama Water Revenue Warrants, Series 2013 - Water System Revenue Warrants, Series 2013 were issued in the original amount of \$180,000. The warrants mature serially on August 15 each year and bear interest according to stated maturity dates as follows:

2013 Water

Fiscal Year	Principal	Interest	Rate
2019	10,000	3,988	2.75%
2020	10,000	3,713	2.75%
2021	10,000	3,438	2.75%
2022	10,000	3,163	2.75%
2023	10,000	2,888	2.75%
2024	10,000	2,613	2.75%
2025	10,000	2,338	2.75%
2026	10,000	2,063	2.75%
2027	10,000	1,788	2.75%
2028	10,000	1,513	2.75%
2029	10,000	1,238	2.75%
2030	10,000	963	2.75%
2031	10,000	688	2.75%
2032	10,000	413	2.75%
2033	10,000	138	2.75%
	150,000		
Current	10,000		
	140,000		

The interest is payable on February 15 and August 15 of each year. Each installment of principal and interest shall bear interest after its due date until paid at a per annum rate of interest equal to 2% above the Authority Trustee Prime rate. The 2013 Series Warrants maturing in 2023 shall be subject to redemption prior to their respective maturities, at the option of the Board, on August 15, 2022, and on any date thereafter, as a whole or in part, at the redemption price equal to the principal amount thereof to be redeemed plus accrued interest to the redemption date.

The 2013 Warrants are secured by the net revenues from the operations of the Water System after payment of the cost of its operations and maintenance.

The Series 2013 Revenue Warrants were issued to pay costs of the Huntsville Utilities Variable Frequency Drive Installation project.

Year Ending September 30, 2018



Note 4 - Long-Term Debt (continued)

City of Huntsville, Alabama Water Revenue and Term Warrants, Series 2015 - Water System Revenue Warrants, Series 2015, were issued in the original amount of \$92,810,000. The warrants mature serially on November 1 each year and bear interest according to stated maturity dates as follows:

2015 Water

Fiscal Year	Principal	Interest	Rate
2019	3,155,000	3,910,500	4.00%
2020	3,300,000	3,781,400	4.00%
2021	3,450,000	3,629,150	5.00%
2022	3,575,000	3,507,150	2.00%
2023	3,700,000	3,378,900	5.00%
2024	3,890,000	3,189,150	5.00%
2025	4,090,000	2,989,650	5.00%
2026	4,300,000	2,779,900	5.00%
2027	4,520,000	2,559,400	5.00%
2028	4,755,000	2,327,525	5.00%
2029	4,995,000	2,083,775	5.00%
2030	5,255,000	1,827,525	5.00%
2031	5,525,000	1,558,025	3.38%
2032	5,760,000	1,322,700	4.00%
2033	5,975,000	1,106,000	5.00%
2034	6,250,000	830,250	5.00%
2035	6,570,000	509,750	5.00%
2036	6,910,000	172,750	5.00%
	85,975,000		
Current	3,155,000		
	82,820,000		

The Water System issued the Series 2015 Warrants for the purpose of (i) providing funds to pay the costs of various public capital improvements to the System more particularly including the construction of a new water treatment plant, and (ii) paying the costs of issuing the Series 2015 Warrants.

The Series 2015 Warrants bond indenture does not require the Water System to establish a reserve account but does require the Water System to establish a Warrant Fund equal to one twelfth (1/12) of the principal of the Series 2015 Warrants coming due on November 1 each year and one sixth (1/6) of the interest due each year.

The 2015 Warrants are secured by the net revenues from the operations of the Water System after payment of the cost of its operations and maintenance and by the monies and investments on deposit in trust funds created by the Trust Indenture under which the warrants were issued.

Year Ending September 30, 2018



Note 4 - Long-Term Debt (continued)

The 2015 issue contained issuance cost of \$406,698 that are classified as regulatory asset and amortized over 20 years. At September 30, 2018, the unamortized regulatory asset is \$343,999. The 2015 issue also contained a premium of \$12,610,058 that is being amortized over 20 years. At September 30, 2018, the unamortized premium is \$9,919,950.

City of Huntsville, Alabama Water Revenue and Term Warrants, Series 2016 - Water System Revenue Warrants, Series 2016, were issued in the original amount of \$10,425,000 to partially refund the Series 2008 Warrant. The warrants mature serially on November 1 each year and bear interest according to stated maturity dates as follows:

2016 Water

Fiscal Year	Principal	Interest	Rate
2019	1,605,000	415,250	3.000%
2020	415,000	382,875	4.000%
2021	430,000	363,825	5.000%
2022	450,000	341,825	5.000%
2023	475,000	318,700	5.000%
2024	505,000	294,200	5.000%
2025	525,000	268,450	5.000%
2026	550,000	241,575	5.000%
2027	580,000	213,325	5.000%
2028	610,000	186,625	4.000%
2029	640,000	158,425	5.000%
2030	670,000	125,675	5.000%
2031	705,000	91,300	5.000%
2032	730,000	62,269	3.125%
2033	755,000	38,594	3.250%
2034	780,000	13,163	3.375%
	10,425,000		
Current	1,605,000		
	8,820,000		

Optional Redemption: Those of the Series 2016 Warrants having stated maturities on November 1, 2027, and thereafter, shall be subject to redemption and payment prior to maturity, at the option of the Issuer, as a whole or in part, on November 1, 2026, and on any date thereafter (and if in part, of such maturities as shall be selected by the Issuer, and if less than all the Series 2016 Warrants of a single maturity are to be redeemed, those to be redeemed to be selected by the Trustee by lot), , at and for a redemption price equal to the principal amount so redeemed plus accrued interest thereon to the rate fixed for redemption.

Year Ending September 30, 2018



The 2016 issue contained issuance cost of \$171,652 that are classified as regulatory asset and amortized over 20 years. At September 30, 2018, the unamortized regulatory asset is \$151,626. The 2016 issue also contained a premium of \$1,090,205 that is being amortized over 20 years. At September 30, 2018, the unamortized premium is \$931,469.

Note 5 - Employee Benefits

The annual leave policy allows each employee to accumulate up to 35 days of annual leave. The Utilities follows the practice of accruing the dollar amount of the leave accrued per each employee on a monthly basis. Actual leave time taken is charged against this account. The sick leave policy provides that at the time of retirement, each employee will be paid 25% of the accumulated sick leave based on the employee's average salary during the last five years. The Utilities follow the practice of accruing 25% of accumulated sick leave for the employees at year end who are vested in their sick leave. Accrued annual leave and sick leave at September 30, 2018 are as follows:

	Accrued Annual Leave		Accrued Sick		
				Leave	
Electric System	\$	2,596,473	\$	655,859	
Natural Gas Systems		783,982		375,491	
Water Systems		858,453		335,703	
	\$	4,238,908	\$	1,367,053	

Note 6 - Defined Benefit Pension Plan and Description

Plan Description

The Employees' Retirement System of Alabama, an agency multiple-employer plan, was established October 1, 1945 under the provisions of Act 515 of the Legislature of 1945 for the purpose of providing retirement allowances and other specified benefits for state employees, State Police, and on an elective basis, to all cities, counties, towns, and quasi-public organizations. The responsibility for the general administration and operation of ERS is vested in its Board of Control. The ERS Board of Control consists of 13 trustees. The Plan is administered by the Retirement Systems of Alabama (RSA). Title 36-Chapter 27 of the Code of Alabama grants the authority to establish and amend the benefit terms to the ERS Board of Control. The Plan issues a publicly available financial report that can be obtained at www.rsa-al.gov.

Year Ending September 30, 2018



Note 6 - Defined Benefit Pension Plan and Description (continued)

The ERS Board of Control consists of 13 trustees as follows:

- 1) The Governor, ex officio.
- 2) The State Treasurer, ex officio.
- 3) The State Personnel Director, ex officio.
- 4) The State Director of Finance, ex officio.
- 5) Three vested members of ERS appointed by the Governor for a term of four years, no two of whom are from the same department of state government nor from any department of which an ex officio trustee is the head.
- 6) Six members of ERS who are elected by members from the same category of ERS for a term of four years as follows:
 - a. Two retired members with one from the ranks of retired state employees and one from the ranks of retired employees of a city, county, or a public agency each of whom is an active beneficiary of ERS.
 - b. Two vested active state employees.
 - c. Two vested active employees of an employer participating in ERS pursuant to § 36-27-6.

Benefits Provided

State law establishes retirement benefits as well as death and disability benefits and any ad hoc increase in postretirement benefits for the ERS. Benefits for ERS members vest after 10 years of creditable service. State employees who retire after age 60 (52 for State Police) with 10 years or more of creditable service or with 25 years of service (regardless of age) are entitled to an annual retirement benefit, payable monthly for life. Local employees who retire after age 60 with 10 years or more of creditable service or with 25 or 30 years of service (regardless of age), depending on the particular entity's election, are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, members of the ERS (except State Police) are allowed 2.0125% of their average final compensation (highest 3 of the last 10 years) for each year of service. State Police are allowed 2.875% for each year of State Police service in computing the formula method.

Act 377 of the Legislature of 2012 established a new tier of benefits (Tier 2) for members hired on or after January 1, 2013. Tier 2 ERS members are eligible for retirement after age 62 (56 for State Police) with 10 years or more of creditable service and are entitled to an annual retirement benefit, payable monthly for life. Service and disability retirement benefits are based on a guaranteed minimum or a formula method, with the member receiving payment under the method that yields the highest monthly benefit. Under the formula method, Tier 2 members of the ERS (except State Police) are allowed 1.65% of their average final compensation (highest 5 of the last 10 years) for each year of service. State Police are allowed 2.375% for each year of state police service in computing the formula method.

Members are eligible for disability retirement if they have 10 years of credible service, are currently in-service, and determined by the RSA Medical Board to be permanently incapacitated from further performance of duty. Preretirement death benefits are calculated and paid to the beneficiary on the member's age, service credit, employment status and eligibility for retirement.

Year Ending September 30, 2018



Note 6 - Defined Benefit Pension Plan and Description (continued)

The ERS serves approximately 909 local participating employers. The ERS membership includes approximately 88,517 participants. As of September 30, 2017, membership consisted of:

	ERS	Electric	Gas	Water
Retirees an beneficiaries currently receiving benefits	23,853	115	148	49
Terminated employees entitled to but not receiving benefits	1,401	2	5	1
Terminated employees not entitled to a benefit	7,154	3	6	2
Active Members	55,941	152	415	116
Post-DROP participants who are still in active service	168	<u> </u>		-
Total	88,517	272	574	168

Contributions

Covered members of the ERS contributed 5% of earnable compensation to the ERS as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, covered members of the ERS were required by statute to contribute 7.25% of earnable compensation. Effective October 1, 2012, covered members of the ERS are required by statute to contribute 7.50% of earnable compensation. Certified law enforcement, correctional officers, and firefighters of the ERS contributed 6% of earnable compensation as required by statute until September 30, 2011. From October 1, 2011, to September 30, 2012, certified law enforcement, correctional officers, and firefighters of the ERS were required by statute to contribute 8.25% of earnable compensation. Effective October 1, 2012, certified law enforcement, correctional officers, and firefighters of the ERS are required by statute to contribute 8.50% of earnable compensation. State Police of the ERS contribute 10% of earnable compensation. ERS local participating employers are not required by statute to increase contribution rates for their members.

Tier 2 covered members of the ERS contribute 6% of earnable compensation to the ERS as required by statute. Tier 2 certified law enforcement, correctional officers, and firefighters of the ERS are required by statute to contribute 7% of earnable compensation. Tier 2 State Police members of the ERS contribute 10% of earnable compensation. These contributions rates are the same for Tier 2 covered members of ERS local participating employers.

The ERS establishes rates based upon an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with additional amounts to finance any unfunded accrued liability, the preretirement death benefit and administrative expenses of the Plan.

For the year ended September 30, 2018, Huntsville Utilities active Tier 1 employee contribution rate was 5% and Tier 2 was 9.87% of covered employee payroll. Huntsville Utilities contractually required contribution rate for the year ended September 30, 2018 was as follows:

Year Ending September 30, 2018



Note 6 - Defined Benefit Pension Plan and Description (continued)

	Electric	c Systems Natural Gas		Electric Systems Natural Gas Systems Wa		Natural Gas Systems		Water Systems	
	20	18	20	18	20	18			
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2			
Normal Cost	1.53%	-0.33%	1.82%	0.28%	1.53%	-0.81%			
Accrue Liability	17.25%	17.25%	7.78%	7.78%	12.49%	12.49%			
Preretirement Death Benefit	0.02%	0.02%	0.02%	0.02%	0.02%	0.02%			
Administrative Expense	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%			
	19.15%	17.29%	9.97%	8.43%	14.39%	12.05%			

These required contribution rates are based upon the actuarial valuation dated September 30, 2015, a percent of annual pensionable payroll, and actuarially determined as an amount that, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, with an additional amount to finance any unfunded accrued liability. Total employer contributions to the pension plan for the year ended September 30, 2018 from the Utilities were:

	Electric	Gas	Water
Employer Contributions	2,181,893	2,546,158	944,369

Net Pension Liability

The Utilities net pension liability was measured as of September 30, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as September 30, 2016 rolled forward to September 30, 2018 using standard roll-forward techniques as shown in the following table:

	 Elect	ric	 G	as		Wa	ter
	Expected	Actual	Expected		Actual	Expected	Actual
Total pension liability as of September 30, 2016 (a)	\$ 66,152,081	\$ 66,824,096	\$ 89,108,619	\$	91,304,642	\$ 32,937,803	\$ 33,359,014
Discount Rate	7.75%	7.75%	7.75%		7.75%	7.75%	7.75%
Entry Age Normal Cost for	704 210	704 210	1 002 250		1 002 250	477 107	477 107
October 1, 2016 - September 30, 2017 (b)	784,310	784,310	1,882,258		1,882,258	477,197	477,197
Transfers Among Employers:	-	19,486	-		7,819		22,388
Actual benefit payments and refunds for October 1, 2016 - September 30, 2017 (c)	(4,400,918)	(4,400,918)	(4,251,400)		(4,251,400)	(1,645,720)	(1,645,720)
Total pension liability as of September 30, 2017 = [(a) X (1.08)] + (b) - [(c) X (1.04)]	\$ 67,491,724	\$ 68,235,306	\$ 93,480,653	\$	95,854,687	\$ 34,258,188	\$ 34,734,430
Difference between Expected and Actual:		\$ 743,582.00		\$	2,374,034.00		\$ 476,242.00
Less Liability Transferred for Immediate Recognition:		19,486			7,819		22,388
Experience (Gain)/Loss = (g) - (h)		724,096			2,366,215		453,854

Year Ending September 30, 2018



Note 6 - Defined Benefit Pension Plan and Description (continued)

Actuarial Assumptions

The total pension liability as of September 30, 2017 actuarial valuation was based on the annual actuarial funding valuation report prepared as of September 30, 2016. The key actuarial assumptions are summarized below:

Inflation 2.75%

Salary increase 3.25% - 5.00%

Investment rate of return* 7.75%

Mortality rates for ERS were based on the sex distinct RP-2000 Blue Collar Mortality Table Projected with Scale BB to 2020 with an adjustment of 125% at all ages for males and 120% for females at ages on and after age 78. The rates of mortality for the period after disability retirement are according to the sex distinct RP-2000 Disabled Retiree Mortality Table Projected with Scale BB to 2020 with an adjustment of 130% at all ages for females.

The actuarial assumptions used in the September 30, 2016 valuation were based on the results of an investigation of the economic and demographic experience for the ERS based upon participant data as of September 30, 2015.

The Board of Control accepted and approved these changes in September 2016, which became effective at the beginning of fiscal year 2016.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of geometric real rates of return for each major asset class are as follows:

		Long-Term
	Target	Expected Rate
	Allocation	of Return*
Fixed Income	17.0%	4.40%
U.S. Large Stocks	32.0%	8.00%
U.S. Mid Stocks	9.0%	10.00%
U.S. Small Stocks	4.0%	11.00%
International Developed Market Stocks	12.0%	9.50%
International Emerging Market Stocks	3.0%	11.00%
Alternatives	10.0%	10.10%
Real Estate	10.0%	7.50%
Cash	3.0%	1.50%
Total	100.0%	

^{*}Includes assumed rate of inflation of 2.50%.

^{*}Net of pension plan investment expenses

Year Ending September 30, 2018



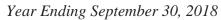
Note 6 - Defined Benefit Pension Plan and Description (continued)

Discount Rate

The discount rate used to measure the total pension liability was the long-term rate of return, 7.75%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that the employer contributions will be made in accordance with the funding policy adopted by the ERS Board of Control. Based on those assumptions, components of the pension plan's fiduciary net position were projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability

Electric System	Increases (Decreases)				
	Total	Plan	Net		
	Pension	Fiduciary	Pension		
	Liability	Net Position	Liability		
	(a)	(b)	(a) - (b)		
Balance at September 30, 2016	66,152,081	34,048,305	32,103,776		
Changes for the year:					
Service Cost	784,310	-	784,310		
Interest	4,956,251	-	4,956,251		
Difference between expected and					
actual experience	724,096	-	724,096		
Contributions - employer	-	2,147,571	(2,147,571)		
Contributions - employee	-	595,914	(595,914)		
Net investment income	-	4,254,699	(4,254,699)		
Benefit payments, including refunds					
of employee contributions	(4,400,918)	(4,400,918)	-		
Transfers among employees	19,486	19,486			
Net Changes	2,083,225	2,616,752	(533,527)		
Balance at September 30, 2017	68,235,306	36,665,057	31,570,249		





Note 6 - Defined Benefit Pension Plan and Description (continued)

Natural Gas System Increases (Decre			es)
	Total	Plan	Net
	Pension	Fiduciary	Pension
	Liability	Net Position	Liability
	(a)	(b)	(a) - (b)
Balance at September 30, 2016	89,108,619	56,627,914	32,480,705
Changes for the year:			
Service Cost	1,882,258	-	1,882,258
Interest	6,741,176	-	6,741,176
Changes of assumptions		-	-
Difference between expected and			-
actual experience	2,366,215	-	2,366,215
Contributions - employer	-	2,756,952	(2,756,952)
Contributions - employee	-	1,369,673	(1,369,673)
Net investment income	-	7,243,192	(7,243,192)
Benefit payments, including refunds			-
of employee contributions	(4,251,400)	(4,251,400)	-
Transfers among employees	7,819	7,819	
Net Changes	6,746,068	7,126,236	(380,168)
Balance at September 30, 2017	95,854,687	63,754,150	32,100,537

Year Ending September 30, 2018



Note 6 - Defined Benefit Pension Plan and Description (continued)

Water System	Increases (Decreases)			
	Total	Plan	Net	
	Pension	Fiduciary	Pension	
	Liability	Net Position	Liability	
	(a)	(b)	(a) - (b)	
Balance at September 30, 2016	32,937,803	18,495,113	14,442,690	
Changes for the year:				
Service Cost	477,197	-	477,197	
Interest	2,488,908	-	2,488,908	
Changes of assumptions		-	-	
Difference between expected and			-	
actual experience	453,854	-	453,854	
Contributions - employer	-	1,063,548	(1,063,548)	
Contributions - employee	-	362,182	(362,182)	
Net investment income	-	2,355,477	(2,355,477)	
Benefit payments, including refunds			-	
of employee contributions	(1,645,720)	(1,645,720)	-	
Transfers among employees	22,388	22,388		
Net Changes	1,796,627	2,157,875	(361,248)	
	_		_	
Balance at September 30, 2017	34,734,430	20,652,988	14,081,442	

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

The following table presents the City's net pension liability calculated using the discount rate of 7.75%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower (6.75%) or 1-percentage-point higher (8.75%) than the current rate:

HU's Net Pension	Liabi	litv
------------------	-------	------

	1.00%	Current	1.00%
	Decrease	Rate	Increase
	6.75%	7.75%	8.75%
Electric	39,626,659	31,570,249	24,790,622
Gas	44,755,916	32,100,537	21,515,699
Water	18,307,861	14.081.442	10,523,503

Year Ending September 30, 2018



Note 6 - Defined Benefit Pension Plan and Description (continued)

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued RSA Comprehensive Annual Report for the fiscal year ended September 30, 2017. The supporting actuarial information is included in the GASB Statement No. 68 Report for the ERS prepared as of September 30, 2017. The auditor's report dated August 31, 2018 on the Schedule of Changes in Fiduciary Net Position by Employer and accompanying notes is also available. The additional financial and actuarial information is available at www.rsa-al.gov.

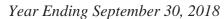
Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended September 30, 2018, the City recognized the following pension expense.

	Electric		Natural Gas		Water	
		System	System		System	
Recognized pension expense - 2018	\$	2,903,493	\$	3,071,636	\$	1,314,422

At September 30, 2018, the City reported deferred outflows of resources and deferred inflows of resources related to pensions of the following sources:

Electric System	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience Changes of assumptions Net differences between projected and actual earnings on pension plan inestments	\$ 1,539,534 1,095,515	\$ 1,108,556
Employer contributions subsequent to the measurement date	2,181,893	
Totals	\$ 4,816,942	\$ 1,108,556





Note 6 - Defined Benefit Pension Plan and Description (continued)

Natural Gas Systems	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience Changes of assumptions Net differences between projected and actual earnings on pension plan inestments	\$ 2,831,948 1,491,383	\$ 1,941,302
Employer contributions subsequent to the measurement date	2,546,158	\$ 1,541,5UZ
Totals	\$ 6,869,489	\$ 1,941,302
Water Systems	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience Changes of assumptions Net differences between projected and actual	\$ 1,230,471 511,255	
earnings on pension plan inestments Employer contributions subsequent to the measurement date	944,369	\$ 629,672
Totals	\$ 2,686,095	\$ 629,672

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

	Electric System	Natural Gas Systems	Water Systems
Year ended September 30:			
2019	370,319	198,599	144,882
2020	610,708	558,023	266,560
2021	128,099	(130,556)	37,859
2022	114,748	93,372	96,721
2023	247,097	616,787	267,676
Thereafter	55,702	1,045,804	298,356

Year Ending September 30, 2018



Note 7 - Property and Rights Held Under Deferred Compensation Plan

Employees of the Utilities may participate in a deferred compensation plan adopted under the provisions of Internal Revenue Code Section 457 (Deferred Compensation Plans with Respect to Service for State and Local Governments). The deferred compensation plan is administered by an unrelated financial institution. Under the terms of an Internal Revenue Code Section 457 deferred compensation plan, all deferred compensation and income attributable to the investment of the deferred compensation amounts held by the financial institution, until paid or made available to the employees or beneficiaries, are the property of the Utilities subject only to the claims of the Utilities general creditors. In addition, the participants in the Plan have rights equal to those of the general creditors of the Utilities, and each participant's rights are equal to his or her share of their fair market value of the Plan assets. The Utilities believe that it is unlikely that Plan assets will be needed to satisfy claims of general creditors that might arise. These assets and related liabilities are not reflected on the books and records of the Utilities.

Note 8 - Postemployment Benefits Other Than Pension Benefits

General Information about the OPEB Plan

<u>Basis of Accounting</u> - The financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the Utilities has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

<u>Method Used to Value Investments</u> - Plan assets have been segregated and restricted in an irrevocable trust fund with a local custodian bank. Plan assets are dedicated to providing retiree benefits and are protected from creditors. Investments are reported at fair value, which is determined by the trustee based on most recent bid and asked prices.

<u>Plan Description and Benefits Provided</u> - The Utilities provides certain health care and life insurance benefits to its retired employees, as a part of a single-employer defined benefit plan. Benefits include healthcare and dental care for eligible retirees and for retiree spouses to age 65 through the Utilities' group health insurance plan, which covers both active and retired members. The Utilities self-funds its health and dental benefit plan. For retirees over age 65, the Utilities provides a supplemental Medicare policy. Life insurance is provided for retirees meeting eligibility requirements. No separate stand-alone OPEB plan financial statements are publicly available. However, information on funding progress, contributions, and other elements are included in these financial statements.

<u>Employees Covered by Benefit Terms</u> - The Utilities provides certain post-retirement health and life insurance benefits to all employees who retire from the Utilities under the provisions of the qualified plan and a minimum of 20 years of service. At September 30, 2018, the following employees were covered by the benefit terms:

Inactive plan members or beneficiaries currently receiving benefit payments	252
Inactive plan members entitled to but not yet receiving benefit payments	-
Active plan members	671
	923

Year Ending September 30, 2018



Note 8 - Postemployment Benefits Other Than Pension Benefits (continued)

<u>Contributions</u> - The benefits are not provided under any statutory or contractual authority, but rather by administrative decision. For 2018, the Utilities contributed \$2,639,872.

Net OPEB Liability

The Utilities' net OPEB liability was measured as of September 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date.

<u>Actuarial Assumptions</u> - The total OPEB liability in the September 30, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation 2.88%

Salary increase 3.375% - 5.125% Investment rate of return* 5.00% annually

Healthcare cost trend rates 7.75% through 2021, and 5.00% thereafter

Mortality rates for active employees were based on the sex distinct RP-2000 Employee Mortality Table projected with Scale BB to 2020 with an adjustment factor of 70% for males and 50% for females. Postretirement mortality rates on the sex distinct RP-2000 Blue Collar Mortality Table projected with Scale BB to 2020. An adjustment of 125% at all ages for males and 120% for females beginning at age 78 was made for service retirements and beneficiaries. An adjustment of 130% for females at all ages was made for disability retirements.

<u>Discount Rate</u> - The discount rate used to measure the total OPEB liability was 3.74 percent. The projection of cash flows used to determine the discount rate assumed that the Utilities' contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the OPEB liability.



Note 8 - Postemployment Benefits Other Than Pension Benefits (continued)

Electric System	Total OPEB		Plan Fiduciary		Net OPEB	
	Liability (a)		Net Position (b)		Liability (a) -	
Balances at 9/30/2017	\$	34,595,181	\$	5,092,939	\$	29,502,242
Changes for the year:						_
Service cost		1,057,548		-		1,057,548
Interest	1,282,627			-		1,282,627
Differences between expected						
and actual experience		(26,895)		-		(26,895)
Contributions - employer		-		1,354,487		(1,354,487)
Net investment income		-		63,429		(63,429)
Benefit payments		(600,680)		-		(600,680)
Administrative expense		-		(19,977)		19,977
Net changes		1,712,600		1,397,939		314,661
Balances at 9/30/2018	\$	36,307,781	\$	6,490,878	\$	29,816,903

Gas System	Total OPEB Liability (a)		Plan Fiduciary Net Position (b)		Net OPEB Liability (a) - (
Balances at 9/30/2017	\$	14,677,856	\$	2,434,764	\$	12,243,092
Changes for the year:						
Service cost		448,691		-		448,691
Interest	544,186		-			544,186
Differences between expected						
and actual experience		(11,411)		-		(11,411)
Contributions - employer		-		647,535		(647,535)
Net investment income		-		30,324		(30,324)
Benefit payments		(254,853)		-		(254,853)
Administrative expense		-		(9,550)		9,550
Net changes		726,613		668,309		58,304
Balances at 9/30/2018	\$	15,404,469	\$	3,103,073	\$	12,301,396

Year Ending September 30, 2018



Note 8 - Postemployment Benefits Other Than Pension Benefits (continued)

Water System	Total OPEB		Plan Fiduciary		Net OPEB	
		Liability (a)		t Position (b)	Lial	bility (a) - (b)
Balances at 9/30/2017	\$	15,005,615	\$	2,398,345	\$	12,607,270
Changes for the year:						
Service cost		458,710		-		458,710
Interest	556,338		-			556,338
Differences between expected						
and actual experience		(11,665)		-		(11,665)
Contributions - employer		-		637,849		(637,849)
Net investment income		-		29,869		(29,869)
Benefit payments		(260,544) -		-		(260,544)
Administrative expense	-			(9,408)		9,408
Net changes		742,839		658,310		84,529
Balances at 9/30/2018	\$	15,748,454	\$	3,056,655	\$	12,691,799

<u>Sensitivity of the Net OPEB Liability to Changes in the Discount Rate</u> - The following presents the net OPEB liability of the Utilities, as well as what the Utilities' net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.74 percent) or 1-percentage-point higher (4.74 percent) than the current discount rate:

	1	1% Decrease (2.74%)		scount Rate (3.74%)	1% Increase (4.74%)		
Electric Net OPEB liability	\$	29,663,728	\$	29,816,903	\$	29,970,078	
Gas Net OPEB liability		11,645,248		12,301,396		12,957,543	
Water Net OPEB liability		12,541,969		12,691,799		12,841,628	

<u>Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates</u> - The following presents the net OPEB liability of the Utilities, as well as what the Utilities' net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower (6.75 percent) or 1-percentage-point higher (8.75 percent) than the current discount rate:

		Healthcare Cost						
	1	% Decrease (6.75%)	Trend Rate (7.75%)		1% Increase (8.75%)			
Net OPEB liability	\$	42,747,986	\$	54,810,098	\$	69,607,293		

Year Ending September 30, 2018



Note 9 - City of Huntsville - Payment in Lieu of Taxes

Because the Utilities are component units of the City of Huntsville, they are not subject to income taxes, either at the federal or state level. The Electric System, however, does pay to the City of Huntsville a tax equivalent, which is determined by applying the current property tax rates to net plant in service at the end of the preceding year. The Natural Gas and Water Systems each pay a tax equivalent, which is a predetermined (6%) percentage of sales revenue. The tax equivalent for the years ended September 30, 2018 are as follows:

	 2018
Electric System	\$ 11,097,956
Natural Gas Systems	2,673,772
Water Systems	2,556,503

Note 10 - Gas Purchase Commitments

The Gas System has entered into a purchase contract with Tennessee Energy Acquisition Corporation to establish the purchase price for natural gas. The contracts allow the Gas System to lock in certain volumes of gas to be purchased and prices for that gas. Under the contract, the Gas System has committed to purchase 1,572,500 MMBtus per year through December 2026 at index less .56 cents.

The Gas System has entered in to a purchase contract with Southeast Alabama Gas Supply District to procure natural gas supply. Under the contract, the Gas System has committed to purchase 219,958 MMBtu per year through October 2024 at index less \$0.35, and 439,895 MMBtu per year November 2024 through April 2049 at a discount yet to be determined.

Note 11 - Electric Purchase Commitments

Under its wholesale power agreement, the Electric System is committed to purchase its electric power and energy requirement from the Tennessee Valley Authority. The rates for such purchases are subject to review periodically.

Year Ending September 30, 2018



Note 12 - Risk Management

The Utilities are exposed to various risks such as torts, theft, damage, and destruction of assets; errors and omissions; and natural disasters and injuries to employees. Potential losses from these risks are mitigated with a combination of commercial and self-insurance. Commercial insurance coverage is combined for the Electric, Water, and Gas Utilities with the expense prorated to each department on a predetermined percentage. Coverage is provided as follows:

Blanket real and personal property	
Real property	350,000,000
Flood and earthquake	10,000,000
Blanket crime	1,000,000
Cyber	3,000,000
Automobile liability	1,000,000
Public officals and employment liability:	
Electric	5,000,000
Gas and Water	5,000,000
Workers compensation:	
Bodily injury (accident and disease)	Statutory
Excess coverage per occurrence (SIR)	1,000,000
Comprehensive general liability	Self-insured

Note 13 - Commitments and Contingencies

General Litigation

The Utilities are a party to a number of legal actions arising in the ordinary course of its business. In management's opinion, the Utilities have adequate legal defenses, insurance coverage, and/or self-insured reserves respecting each of these actions and does not believe that they will materially affect the Utilities' operations or financial position.

Construction Commitment

The Utilities entered into two construction contracts during fiscal year 2018 which are for the purpose of constructing a fiber network. The total contract for each vendor is as follows:

	Original Contract Amount	Amount Paid
Constructing a fiber network		
Bear Communication	80,988,688	15,942,332
Associated Diversified Services / Volt	17,521,428	3,916,135

Year Ending September 30, 2018



Note 14 - Customer Deposits

During 2018, the Utilities had the following Customer Deposit transactions:

	Deposits		Accrued Interest		Total
Electric Systems	\$ 35,822,127	\$	9,063,152	\$	44,885,279
Natural Gas Systems	3,488,081		882,499		4,370,580
Water Systems	4,434,410		1,121,925		5,556,335
	\$ 43,744,618	\$	11,067,576	\$	54,812,194

	Beginning Balance	Ne	w Deposits	Returned Deposits	Deposit Ilocation	Enc	ding Balance
Electric Systems	\$ 35,354,485	\$	7,513,175	\$ (6,746,122)	\$ (299,411)	\$	35,822,127
Natural Gas Systems	3,231,945		731,575	(656,885)	181,446		3,488,081
Water Systems	4,220,792		930,054	(834,401)	117,965		4,434,410
	\$ 42,807,222	\$	9,174,804	\$ (8,237,408)	\$ -	\$	43,744,618

Note 15 - Subsequent Events

The Utilities have evaluated subsequent events between September 30, 2018 and December 14, 2018, the date the financial statements were available to be issued, and there are none to disclose.

Note 16 - New Accounting Standards and Restatements of Net Position

In 2018, the Utilities adopted the provisions of GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans and GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions which improves accounting and financial reporting by state and local governments for OPEB. The effect of these changes was to record the full OPEB liability as of October 1, 2017. As a result, beginning net position has been restated for the change which resulted in a decrease in beginning net position of \$53,065,523.

In 2018, the Utilities adopted the provisions of GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period. This standard improves financial reporting by enhancing the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and simplifies accounting for certain interest costs. The effect of this change was to expense all interest incurred during the year ended September 30, 2018 and for all periods thereafter. Interest expense for the year ended September 30, 2018 was \$9,612,435.





Schedule of Changes in the Net Pension Liability

ELECTRIC SYSTEM	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
TOTAL PENSION LIABILITY:				
Service Cost	784,310	719,480	711,294	731,584
Interest	4,956,251	4,837,042	4,638,804	4,509,630
Difference in expected an actual experience	724,096	577,633	1,097,266	-
Changes of assumptions	-	1,593,475	-	-
Benefit payments, including refunds of employee contributions	(4,400,918)	(4,124,002)	(3,814,789)	(3,438,283
Transfer among employees	19,486	23,428		
Net change in total pension liability	2,083,225	3,627,056	2,632,575	1,802,931
Total pension liability - beginning	66,152,081	62,525,025	59,892,450	58,089,519
Total pension liability - end (a)	68,235,306	66,152,081	62,525,025	59,892,450
PLAN FIDUCIARY NET POSITION:				
Contribution - employer	2,147,571	1,991,515	1,891,153	1,956,167
Contribution - member	595,914	589,360	548,691	544,943
Net investment income	4,254,699	3,217,256	387,215	3,616,105
Benefit payments, including refunds of employee contributions	(4,400,918)	(4,124,002)	(3,814,789)	(3,438,283
Transfers among employees	19,486	23,428	25,241	
Net change in plan fiduciary net position	2,616,752	1,697,557	(962,489)	2,678,932
Plan net position - beginning	34,048,305	32,350,748	33,313,237	30,634,305
Plan net position - end (b)	36,665,057	34,048,305	32,350,748	33,313,237
Net pension liability - ending (a) - (b)	31,570,249	32,103,776	30,174,277	26,579,213
Plan fiduciary net position as a percentage of the total pension liability	53.73%	51.47%	51.74%	55.629
Covered employee payroll*	11,424,043	11,425,176	10,519,400	10,518,022
Net pension liability as a percentage of covered employee payroll	276.35%	280.99%	286.84%	252.709

^{*}Employer's covered payroll during the measurement period is the covered payroll. For FY2018, the measurement period is October 1, 2016 through September 30, 2017. GASB issued a statement "Pension Issues" in March 2016 to redefine covered payroll for FY2017.



Schedule of Changes in the Net Pension Liability

GAS SYSTEMS		2017	2016	2015	2014
TOTAL PENSION LIABILITY:					
	vice Cost	1,882,258	1,721,132	1,573,503	1,505,78
	erest	6,741,176	6,418,834	6,078,446	5,786,80
	erence in expected an actual experience	2,366,215	659,005	435,578	-
	nges of assumptions	-	1,964,837	-	-
	efit payments, including refunds of employee contributions	(4,251,400)	(3,866,137)	(3,799,232)	(3,494,95
Trar	nsfer among employees	7,819	42,460		
	Net change in total pension liability	6,746,068	6,940,131	4,288,295	3,797,63
	Total pension liability - beginning	89,108,619	82,168,488	77,880,193	74,082,55
	Total pension liability - end (a)	95,854,687	89,108,619	82,168,488	77,880,19
PLAN FIDUCIARY NET POSITION:					
Con	itribution - employer	2,756,952	2,756,354	2,552,653	2,501,13
Con	itribution - member	1,369,673	1,357,425	1,215,689	1,134,39
Net	investmentincome	7,243,192	5,220,617	599,470	5,401,04
Ben	nefit payments, including refunds of employee contributions	(4,251,400)	(3,866,137)	(3,799,232)	(3,494,95
Trar	nsfers among employees	7,819	42,460	7,562	41,27
	Net change in plan fiduciary net position	7,126,236	5,510,719	576,142	5,582,89
	Plan net position - beginning	56,627,914	51,117,195	50,541,053	44,958,15
	Plan net position - end (b)	63,754,150	56,627,914	51,117,195	50,541,05
Net	pension liability - ending (a) - (b)	32,100,537	32,480,705	31,051,293	27,339,14
Plar	n fiduciary net position as a percentage of the total pension liability	66.51%	63.55%	62.21%	64.90
Cov	rered employee payroll*	26,518,350	26,520,532	24,318,743	22,247,04
Net	pension liability as a percentage of covered employee payroll	121.05%	122.47%	127.68%	122.89

^{*}Employer's covered payroll during the measurement period is the covered payroll. For FY2018, the measurement period is October 1, 2016 through September 30, 2017. GASB issued a statement "Pension Issues" in March 2016 to redefine covered payroll for FY2017.



Schedule of Changes in the Net Pension Liability

WATER SYSTEM		<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
TOTAL PENSION LIABILITY:					
	Service Cost	477,197	441,272	402,811	386,061
	Interest	2,488,908	2,345,199	2,243,404	2,164,859
	Difference in expected an actual experience	453,854	976,221	194,984	-
	Changes of assumptions	-	684,563	-	-
	Benefit payments, including refunds of employee contributions	(1,645,720)	(1,564,096)	(1,573,407)	(1,564,81
	Transfer among employees	22,388	(42,396)		
	Net change in total pension liability	1,796,627	2,840,763	1,267,792	986,10
	Total pension liability - beginning	32,937,803	30,097,040	28,829,248	27,843,140
	Total pension liability - end (a)	34,734,430	32,937,803	30,097,040	28,829,24
PLAN FIDUCIARY NET POSITION	ON:				
	Contribution - employer	1,063,548	983,775	884,789	822,26
	Contribution - member	362,182	350,968	334,737	291,84
	Net investment income	2,355,477	1,722,031	199,105	1,828,68
	Benefit payments, including refunds of employee contributions	(1,645,720)	(1,564,096)	(1,573,407)	(1,564,81
	Transfers among employees	22,388	(42,396)	480,153	(275,61
	Net change in plan fiduciary net position	2,157,875	1,450,282	325,377	1,102,369
	Plan net position - beginning	18,495,113	17,044,831	16,719,454	15,617,08
	Plan net position - end (b)	20,652,988	18,495,113	17,044,831	16,719,45
	Net pension liability - ending (a) - (b)	14,081,442	14,442,690	13,052,209	12,109,79
	Plan fiduciary net position as a percentage of the total pension liability	59.46%	56.15%	56.63%	57.99
	Covered employee payroll*	7,076,595	7,107,229	6,438,733	5,870,73
	Net pension liability as a percentage of covered employee payroll	198.99%	203.21%	202.71%	206.279

^{*}Employer's covered payroll during the measurement period is the covered payroll. For FY2018, the measurement period is October 1, 2016 through September 30, 2017. GASB issued a statement "Pension Issues" in March 2016 to redefine covered payroll for FY2017.

Schedule of Employer Contributions



ELECTRIC SYSTEM	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Actuarially determined contribution **	2,181,893	2,070,122	1,947,313	1,890,601
Contributions in relation to the actuarially determined contribution	2,181,893	2,070,122	1,947,313	1,890,601
Contribution deficiency		-	-	
Covered employee payroll ***	10,784,446	11,424,043	11,568,353	10,915,642
Contributions as a percentage of covered employee payroll	20.23%	18.12%	16.83%	17.32%

^{**} The amount of employer contributions related to normal and accrued liability components of employer rate net of any refunds or service payments. The Schedule of Employer Contributions is based on the 12 month period of the underlying financial statements.

Notes to Schedule

Actuarially determined contribution rates are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. Contributions for fiscal year 2018 were based on the September 30, 2017 actuarial valuation.

Methods an assumptions used to determine contribution rates for the period October 1, 2016 to September 30, 2017*:

Actuarial cost method Entry Age

Amortization method Level percent closed Remaining amortization period 27.7 years

Asset valuation method Five years smoothed market

Inflation 3.00%

Salary increases 3.75 - 7.25%, including inflation

Investment rate of return 8.00%, net of pension plan investment

expense, including inflation

^{***} Employer's covered payroll for FY2018 is the total covered payroll for the 12 month period of the underlying financial statement.

Schedule of Employer Contributions



GAS SYSTEMS	<u>2018</u>	<u>2017</u>	<u>2016</u>	2015
Actuarially determined contribution ** Contributions in relation to the actuarially determined contribution	2,546,158 2,546,158	2,664,475 2,664,475	2,746,903 2,746,903	2,746,903 2,746,903
Contribution deficiency	<u> </u>	-		
Covered employee payroll ***	25,793,903	26,518,350	26,059,398	26,059,398
Contributions as a percentage of covered employee payroll	9.87%	10.05%	10.54%	10.54%

^{**} The amount of employer contributions related to normal and accrued liability components of employer rate net of any refunds or service payments. The Schedule of Employer Contributions is based on the 12 month period of the underlying financial statements.

Notes to Schedule

Actuarially determined contribution rates are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. Contributions for fiscal year 2017 were based on the September 30, 2014 actuarial valuation.

Methods an assumptions used to determine contribution rates for the period October 1, 2016 to September 30, 2017*:

Actuarial cost method Amortization method Remaining amortization period Asset valuation method Inflation Salary increases Investment rate of return

Entry Age
Level percent closed
25.8 years
Five years smoothed market
3.00%
3.75 - 7.25%, including inflation
8.00%, net of pension plan investment
expense, including inflation

^{***} Employer's covered payroll for FY2018 is the total covered payroll for the 12 month period of the underlying financial statement.

Schedule of Employer Contributions



WATER SYSTEM	<u>2018</u>	<u>201</u> 7	<u>2016</u>	<u>2015</u>
Actuarially determined contribution ** Contributions in relation to the actuarially determined contribution	944,369 944,369	1,030,584 1,030,584	983,774 983,774	822,264 983,774
Contribution deficiency		-	-	(161,510)
Covered employee payroll ***	6,604,192	7,076,595	6,747,417	6,260,841
Contributions as a percentage of covered employee payroll	14.30%	14.56%	14.58%	13.13%

^{**} The amount of employer contributions related to normal and accrued liability components of employer rate net of any refunds or service payments. The Schedule of Employer Contributions is based on the 12 month period of the underlying financial statements.

Notes to Schedule

Actuarially determined contribution rates are calculated as of September 30, three years prior to the end of the fiscal year in which contributions are reported. Contributions for fiscal year 2017 were based on the September 30, 2014 actuarial valuation.

Methods an assumptions used to determine contribution rates for the period October 1, 2016 to September 30, 2017*:

Actuarial cost method Amortization method Remaining amortization period Asset valuation method Inflation Salary increases

Investment rate of return

Entry Age
Level percent closed
28.9 years
Five years smoothed market
3.00%
3.75 - 7.25%, including inflation
8.00%, net of pension plan investment
expense, including inflation

^{***} Employer's covered payroll for FY2018 is the total covered payroll for the 12 month period of the underlying financial statement.

Schedule of Changes in Net OPEB Liability



Electric System

Schedule of Changes in the Utilities' Net OPEB Liability and Related Ratios Year Ending September 30,

	 2018
Total OPEB Liaibility	
Service cost	\$ 1,057,548
Interest	1,282,627
Changes of assumptions	(26,895)
Benefit payments	(600,680)
Net change in total OPEB liability	1,712,600
Total OPEB liability - beginning	 34,595,181
Total OPEB liability - ending (a)	\$ 36,307,781
Plan Fiduciary Net Position:	
Contributions - employer	\$ 1,354,487
Net investment income	63,429
Benefit payments	-
Administrative expense	 (19,977)
Net change in plan fiduciary net position	1,397,939
Plan fiduciary net position - beginning	5,092,939
Plan fiduciary net position - ending (b)	\$ 6,490,878
Utilities' net OPEB liability - ending (a) - (b)	\$ 29,816,903
Plan fiduciary net position as a percentage of the total OPEB liability	17.88%
Covered employee payroll	\$ 23,495,369
Utilities' net OPEB liability as a percentage of covered employee payroll	126.91%

Schedule of Changes in Net OPEB Liability



Gas System

Schedule of Changes in the Utilities' Net OPEB Liability and Related Ratios Year Ending September 30,

Tour Internet Co,		2018
Total OPEB Liaibility		
Service cost	\$	448,691
Interest	Ş	544,186
Changes of assumptions		(11,411)
Benefit payments		(254,853)
Net change in total OPEB liability		726,613
Total OPEB liability - beginning		14,677,856
Total OPEB liability - beginning		14,077,830
Total OPEB liability - ending (a)	\$	15,404,469
Plan Fiduciary Net Position:		
Contributions - employer	\$	647,535
Net investment income	•	30,324
Benefit payments		-
Administrative expense		(9,550)
Net change in plan fiduciary net position		668,309
Plan fiduciary net position - beginning		2,434,764
, , ,	-	
Plan fiduciary net position - ending (b)	\$	3,103,073
Utilities' net OPEB liability - ending (a) - (b)	\$	12,301,396
Plan fiduciary net position as a percentage of the total OPEB liability		20.14%
Covered employee payroll	\$	9,968,488
Utilities' net OPEB liability as a percentage of covered employee payroll		123.40%

Schedule of Changes in Net OPEB Liability



Water System

Schedule of Changes in the Utilities' Net OPEB Liability and Related Ratios Year Ending September 30,

		2018
Total ODER Lieibility		
Total OPEB Liaibility	.	450.740
Service cost	\$	458,710
Interest Character of accommentions		556,338
Changes of assumptions		(11,665)
Benefit payments		(260,544)
Net change in total OPEB liability		742,839
Total OPEB liability - beginning		15,005,615
Total OPEB liability - ending (a)	\$	15,748,454
Plan Fiduciary Net Position:		
Contributions - employer	\$	637,849
Net investment income		29,869
Benefit payments		-
Administrative expense		(9,408)
Net change in plan fiduciary net position		658,310
Plan fiduciary net position - beginning		2,398,345
Plan fiduciary net position - ending (b)	\$	3,056,655
Utilities' net OPEB liability - ending (a) - (b)	\$	12,691,799
Plan fiduciary net position as a percentage of the total OPEB liability		19.41%
Covered employee payroll	\$	10,191,086
Utilities' net OPEB liability as a percentage of covered employee payroll		124.54%

City of Huntsville Electric, Natural Gas, and Water Systems Required Supplementary Information Schedule of Utilities' Contributions



Electric System

Schedule of Utilities Contributions

Year Ending September 30,	2018
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$ 1,967,038 1,354,487
Contribution deficiency (excess)	\$ 612,551
Covered employee payroll	\$ 23,495,369
Contributions as a percentage of covered employee payroll	5.76%
Gas System Schedule of Utilities Contributions Year Ending September 30,	2018
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$ 834,564 647,535
Contribution deficiency (excess)	\$ 187,029
Covered employee payroll	\$ 9,968,488
Contributions as a percentage of covered employee payroll	6.50%
Water System Schedule of Utilities Contributions Year Ending September 30,	2018
Actuarially determined contribution Contributions in relation to the actuarially determined contribution	\$ 853,200 637,849
Contribution deficiency (excess)	\$ 215,351
Covered employee payroll	\$ 10,191,086
Contributions as a percentage of covered employee payroll	6.26%

Schedule of Utilities' Contributions



Notes to schedule:

Valuation date September 30, 2018

Actuarially determined contribution rates are calculated as of September 30, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumtions used to determine the contribution rates:

Acutuarial cost method Entry age

Amortization method Level funding, closed

Remaining amortization method 30 years
Asset valuation method Market value
Inflation 3.00%

Healthcare cost trend rates 7.75% initial, decreasing each year to an ultimate rate of

5.00%

Salary increase 3.75% - 5.125%, including inflation

Investment rate of return 5.00%, net of OPEB plan investment expense, including inflation

Retirement age In the 2017 actuarial valution, expected retirement ages of

general employees were adjusted to more closely reflect actual

experience

Mortality In the 2017 actuarial valution, assumed life expectancies were

adjusted by 70% - 125% and 50% - 130% for males and females, respectively based on RP-2000 Blue Collar base rates projected to

2020 using scale BB.



City of Huntsville Electric, Natural Gas, and Water Systems Supplementary Information Statistical Highlights - Electric System



STATISTICAL HIGHLIGHTS-ELECTRIC SYSTEM

CATEGORIES	2018	2017	2016
OPERATING REVENUE			
Residential	\$ 260,774,819	\$ 231,572,251	\$ 233,653,455
Large Commercial and Industrial	200,216,020	200,194,454	197,260,436
Small Commercial	42,397,969	36,066,016	33,726,964
Public Street and Highway Lighting	4,777,392	4,863,964	4,714,640
Other Operating Revenue	17,256,557	13,376,089	11,045,344
Total Operating Revenue	\$ 525,422,757	\$486,072,774	\$480,400,839
CUSTOMERS			
Residential	164,945	162,931	160,556
Large Commercial and Industrial	2,938	2,872	3,541
Small Commercial	18,569	18,485	17,599
Public Street and Highway Lighting	653	640	642
Total Customers	187,105	184,928	182,338
KWH SALES (THOUSANDS)			
Residential	2,567,626	2,298,238	2,421,246
Large Commercial and Industrial	2,283,507	2,252,088	2,336,682
Small Commercial	375,896	340,273	326,349
Public Street and Highway Lighting		35,604	35,779
Total KWH Sales (Thousands)	5,261,329	4,926,203	5,120,055
	, , , , , , , , , , , , , , , , , , , ,	,	, , , , , ,
OPERATING REVENUE/CUSTOMER Residential	¢ 1 500 00	ć 1,421,20	¢ 1.455.00
	\$ 1,580.98	\$ 1,421.29	\$ 1,455.28
Large Commercial and Industrial	68,147.05	69,705.59	55,707.55
Small Commercial	2,283.27	1,951.10	1,916.41
Public Street and Highway Lighting	7,316.07	7,599.94	7,343.68
OPERATING REVENUE/KWH			
Residential	\$ 0.102	\$ 0.101	\$ 0.097
Large Commercial and Industrial	0.088	0.089	0.084
Small Commercial	0.113	0.106	0.103
Public Street and Highway Lighting	0.139	0.137	0.132
KWH/CUSTOMER			
Residential	15,566.56	14,105.59	15,080.38
Large Commercial and Industrial	777,231.79	784,153.27	659,893.18
Small Commercial	20,243.20	18,408.04	18,543.60
Public Street and Highway Lighting	52,526.80	55,631.32	55,730.28
OPERATING REVENUE			
Residential	49.6%	47.6%	48.6%
Large Commercial and Industrial	38.1%	41.2%	41.1%
Small Commercial	8.1%	7.4%	7.0%
Public Street and Highway Lighting	0.9%	1.0%	1.0%
Other Operating Revenue	3.3%	2.8%	2.3%
CUSTOMERS			
	00.70/	00 10/	00 10/
Residential	88.2% 1.6%	88.1% 1.6%	88.1% 1.9%
Large Commercial and Industrial Small Commercial	9.9%	10.0%	9.7%
Public Street and Highway Lighting	0.3%	0.3%	0.4%
	0.576	0.576	0.476
Percentage of kWh Sold			
Residential	48.8%		47.3%
Large Commercial and Industrial	43.4%		45.6%
Small Commercial	7.1%	6.9%	6.4%
Public Street and Highway Lighting	0.7%	0.7%	0.7%

City of Huntsville Electric, Natural Gas, and Water Systems Supplementary Information Statistical Highlights - Electric System



STATISTICAL HIGHLIGHTS-ELECTRIC DIVISION

Top 10 by Revenue		2010	Top 10 by Consumption	1	
HUNTSVILLE HOSPITAL	\$	8,518,543	HUNTSVILLE HOSPITAL	98,374,602	KWH
HUNTSVILLE SCHOOLS	\$	5,868,568	TMMAL	76,489,585	KWH
TMMAL	\$	5,256,469	SAINT GOBAIN CERAMIC	66,825,744	KWH
SAINT GOBAIN CERAMIC	\$	3,939,776	HUNTSVILLE SCHOOLS	62,359,274	KWH
			TECHNICOLOR HOME		
WAL MART STORES EAST	\$	3,884,225	ENTERTAINMENT SERVICES	59,712,538	KWH
HUNTSVILLE UTILITIES	\$	3,829,350	KENNAMETAL INC	49,566,427	KWH
KENNAMETAL INC	\$	3,795,747	WAL MART STORES EAST	45,921,829	KWH
TECHNICOLOR HOME ENTERTAINMENT					
SERVICES	\$	3,750,124	HUNTSVILLE UTILITIES	41,824,392	KWH
MAD CO BD OF ED	\$	3,247,406	BASF CATALYSTS LLC	38,690,111	KWH
ALABAMA A&M UNIV	\$	3,141,686	BOEING COMPANY	36,547,597	KWH
		2017			
Top 10 by Revenue			Top 10 by Consumption	1	
HUNTSVILLE HOSPITAL	\$	7,916,573	HUNTSVILLE HOSPITAL	91,476,210	KWH
HUNTSVILLE SCHOOLS	\$	6,116,198	TMMAL	79,137,907	KWH
TMMAL	\$	5,257,134	HUNTSVILLE SCHOOLS	63,844,322	KWH
TECHNICOLOR HOME ENTERTAINMENT			TECHNICOLOR HOME		
SERVICES	\$	4,056,149	ENTERTAINMENT SERVICES	63,317,066	KWH
HUNTSVILLE UTILITIES	\$	3,888,189	SAINT GOBAIN CERAMIC	55,092,164	KWH
WAL MART STORES EAST	\$	3,797,528	KENNAMETAL INC	47,615,774	KWH
KENNAMETAL INC	\$	3,640,054	WAL MART STORES EAST	44,927,523	KWH
SAINT GOBAIN CERAMIC	\$	3,579,830	HUNTSVILLE UTILITIES	42,074,252	KWH
MAD CO BD OF ED	\$	3,046,318	BASF CATALYSTS LLC	37,434,940	KWH
ALABAMA A&M UNIV	\$	3,018,277	ALABAMA A&M UNIV	34,583,277	KWH
		<u>2016</u>			
Top 10 by Revenue			Top 10 by Consumption	1	
HUNTSVILLE HOSPITAL	\$	7,921,758	HUNTSVILLE HOSPITAL	96,341,971	KWH
HUNTSVILLE SCHOOLS	Š	5,955,364	TMMAL	80,548,955	
TMMAL	\$	5,700,091	HUNTSVILLE SCHOOLS	65,719,813	
WAL MART STORES EAST	\$	3,530,203	SAINT GOBAIN CERAMIC	61,331,711	
HUNTSVILLE UTILITIES	\$	3,502,248	KENNAMETAL INC	47,127,600	
KENNAMETAL INC	\$	3,446,322	WAL MART STORES EAST	43,661,191	
SAINT GOBAIN CERAMIC	\$	3,440,322	HUNTSVILLE UTILITIES	40,306,003	
MAD CO BD OF ED	\$		BASE CATALYSTS LLC		
	\$	3,103,991		37,752,770	
ALABAMA A&M UNIV	5	2,881,438	PPG INDUSTRIES INC WKS #22	34,734,913	
HUNTSVILLE CITY ENG	٥	2,853,280	ALABAMA A&M UNIV	34,580,588	KWH

City of Huntsville Electric, Natural Gas, and Water Systems Supplementary Information Statistical Highlights - Gas System



STATISTICAL HIGHLIGHTS-GAS SYSTEM

CATEGORIES		2018	2017	2016
OPERATING REVENUE				
Residential	\$ 20	,882,355	\$ 13,815,923	\$ 14,910,446
Commercial	21	,617,149	17,279,794	17,823,428
Industrial	2	,100,922	2,055,685	2,325,249
Other Operating Revenue	3	,548,204	2,315,863	2,562,636
Total Operating Revenue	\$48	,148,630	\$ 35,467,265	\$ 37,621,759
CUSTOMERS				
Residential		49,266	48,080	47,040
Commercial		5,557	5,514	5,439
Industrial		16	18	18
Total Customers		54,839	53,612	52,497
MCF SALES				
Residential	1	,877,024	1,351,105	1,491,621
Commercial	2	,397,287	1,925,150	2,024,603
Industrial		302,966	315,426	335,026
Total MCF Sales	4	,577,277	3,591,681	3,851,250
OPERATING REVENUE/CUSTOMER				
Residential	\$	423.87	\$ 287.35	\$ 316.97
Commercial		3,890.08	3,133.80	3,276.97
Industrial	13	1,307.62	114,204.72	129,180.50
OPERATING REVENUE/MCF				
Residential	\$	11.125	\$ 10.226	\$ 9.996
Commercial	\$	9.017	\$ 8.976	\$ 8.803
Industrial	\$	6.935	\$ 6.517	\$ 6.941
MCF/CUSTOMER				
Residential		38.10	28.10	31.71
Commercial		431.40	349.14	372.24
Industrial	1	8,935.38	17,523.67	18,612.56
OPERATING REVENUE %				
Residential		43.4%	39.0%	39.6%
Commercial		44.9%	48.7%	47.4%
Industrial		4.4%	5.8%	6.2%
Other Operating Revenue		7.4%	6.5%	6.8%
Total Operating Revenue		100.0%	100.0%	100.0%
CUSTOMERS %				
Residential		89.84%	89.68%	89.61%
Commercial		10.13%	10.29%	10.36%
		20.2070		
Industrial		0.03%	0.03%	0.03%

City of Huntsville Electric, Natural Gas, and Water Systems Supplementary Information Statistical Highlights - Gas System



STATISTICAL HIGHLIGHTS-GAS DIVISION

			2018		
Top 10 by Revenue			Top 10 by Consumpt	ion	
HUNTSVILLE SCHOOLS	s	960,147	UNITED STATES ARMY	346,378,000	CLIE
POLARIS INDUSTRIES INC	\$	843,422	BASE CATALYSTS LLC	335,460,000	
HUNTSVILLE CITY GSD	\$	705,637	HUNTSVILLE HOSPITAL	249,796,700	
VINTAGE PHARMACEUTICALS LLC	\$	482,345	NORRIS CYLINDER COMPANY INC	220,226,000	
HUNTSVILLE HOSPITAL	\$	465,173	HUNTSVILLE SCHOOLS	111,749,400	
REMINGTON ARMS COMPANY LLC	\$	447,909	POLARIS INDUSTRIES INC	103,190,400	
UNITED STATES ARMY	\$	429,502	HUNTSVILLE CITY GSD	81,951,900	
ALABAMA A&M UNIV	\$	400,083	REMINGTON ARMS COMPANY LLC	59,454,000	
INTERNATIONAL PAPER COMPANY	\$	383,579	VINTAGE PHARMACEUTICALS LLC	58,823,300	
BASE CATALYSTS LLC	5	360,633	INTERNATIONAL PAPER COMPANY	54,487,000	
BASE CATALISTS LLC	٥	300,033	INTERNATIONAL PAPER COMPANY	34,467,000	COF
			2017		
Top 10 by Revenue			Top 10 by Consumpt	ion	
HUNTSVILLE SCHOOLS	\$	804,077	BASF CATALYSTS LLC	320,366,000	
VINTAGE PHARMACEUTICALS LLC	\$	620,143	UNITED STATES ARMY	318,496,500	
HUNTSVILLE CITY GSD	\$	609,535	HUNTSVILLE HOSPITAL	235,047,800	
POLARIS INDUSTRIES INC	\$	576,428	NORRIS CYLINDER COMPANY INC	206,195,000	
REMINGTON ARMS COMPANY LLC	\$	400,067	KOHLER CO	156,842,800	
ALABAMA A&M UNIV	\$	380,546	UNITED STATES ARMY	127,683,000	
INTERNATIONAL PAPER COMPANY	\$	374,936	HUNTSVILLE SCHOOLS	90,544,500	CUF
HUNTSVILLE HOSPITAL	\$	372,307	VINTAGE PHARMACEUTICALS LLC	75,521,900	CUF
NEKTAR THERAPEUTICS	\$	319,085	HUNTSVILLE CITY GSD	71,075,700	CUF
UNITED STATES ARMY	\$	312,797	POLARIS INDUSTRIES INC	69,904,400	CUF
			2016		
Top 10 by Revenue			2016 Top 10 by Consumpt	ion	
HUNTSVILLE SCHOOLS	\$	832,771	BASF CATALYSTS LLC	319,800,000	CUF
VINTAGE	\$	668,794	UNITED STATES ARMY	304,039,000	CUF
HUNTSVILLE CITY GSD	\$	558,240	HUNTSVILLE HOSPITAL	258,454,600	CUF
HUNTSVILLE HOSPITAL	\$	407,857	NORRIS CYLINDER COMPANY INC	214,468,000	CUF
ALABAMA A&M UNIV	\$	400,564	KOHLER CO	159,917,200	
INTERNATIONAL PAPER COMPANY	\$	393,571	UNITED STATES ARMY	155,358,000	
NEKTAR THERAPEUTICS	\$	358,275	HUNTSVILLE SCHOOLS	90,358,200	
UNITED STATES ARMY	\$	307,344	VINTAGE	81,153,600	
REMINGTON ARMS COMPANY LLC	\$	306,246	REED CONTRACTING SERVICES INC	72,628,800	
CRESTWOOD HEALTHCARE	\$	301,859	HUNTSVILLE CITY GSD	64,398,900	

City of Huntsville Electric, Natural Gas, and Water Systems Supplementary Information Statistical Highlights - Water System



STATISTICAL HIGHLIGHTS-WATER SYSTEM

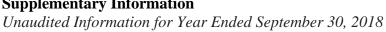
Years Ending September 30						
CATEGORIES OPERATING REVENUE		2018	2017			2016
Residential	ė.	24,805,904	\$ 25,277,1	01	0	23,387,774
Commercial		12,361,612	12,701,2			12,083,615
Industrial		2,001,883	2,144,6			2,138,113
Government		2,586,136	2,449,7			2,395,719
Other		591,180	496,4			553,158
Fire Hydrants		1,550,673	1,485,5			1,405,531
Other Operating Revenue		1,250,982	1,203,1			1,173,452
Total Operating Revenue	\$	45,148,370	\$ 45,757,9		\$4	43,137,362
CUSTOMERS						
Residential		86,813	85,3	80		84,205
Commercial		10,289	10,1	74		10,195
Industrial		57		61		67
Government		21		24		25
Other		9		8		9
Total Customers		97,189	95,6	47		94,501
METERED WATER GALLONS (THOUSAN	D)					
Residential		5,217,553	5,568,5	30		5,546,901
Commercial		3,247,143	3,377,1			3,438,209
Industrial		1,014,388	1,061,8			1,115,598
Government		1,501,700	1,412,2			1,405,037
Other		262,714	218,6			234,750
Total Sales Gallons (Thousands)		11,243,498	11,638,3	71		11,740,495
OPERATING REVENUE/CUSTOMER						
Residential	\$	285.74	\$ 296.		\$	277.75
Commercial		1,201.44	1,248.			1,185.25
Industrial		35,120.76	35,158.			31,912.13
Government		123,149.31	102,073.			95,828.76
Other		65,686.69	62,062.	00		61,462.00
OPERATING REVENUE/ THOUSAND GAI						
Residential	\$	4.754	\$ 4.5		Ş	4.216
Commercial		3.807	3.7			3.515
Industrial		1.973	2.0			1.917
Government		1.722	1.7			1.705
Other		2.250	2.2	/1		2.356
THOUSAND GALLONS/CUSTOMER						
Residential		60.10	65.			65.87
Commercial		315.59	331.			337.24
Industrial		17,796.28	17,406.			16,650.72
Government Other		71,509.52 29,190.44	58,844. 27,331.			56,201.48 26,083.33
		29,130.44	27,331.	03		20,065.55
OPERATING REVENUE %		E4.00/		20/		E4.20/
Residential		54.9%		.2%		54.2%
Commercial Industrial		27.4%		.8%		28.0%
Government		4.4% 5.7%		.7% .4%		5.0% 5.6%
Other		1.3%		.4%		1.3%
Fire Hydrants		3.4%		2%		3.3%
Other Operating Revenue	_	2.8%		.6%		2.7%
Total Operating Revenue		2.676	2.	.076		2.170
CUSTOMERS %						
Residential		89.32%	89.2	7%		89.10%
Commercial		10.59%	10.6			10.79%
Industrial		0.06%		6%		0.07%
Government		0.02%		3%		0.03%
Other		0.01%		1%		0.01%
Total Customers		100.00%	100.0			100.00%

City of Huntsville Electric, Natural Gas, and Water Systems Supplementary Information Statistical Highlights - Water System



STATISTICAL HIGHLIGHTS-WATER

			2018		
Top 10 by Revenue			Top 10 by Consumption		
UNITED STATES ARMY	\$	1,314,449	UNITED STATES ARMY	765,894,800	GAL
MADISON CO COMM S2WD	s	1,286,604	MADISON CO COMM S2WD	738,073,900	
HUNTSVILLE CITY GSD	\$	714,959	HUNTSVILLE CITY GSD	193,735,490	GAL
HUNTSVILLE HOSPITAL	\$	435,424	HUNTSVILLE HOSPITAL	170,403,000	GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$	425,213	ALABAMA A&M UNIV	155,090,900	GAL
HUNTSVILLE SCHOOLS	\$	394,681	NEW HOPE TOWN OF	150,617,000	GAL
ALABAMA A&M UNIV	\$	325,104	COVANTA HUNTSVILLE INC	115,846,700	GAL
NEW HOPE TOWN OF	\$	304,304	HOUSING AUTHORITY OF CITY OF HUNTSVILLE	112,391,900	GAL
IMI HUNTSVILLE LLC	\$	259,798	TRIANA TOWN OF	103,946,000	GAL
TRIANA TOWN OF	\$	208,480	HUNTSVILLE SCHOOLS	92,172,300	GAL
			2017		
Top 10 by Revenue			Top 10 by Consumption		
MADISON CO COMM S2WD	\$	1,313,708	MADISON CO COMM S2WD	750,659,600	GAL
UNITED STATES ARMY	s	1,152,614	UNITED STATES ARMY	665,814,300	
HUNTSVILLE CITY GSD	\$	724,187	HUNTSVILLE CITY GSD	207,274,200	GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$	439,124	HUNTSVILLE HOSPITAL	173,368,700	
HUNTSVILLE HOSPITAL	\$	438,710	ALABAMA A&M UNIV	162,151,600	GAL
HUNTSVILLE SCHOOLS	\$	419,908	NEW HOPE TOWN OF	142,575,000	GAL
ALABAMA A&M UNIV	\$	335,767	HOUSING AUTHORITY OF CITY OF HUNTSVILLE	120,968,000	GAL
NEW HOPE TOWN OF	\$	285,902	COVANTA HUNTSVILLE INC	117,029,800	GAL
IMI HUNTSVILLE LLC	\$	285,677	HUNTSVILLE SCHOOLS	103,249,700	GAL
COVANTA HUNTSVILLE INC	\$	205,305	IMI HUNTSVILLE LLC	89,807,700	GAL
			2016		
Top 10 by Revenue			Top 10 by Consumption		
MADISON CO COMM S2WD	\$	1,358,835	MADISON CO COMM S2WD	796,672,200	GAL
UNITED STATES ARMY	\$	1,053,128	UNITED STATES ARMY	615,217,400	GAL
HUNTSVILLE CITY GSD	\$	722,689	HUNTSVILLE CITY GSD	217,138,900	GAL
HUNTSVILLE HOSPITAL	\$	442,077	HUNTSVILLE HOSPITAL	184,913,200	GAL
HOUSING AUTHORITY OF CITY OF HUNTSVILLE	\$	392,573	ALABAMA A&M UNIV	164,423,500	GAL
HUNTSVILLE SCHOOLS	\$	351,428	NEW HOPE TOWN OF	149,810,000	GAL
ALABAMA A&M UNIV	\$	336,057	COVANTA HUNTSVILLE INC	124,579,900	GAL
NEW HOPE TOWN OF	\$	296,302	HOUSING AUTHORITY CITY OF HUNTSVILLE	111,549,600	GAL
IMI HUNTSVILLE LLC	\$	227,623	HUNTSVILLE SCHOOLS	95,804,600	GAL
COVANTA HUNTSVILLE INC	\$	213,910	SAINT GOBAIN CERAMIC	84,201,000	GAL





Water Systems

A. Annual Average and Peak Day	Production Huntsville Groundwater Sources

Average Day Production (mgd)	8.2
Percentage of Estimated Safe Capacity (80% = 12.4 mgd)	53%
Peak Day Production (mgd)	8.7
Percentage of Estimated Safe Capacity (80% = 12.4 mgd)	56%

B. Annual Average and Peak Day Production Huntsville Water Treatment Plants

Average Day Production (mgd)	35.8
Percentage of Estimated Safe Capacity (80% = 76.8 mgd)	37%
Peak Day Production (mgd)	51.0
Percentage of Estimated Safe Capacity (80% = 76.8 mgd)	53%
Plant Capacity	121.5

C. Additonal Operating Data

Number of Water System Customers	97,189
Sales (Gallons)	11,243,497,410
Sales (Dollars)	42,716,155

Unaudited Information for Year Ended September 30, 2018



Electric Systems

A. Debt Service Requirements for Electric Revenue Warrants

See Note 4 for Electric Revenue Warrants.

B. Operating and Maintenance Costs per Customer

The following compares Huntsville Utilities' operating and maintenance costs per customer and per 1,000 kWh sold to that of other local power companies regulated by the Tennessee Valley Authority for the fiscal year ended September 30, 2018, data for the trailing 12 months ended June 2017.

1. O&M Cost Per Average Customer

	Dollar Amount
Huntsville Utilities	\$248
Similar Distributors	\$388
Neighboring Distributors	\$303
All TVA Distributors	\$372
All Municipals	\$373
All Cooperatives	\$371

2. O&M Cost Per 1,000 kWh Sold

1	Dollar Amount
Huntsville Utilities	\$9
Similar Distributors	\$14
Neighboring Distributors	\$11
All TVA Distributors	\$15
All Municipals	\$13
All Cooperatives	\$18

C. Revenue per Kilowatt

The following provides average revenue per kilowatt for residential, commercial, and industrial customers, for Huntsville Utilities:

	Dollar Amount
Average Revenue per Kilowatt Hour - Residential	\$0.10
Average Revenue per Kilowatt Hour - Commericial 1,000 kW or less	\$0.11
Average Revenue per Kilowatt Hour - Industrial greater than 1.000 kW	\$0.09

Unaudited Information for Year Ended September 30, 2018



I. Water System

A. Annual Average and Peak Day Production Huntsville Groundwater Sources

Average Day Production (mgd)	8.2
Percentage of Estimated Safe Capacity (80% = 12.4 mgd)	53%
Peak Day Production (mgd)	8.7
Percentage of Estimated Safe Capacity (80% = 12.4 mgd)	56%

B. Annual Average and Peak Day Production Huntsville Water Treatment Plants

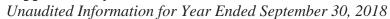
Average Day Production (mgd)	35.8
Percentage of Plant Safe Capacity (80% = 76.8 mgd)	37%
Peak Day Production (mgd)	51.0
Percentage of Plant Safe Capacity (80% = 76.8 mgd)	53%
Plant Capacity (mgd)	121.5

C. Largest Purchasers

The 10 largest purchasers of potable water from the City, together with their respective billing amounts and consumption, were as follows:

	Total Amount	Total Water
Customer	Billed	Consumption (gal.)
United States Army (1)	\$1,314,449	765,894,800
Madison County Commission	\$1,286,604	738,073,900
City of Huntsville (grounds/landscaping)	\$714,959	193,735,490
Huntsville Hospital	\$435,424	170,403,000
Housing Authority of the City of Huntsville	\$425,213	112,391,900
Huntsville City Board of Education	\$394,681	92,172,300
Alabama A&M University	\$325,104	155,090,900
Town of New Hope	\$304,304	150,617,000
IMI Huntsville	\$259,798	81,400,700
Town of Triana	\$208,480	103,946,000

⁽¹⁾ Represents water sales to Redstone Arsenal.





D. Number and Type of Customers

The number and type of customers served by the Water System has been as follows:

Customer Type	Number
Residential	85,380
Commercial	10,174
Industrial	61
Governmental	24
Other	8
Total	95,647

E. Additional Operating Data

Number of Water System Customers	95,647
Sales (Gallons)	11,668,371,40
Sales (Dollars)	\$43,790,167.78

Unaudited Information for Year Ended September 30, 2018



II. Electric System

A. Debt Service Requirements for Electric Revenue Warrants¹

See note 4 for Electric Revenue Warrants.

B. Operating Results from Electric System

The following provides the Electric System's operating results for the fiscal year ended September 30, 2018, and the resulting Annual Net Income for such fiscal year:

Operating Revenues	
Residential	\$260,774,819
Large commercial and industrial	\$200,216,020
Small commercial	\$ 42,397,969
Public street and highway lighting	\$ 4,777,392
Other operating revenue	\$ 17,256,557
Total Operating Revenues	\$525,422,757
Operating Expenses	
Purchased power	\$424,324,561
Transmission	\$ 339,496
Distribution	\$ 16,728,443
Customer accounting	\$ 6,729,594
Administrative and general	\$ 23,197,472
Depreciation	\$ 18,774,994
Payroll taxes	\$ 1,694,896
Total Operating Expenses	\$492,431,565
Operating Income	\$ 32,991,192
Nonoperating Revenues (Expenses)	
Gain on sale of assets	\$(112,404)
Interest income	\$(329,330)
Interest expense ⁽¹⁾	\$4,811,636
Amortization of bond discount	\$26,906
Amortization of bond premium	\$(1,371,083)
Total Nonoperating Revenues (Expenses)	\$3,025,726
Income Before Transfers	\$29,965,466
Transfers Out - Tax Equivalents	\$11,097,956
Change in Net Assets	\$18,867,509
Add: Depreciation	\$18,774,994
Add: Tax equivalent payments	\$11,097,956
Add: Interest expense ⁽¹⁾	\$ 4,811,636
Add: Amortization of bond discount	\$ 1,371,083
Annual Net Income	\$54,923,178

¹ This chart is to be updated for any additional parity warrants issued in the future.

73

Unaudited Information for Year Ended September 30, 2018



C. Customers and Sales

i. The number of customers by class and the corresponding aggregate amount of revenue and kilowatt hours of electricity sold as of and for the indicated fiscal year ended September 30, 2018, have been as follows:

Customers 164,945	Residential kWh Sold 2,2567,625,679	Revenue \$260,774,819	Customers 18,569	50kWh and Under Sold 375,8995,697	Revenue \$42,397,969
Customers 2,938	Over 50 kWh Sold 2,283,507,104	Revenue \$200,216,020	Customers 653	Other Outdoor Lighting kWh Sold 34,299,819	Revenue \$4,777,392

Total kWh			
Customers	Sold	Revenue	
187,105	5,261,328,299	\$508,166,200	

ii. The number of customers by class and the corresponding aggregate amount of revenue and kilowatt hours of electricity sold, expressed as a percentage for the indicated fiscal year ended September 30, 2018, have been as follows:

Percentage of Customers	
Residential	88%
Commercial	10%
Other	2%
Total	100%
Percentage of kWh Sold	
Residential	49%
Commercial	7%
Other	44%
Total	100%
Percentage of Revenue	
Residential	51%
Commercial	8%
Other	41%
Total	100%

Unaudited Information for Year Ended September 30, 2018



D. Major Customers

The following chart sets forth the City's top 10 customers, with associated sales revenues, distribution margin, percentage of distribution revenue to sales revenue, sales revenue as a percentage of total revenue, total kWh used by each customer, and the percentage of kWh used by each customer to total kWh used from all classes.

	Total Customer	Distribution	Distribution Revenue	Customer Revenue		Customer kWh as % of Total
Customer	Customer	Sales	as % of	as % of Total	Customer	HU kWh
Name	Revenue	Revenue	Sales Revenue	HU Sales Revenue	kWh	
Huntsville Hospital	\$8,518,543	\$8,518,543	100%	1.68%	98,374,602	1.87%
Huntsville Schools	\$5,868,568	\$5,868,568	100%	1.15%	62,359,274	1.19%
TMMAL	\$5,256,469	\$5,256,469	100%	1.03%	76,489,585	1.45%
Saint Gobain Ceramic	\$3,939,766	\$3,939,766	100%	0.78%	66,825,744	1.27%
Walmart Stores East	\$3,884,225	\$3,884,225	100%	0.76%	45,921,829	0.87%
Huntsville Utilities	\$3,829,350	\$3,829,350	100%	0.75%	41,824,392	0.79%
Kennametal Inc	\$3,795,747	\$3,795,747	100%	0.75%	49,566,427	0.94%
Technicolor Home Entertainment Services	\$3,750,124	\$3,750,124	100%	0.74%	59,712,538	1.13%
Mad Co BD of ED	\$3,247,406	\$3,247,406	100%	0.64%	28,839,611	0.55%
Alabama A&M Univ	\$3,141,686	\$3,141,686	100%	0.62%	36,023,950	0.68%

Unaudited Information for Year Ended September 30, 2018



E. Operating and Maintenance Costs per Customer

The following compares Huntsville Utilities' operating and maintenance costs per customer and per 1,000 kWh sold to that of other local power companies regulated by the Tennessee Valley Authority for the fiscal year ended September 30, 2018, data for the trailing 12 months ended June 2018.

1. <u>O&M Costs Per Average Customer</u>

	Dollar Amount
Huntsville Utilities	\$248
Similar Distributors	\$388*
Neighboring Distributors	\$303
All TVA Distributors	\$372*
All Municipals	\$373*
All Cooperatives	\$371*

2. O&M Costs per 1,000 kWh Sold

	Dollar Amount
Huntsville Utilities	\$9
Similar Distributors	\$14*
Neighboring Distributors	\$11
All TVA Distributors	\$15*
All Municipals	\$13*
All Cooperatives	\$18*

^{*} Data is from TVA Report dated June 2017. Report not available at this time.

F. Revenue per Kilowatt

The following provides average revenue per kilowatt for residential, commercial and industrial customers, for Huntsville Utilities:

	Dollar Amount
Average Revenue per Kilowatt Hour - Residential	\$0.10
Average Revenue per Kilowatt Hour - Commercial 1,000 kW or Less	\$0.11
Average Revenue per Kilowatt Hour - Industrial greater than 1,000 kW	\$0.09