Maury Service Authority

Financial Report

Year Ended June 30, 2019

Officers
At June 30, 2019

Chairperson
John Riester, Jr.

Vice-Chairperson
John Higgins

Secretary/Treasurer
George Graves

Board Members

John Riester, Jr.

Jonathan Goad

George Graves

John Higgins

Jimmy Carter

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Independent Auditors' Report

To the Board of Directors
Maury Service Authority
Lexington, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the Maury Service Authority, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express 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; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. 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 auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Maury Service Authority, as of June 30, 2019, and the changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principles

As described in Note 12 to the financial statements, in 2019, Maury Service Authority adopted new accounting guidance, GASB Statement No. 88 *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedules related to pension and OPEB funding on pages 3-6 and 32-37 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Maury Service Authority's basic financial statements. The supporting schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supporting schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supporting schedules are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated February 18, 2020, on our consideration of the Maury Service Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Maury Service Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Maury Service Authority's internal control over financial reporting and compliance.

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
February 18, 2020

As management of the Maury Service Authority (the Authority), we offer readers of our financial statements this narrative and overview and analysis of the financial activities of the Authority for the fiscal year ended June 30, 2019.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements. Since the Authority is engaged only in business-type activities, its basic financial statements are comprised of only two components: 1) enterprise fund financial statements and 2) notes to financial statements. This report also contains other supplementary information in addition to the basic financial statements themselves.

Enterprise fund financial statements. The enterprise fund financial statements are designed to provide readers with a broad overview of the Authority's finances, in a manner similar to a private-sector business.

The statement of net position presents information on the Authority's assets, liabilities, and deferred outflows/inflows of resources with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The statement of revenues, expenses and changes in fund net position presents information showing how the Authority's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

The basic enterprise fund financial statements can be found on pages 7 through 9 of this report.

Notes to financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes to the financial statements can be found on pages 10 through 31 of this report.

Other information. In addition to the basic financial statements and accompanying notes, this report also presents certain required supplementary information for the schedules of pension and OPEB funding related to the Virginia Retirement System benefits. Other supplementary information presented includes budgetary comparison schedules.

Financial Highlights

- The assets and deferred outflows of resources of the Authority exceeded its liabilities at the close of the most recent fiscal year by $26,143,638 (net position). Of this amount $3,254,219 (unrestricted net position) may be used to meet the Authority's ongoing obligations to customers and creditors.

- The Authority's total net position increased by $75,531 during the year.

- The Authority's total long-term debt decreased by $646,665 during the current fiscal year due to principal payments on its indebtedness.

Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of an Authority's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities by $26,143,638 at the close of the most recent fiscal year.

Financial Analysis: (Continued)

By far the largest portion of the Authority's net position (86 percent) reflects its net investment in capital assets. The Authority uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending. Although the Authority's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

	Net Position	
	2019	2018
Assets:		
Current and other assets	$ 3,825,071	$ 3,419,774
Capital assets	33,704,372	34,675,520
Total Assets	$ 37,529,443	$ 38,095,294
Total Deferred Outflows of Resources	$ 248,524	$ 136,782
Liabilities:		
Long-term liabilities outstanding	$ 11,187,635	$ 11,828,300
Other liabilities	432,384	327,176
Total Liabilities	$ 11,620,019	$ 12,155,476
Total Deferred Inflows of Resources	$ 14,310	$ 8,493
Net position:		
Net investment in capital assets	$ 22,576,722	$ 22,904,888
Restricted for debt service and bond covenants	312,697	305,740
Unrestricted	3,254,219	2,857,479
Total Net Position	$ 26,143,638	$ 26,068,107

At the end of the current fiscal year, the Authority is able to report positive balances in all categories of net position. The same situation held true for the prior fiscal year.

	Change in Net Position	
	2019	2018
Revenues:		
Sales - City of Lexington	$ 2,553,012	$ 1,779,757
Sales - Rockbridge County PSA	1,228,671	1,087,507
Contribution for debt service payments	358,627	1,444,279
Investment income	16,125	16,040
Other revenue	182,119	57,805
Total revenues	$ 4,338,554	$ 4,385,388
Expenses:		
Operating expenses (excluding depreciation)	$ 2,909,653	$ 2,227,001
Depreciation expense	1,193,631	1,154,712
Special projects and studies	4,040	86,212
Interest expense	155,699	176,446
Total expenses	$ 4,263,023	$ 3,644,371
Increase (decrease) in net position	$ 75,531	$ 741,017
Net position—July 1	26,068,107	25,327,090
Net position—June 30	$ 26,143,638	$ 26,068,107

Financial Analysis: (Continued)

The Authority's net position increased by $75,531 during the current year. Operating revenues increased by $1,038,733 and operating expenses (including depreciation) increased $721,571 over FY 2018 levels. Key elements of these changes are explained in greater detail under the Review of Operations section.

Capital Asset and Debt Administration

Capital Assets - The Authority's investment in capital assets as of June 30, 2019 amounted to $33,704,372 (net of accumulated depreciation). Investments in capital assets decreased by approximately 1% during the year. Below is a comparison of the items that make up capital assets as of June 30, 2019 with that of June 30, 2018.

	2019	2018
Land and land improvements	$ 910,971	$ 910,971
Utility plant in service	32,754,491	33,725,639
Construction in progress	38,910	38,910
Total net capital assets	$ 33,704,372	$ 34,675,520

Additional information on the Authority's capital assets is presented in Note 4 of the Notes to Financial Statements.

Long-term Debt - At the end of the current fiscal year, the Authority had $11,130,635 in bonds outstanding versus $11,777,300 last year, a decrease of 5.49%. The net decrease is due to the retirement of debt in excess of the issuance of bonds for the construction projects.

Additional information on the Authority's long-term liabilities is presented in Note 5 of the Notes to Financial Statements.

Review of Operations

Operating Revenues

Water sales revenues increased by $189,730, or 15.06%, from the previous year. Water rates increased by 4.62% during fiscal year 2019 to $2.72, in addition to a 48,387, or 9.98%, increase in consumption.

Sewage treatment revenues increased by $724,689 or 45.09%, from the previous year. The sewage treatment rate increased by 3.90% to $5.33 during fiscal year 2019. Additionally, consumption increased by 110,709 gallons or 33.57%.

Operating Expenses

Water operating expenses (excluding depreciation) increased by $166,167 in fiscal year 2019 over 2018 amounts. This represents a 23.14% increase over the previous year.

Sewer operating expenses (excluding depreciation) increased by $516,485 in fiscal year 2019 over 2018 amounts. This represents a 34.23% increase over the previous year.

Review of Operations: (Continued)

Long-Term Issues

Wastewater: Our calculations continue to show that based on past trends, the influent to the wastewater plant will remain stagnant, although this is highly dependent on the weather. The operating revenues will continue to fluctuate with the rainfall until our customers are able to significantly reduce the amount of infiltration and inflow into the sewer system.

Similarly, to the water system, due to aged facility, infrastructure, and equipment, the wastewater treatment and distribution systems will be evaluated through a facility assessment evaluation study in FY2020 and FY2021. The outcome of this study will help develop the path of improvements for the water and wastewater treatment systems.

Another issue facing the wastewater plant is the aging staff. In the next several years experienced staff will be retiring. Attracting new younger staff members is proving to be a significant challenge.

Projects

Water: Due to a PSA project's proximity to our water looping piping, approximately 1/2 of the proposed Houston St. Waterline Replacement project will be conducted in FY2021. The remaining portion of the Houston St. Waterline Replacement project is expected to be completed in FY2022.

Wastewater: Some progress has been made to hire a contractor to replace the out-of-date software in the control room. MSA is working with a consultant to address our concerns about other aging control systems related to the treatment system.

Two other projects in the discussion stage at the plant are the construction of a sludge drying bed for waste from cleaning out the influent pump station and a second sludge storage tank to help with solids handling at the plant.

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Executive Director at 130 Osage Lane, Lexington, VA 24450.

Financial Statements

MAURY SERVICE AUTHORITY

Statement of Net Position
As of June 30, 2019

	Water	Sewer	Total
ASSETS			
Current Assets:			
Cash and cash equivalents	$ 749,720	$ 1,624,820	$ 2,374,540
Accounts receivable	370,192	531,604	901,796
Amounts due from other funds	-	177,102	177,102
Prepaid expenses	6,568	21,684	28,252
Total Current Assets	$ 1,126,480	$ 2,355,210	$ 3,481,690
Noncurrent Assets:			
Restricted Assets:			
Cash and cash equivalents	$ 312,697	$ -	$ 312,697
Other Assets:			
Net pension asset	$ 9,819	$ 20,865	$ 30,684
Capital Assets:			
Land and improvements	$ 276,046	$ 634,925	$ 910,971
Construction in progress	38,910	-	38,910
Plant, lines and equipment	14,778,004	32,613,769	47,391,773
Total Capital Assets	$ 15,092,960	$ 33,248,694	$ 48,341,654
Accumulated depreciation	4,568,075	10,069,207	14,637,282
Net Capital Assets	$ 10,524,885	$ 23,179,487	$ 33,704,372
Total Noncurrent Assets	$ 10,847,401	$ 23,200,352	$ 34,047,753
Total Assets	$ 11,973,881	$ 25,555,562	$ 37,529,443
DEFERRED OUTFLOWS OF RESOURCES			
Deferred charge on refunding	$ 2,985	$ -	$ 2,985
Pension related items	58,667	132,510	191,177
OPEB related items	12,396	41,966	54,362
Total Deferred Outflows of Resources	$ 74,048	$ 174,476	$ 248,524
LIABILITIES			
Current Liabilities:			
Accounts payable	$ 43,793	$ 93,205	$ 136,998
Accrued payroll	12,216	29,998	42,214
Accrued interest payable	13,787	-	13,787
Amounts due to other funds	177,102	-	177,102
Compensated absences	35,726	26,557	62,283
Revenue bonds - current portion	328,965	323,009	651,974
Total Current Liabilities	$ 611,589	$ 472,769	$ 1,084,358
Long-term Liabilities:			
Revenue bonds payable - net of current portion	$ 6,925,567	$ 3,553,094	$ 10,478,661
Net OPEB Liability	12,540	44,460	57,000
Total Long-term Liabilities	$ 6,938,107	$ 3,597,554	$ 10,535,661
Total Liabilities	$ 7,549,696	$ 4,070,323	$ 11,620,019
DEFERRED INFLOWS OF RESOURCES			
Pension related items	$ 8,254	$ 1,056	$ 9,310
OPEB related items	1,100	3,900	5,000
Total Deferred Inflows of Resources	$ 9,354	$ 4,956	$ 14,310
NET POSITION			
Net investment in capital assets	$ 3,273,338	$ 19,303,384	$ 22,576,722
Restricted for debt service and bond covenants	312,697	-	312,697
Unrestricted	902,844	2,351,375	3,254,219
Total Net Position	$ 4,488,879	$ 21,654,759	$ 26,143,638

The accompanying notes to financial statements are an integral part of this statement.

MAURY SERVICE AUTHORITY

Statement of Revenues, Expenses and Changes in Net Position
Year Ended June 30, 2019

	Water	Sewer	Total
Operating Revenue:			
Sales:			
Lexington	$ 841,135	$ 1,711,877	$ 2,553,012
Rockbridge County Service Authority	608,755	619,916	1,228,671
Miscellaneous revenue	5,126	176,993	182,119
Total Operating Revenue	$ 1,455,016	$ 2,508,786	$ 3,963,802
Operating Expenses:			
Personnel and benefits	$ 408,649	$ 904,742	$ 1,313,391
Electricity	181,634	274,053	455,687
Chemicals	85,956	141,942	227,898
Insurance	41,023	32,799	73,822
Maintenance	95,707	315,826	411,533
Professional fees	19,410	111,837	131,247
Other expenses	51,981	244,094	296,075
Depreciation	372,314	821,317	1,193,631
Total Operating Expenses	$ 1,256,674	$ 2,846,610	$ 4,103,284
Operating Income (loss)	$ 198,342	$ (337,824)	$ (139,482)
Nonoperating Revenues (Expenses):			
Contribution for debt service payments	$ 35,618	$ 323,009	$ 358,627
Interest income	8,434	7,691	16,125
Special projects and studies	(1,277)	(2,763)	(4,040)
Interest expense	(155,699)	-	(155,699)
Total Nonoperating Revenues (Expenses)	$ (112,924)	$ 327,937	$ 215,013
Change in net position	$ 85,418	$ (9,887)	$ 75,531
Net position, beginning of year	4,403,461	21,664,646	26,068,107
Net position, end of year	$ 4,488,879	$ 21,654,759	$ 26,143,638

The accompanying notes to financial statements are an integral part of this statement.

MAURY SERVICE AUTHORITY

Statement of Cash Flows
Year Ended June 30, 2019

	Water	Sewer	Total
Cash Flows from Operating Activities:			
Receipts from customers and users	$ 1,425,421	$ 2,435,868	$ 3,861,289
Payments to suppliers	(462,979)	(1,092,299)	(1,555,278)
Payments to and for employees	(410,315)	(927,009)	(1,337,324)
Net Cash Provided by (Used for) Operating Activities	$ 552,127	$ 416,560	$ 968,687
Cash Flows from Noncapital Financing Activities:			
Contribution for debt service payments	$ 35,618	$ 323,009	$ 358,627
Interfund loans	55,167	(55,167)	-
Net Cash Provided By (Used for) Noncapital Financing Activities	$ 90,785	$ 267,842	$ 358,627
Cash Flows from Capital and Related Financing Activities:			
Purchase and construction of assets	$ (33,500)	$ (188,983)	$ (222,483)
Principal payments on bonds	(316,913)	(323,008)	(639,921)
Interest paid on indebtedness	(161,139)	-	(161,139)
Net Cash Provided by (Used for) Capital and Related Financing Activities	$ (511,552)	$ (511,991)	$ (1,023,543)
Cash Flows from Investing Activities:			
Interest income	$ 8,434	$ 7,691	$ 16,125
Net Cash Provided by (Used for) Investing Activities	$ 8,434	$ 7,691	$ 16,125
Increase (decrease) in cash and cash equivalents	$ 139,794	$ 180,102	$ 319,896
Cash and cash equivalents - beginning - including restricted	922,623	1,444,718	2,367,341
Cash and cash equivalents - ending - including restricted	$ 1,062,417	$ 1,624,820	$ 2,687,237
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:			
Operating income (loss)	$ 198,342	$ (337,824)	$ (139,482)
Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:			
Depreciation	372,314	821,317	1,193,631
Payments for special projects and studies	(1,277)	(2,763)	(4,040)
(Increase) decrease in accounts receivable	(29,595)	(72,918)	(102,513)
(Increase) decrease in prepaid expenses	(2,294)	(76)	(2,370)
(Increase) decrease in net pension asset	13,172	61,477	74,649
(Increase) decrease in pension deferred outflows	(35,808)	(78,931)	(114,739)
(Increase) decrease in OPEB deferred outflows	(383)	(303)	(686)
Increase (decrease) in accounts payable	16,303	31,091	47,394
Increase (decrease) in accrued payroll	(1,320)	6,629	5,309
Increase (decrease) in compensated absences	13,765	(14,048)	(283)
Increase (decrease) in net OPEB liability	1,408	4,592	6,000
Increase (decrease) in pension deferred inflows	7,710	(893)	6,817
Increase (decrease) in OPEB deferred inflows	(210)	(790)	(1,000)
Net Cash Provided by (Used for) Operating Activities	$ 552,127	$ 416,560	$ 968,687

The accompanying notes to financial statements are an integral part of this statement.

Note 1—Formation of the Maury Service Authority:

The Maury Service Authority was formed on August 7, 1970 as a political subdivision of the Commonwealth of Virginia by the Cities of Buena Vista and Lexington and the County of Rockbridge pursuant to the Virginia Water and Sewer Authorities Act (1950 as amended). The Authority is governed by a Board of Directors appointed by the founding localities. The Authority is responsible for acquiring, financing, constructing, and maintaining facilities for the improvement, treatment, storage and transmission of potable water. The Authority also provides wastewater treatment services to the participating jurisdictions.

Financial Reporting Entity - The Authority's financial statements include all of its funds and accounts. There are no potential component units which should be included in the reporting entity. The Authority is construed as a joint venture between the localities listed above.

Note 2—Summary of Significant Accounting Policies:

A. Basis of Accounting - The Maury Service Authority operates as enterprise funds and its financial statements are prepared on the accrual basis of accounting. Under this method, revenues are recognized when earned, and expenses are recorded as liabilities when incurred, without regard to receipt or payment of cash. The Authority accrues revenue for services rendered but not yet billed at the end of the fiscal year.

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

B. Allowance for Doubtful Accounts - The Authority bills the City of Lexington and the Rockbridge County Public Service Authority for substantially all of its services and consequently no provision for doubtful accounts is considered necessary.

C. Basic Financial Statements:

   Since the Authority is only engaged in business-type activities, it is only required to present the financial statements required for enterprise funds. For the Authority, the basic financial statements and required supplementary information consist of:

   - Management's Discussion and Analysis
   - Enterprise fund financial statements
     - Statement of Net Position
     - Statement of Revenues, Expenses, and Changes in Net Position
     - Statement of Cash Flows
     - Notes to Financial Statements
   - Required supplementary information
     - Pension and OPEB Funding Information

Note 2—Summary of Significant Accounting Policies: (Continued)

D. Capital Assets:

Capital assets, which include property, plant, equipment, and infrastructure assets (e.g., roads, bridges, sidewalks, and similar items), are reported in the financial statements. Capital assets are defined by the Authority as assets with an initial, individual cost of more than $7,000 (amount not rounded) and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation.

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend its useful life are not capitalized. Major outlays for capital assets and improvements are capitalized as projects are constructed.

Property, plant, equipment, and infrastructure are depreciated using the straight-line method over the following estimated useful lives:

Assets	Years
Water and Sewage treatment plant and equipment	10 to 50
Machinery and equipment	3 to 25
Office furniture and fixtures	10
Automobiles	5 to 10

E. Interest on Indebtedness: Interest incurred during the construction phase of capital assets is included as part of the capitalized value of the assets constructed. Other interest costs of the Authority are treated as nonoperating expenses. There was no capitalized interest for the year ended June 30, 2019.

F. Cash and Cash Equivalents: The Authority's cash and cash equivalents consist of demand deposits, certificates of deposit, overnight repurchase agreements and short-term U.S. Governmental obligations, with an original maturity of three months or less from the date of acquisition, all of which are readily convertible to known amounts of cash.

G. Budgets and Budgetary Accounting: A budget is prepared for informational, fiscal planning purposes, and to provide the basis for setting wholesale rates. None of the participating entities are required to approve the budgets. The budgets are adopted as planning documents and are not legal controls over expenses.

The budgets are adopted on an appropriation basis. Principally, the appropriation basis of budgeting provides for a full accrual basis of accounting, capital expenditures, and bond principal payments but does not provide for depreciation of utility plant assets and amortization. A review of the budgetary comparison schedules presented herein will disclose how accurately the Authority was able to forecast its revenues and expenditures.

H. Inventory: Consumption of materials and supplies is recorded as an expense when used. No inventory amounts are recorded as an asset, as available inventories are not significant.

I. Use of Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Note 2—Summary of Significant Accounting Policies: (Continued)

J. Deferred Outflows/Inflows of Resources: In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The Authority has multiple items that qualify for reporting in this category. The first is the deferred charge on refunding reported in the statement of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. Other deferred outflows are comprised of certain items related to the measurement of the net pension asset and net OPEB liability and contributions to the pension and OPEB plans made during the current year and subsequent to the net pension asset and net OPEB liability measurement date. For more detailed information on these items, reference the related notes.

   In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The Authority also has items that qualify for reporting in this category. Certain items related to the measurement of the net pension asset and net OPEB liability are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

K. Long-term Obligations: Bond premiums and discounts are deferred and amortized over the life of the bonds. Bonds payable are reported net of the applicable bond premium or discount.

L. Net Position: Net position is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. Net investment in capital assets represents capital assets, less accumulated depreciation, less any outstanding debt related to the acquisition, construction or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position.

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

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

O. Other Postemployment Benefits (OPEB): For purposes of measuring the net VRS related OPEB liabilities, deferred outflows of resources and deferred inflows of resources related to the OPEB, and OPEB expense, information about the fiduciary net position of the VRS GLI OPEB Plan and the additions to/deductions from the VRS OPEB Plan's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Note 3—Deposits and Investments:

Deposits

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

Investments

Statutes authorize the Authority to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool (LGIP).

The Authority does not have a formal investment policy.

Note 4—Capital Assets:

Details of changes in capital assets for the year ended June 30, 2019 are as follows:

	Beginning Balance	Increases	Decreases	Reclass	Ending Balance
WATER:					
Capital assets not being depreciated:					
Land and improvements	$ 276,046	$ -	$ -	$ -	$ 276,046
Construction in progress	38,910	-	-	-	38,910
Total capital assets not being depreciated	$ 314,956	$ -	$ -	$ -	$ 314,956
Capital assets being depreciated:					
Water plant and lines	$ 14,555,199	$ -	$ -	$ (16,841)	$ 14,538,358
Equipment	189,305	33,500	-	16,841	239,646
Total capital assets being depreciated	$ 14,744,504	$ 33,500	$ -	$ -	$ 14,778,004
Accumulated depreciation:					
Water plant and lines	$ (4,095,413)	$ (355,616)	$ -	$ -	$ (4,451,029)
Equipment	(100,348)	(16,698)	-	-	(117,046)
Total accumulated depreciation	$ (4,195,761)	$ (372,314)	$ -	$ -	$ (4,568,075)
Total capital assets, being depreciated, net	$ 10,548,743	$ (338,814)	$ -	$ -	$ 10,209,929
Total water capital assets, net	$ 10,863,699	$ (338,814)	$ -	$ -	$ 10,524,885

Note 4—Capital Assets: (Continued)

	Beginning Balance	Increases	Decreases	Ending Balance
SEWER:				
Capital assets not being depreciated:				
Land and improvements	$ 634,925	$ -	$ -	$ 634,925
Total capital assets not being depreciated	$ 634,925	$ -	$ -	$ 634,925
Capital assets being depreciated:				
Sewer treatment plant	$ 28,661,192	$ -	$ -	$ 28,661,192
Equipment	3,763,594	188,983	-	3,952,577
Total capital assets being depreciated	$ 32,424,786	$ 188,983	$ -	$ 32,613,769
Accumulated depreciation:				
Sewer treatment plant	$ (7,935,706)	$ (576,862)	$ -	$ (8,512,568)
Equipment	(1,312,184)	(244,455)	-	(1,556,639)
Total accumulated depreciation	$ (9,247,890)	$ (821,317)	$ -	$ (10,069,207)
Total capital assets, being depreciated, net	$ 23,176,896	$ (632,334)	$ -	$ 22,544,562
Total sewer capital assets, net	$ 23,811,821	$ (632,334)	$ -	$ 23,179,487
Total capital assets, net	$ 34,675,520	$ (971,148)	$ -	$ 33,704,372

Note 5—Long-term Liabilities:

A. Changes in Long-term Liabilities:

The following is a summary of long-term liabilities transactions for the year ended June 30, 2019:

	Beginning Balance	Issuances/ Additions	Retirements/ Reductions	Ending Balance	Due Within One Year
Water Revenue Bonds	$ 7,565,980	$ -	$ 316,913	$ 7,249,067	$ 324,884
Add:					
Issuance premiums	12,209	-	6,744	5,465	4,081
Total Water Revenue Bonds	$ 7,578,189	$ -	$ 323,657	$ 7,254,532	$ 328,965
Net OPEB Liability	11,132	14,608	13,200	12,540	-
Total Water Long-term Liabilities	$ 7,589,321	$ 14,608	$ 336,857	$ 7,267,072	$ 328,965
Sewer Revenue Bonds	$ 4,199,111	$ -	$ 323,008	$ 3,876,103	$ 323,009
Net OPEB Liability	39,868	51,480	46,888	44,460	-
Total Sewer Long-term Liabilities	$ 4,238,979	$ 51,480	$ 369,896	$ 3,920,563	$ 323,009
Totals	$ 11,828,300	$ 66,088	$ 706,753	$ 11,187,635	$ 651,974

Note 5—Long-term Liabilities: (Continued)

B. Details of Long-term Liabilities:

Direct Borrowings and Direct Placements - Water Revenue Bonds:		
$1,660,000 Water System Revenue Refunding Bond, Series 2009, issued through the Virginia Resources Authority dated June 17, 2009 bearing interest at rates ranging from 1.125% to 3.759% due in semi-annual installments of interest through April 1, 2021. Principal is payable annually on April 1. Face amounts of bonds outstanding $360,000 plus unamortized issuance premium of $5,465.	$	365,465
$7,598,000 Water Revenue Bond, Series 2012, issued through Rural Development dated June 5, 2012 bearing interest at 2%. Payments of interest only are due on June 5, 2013 and 2014. Beginning July 5, 2014, monthly payments of combined principal and interest of $23,858 are due through June 5, 2052.		6,889,067
Total Direct Borrowings and Direct Placements - Water Revenue Bonds	$	7,254,532
Net OPEB Liability	$	12,540
Total Water Long-term Liabilities	$	7,267,072
Direct Borrowings and Direct Placements - Sewer Revenue Bonds:		
$6,543,947 Sewer Revenue bond, Series 2009, dated May 7, 2009 due in semi-annual installments of principal of $163,599 commencing on December 1, 2011 through June 1, 2031. No interest.	$	3,876,103
Net OPEB Liability	$	44,460
Total Sewer Long-term Liabilities	$	3,920,563
Total Long-Term Liabilities	$	11,187,635

C. Default Provisions:

In the event of default on revenue bonds, the lender may declare the entire unpaid principal and interest on the issuance as due and payable.

Note 5—Long-term Liabilities: (Continued)

D. Annual Amortization of Long-term Liabilities:

The annual requirements to amortize all long-term debt outstanding as of June 30, 2019 are as follows:

	Direct Borrowings and Direct Placements			
Year Ending	Water Revenue Bonds		Sewer Revenue Bonds	
June 30,	Principal	Interest	Principal	Interest
2020	$ 324,884	$ 149,578	$ 323,009	$ -
2021	337,909	137,852	323,009	-
2022	155,996	130,300	323,009	-
2023	159,144	127,152	323,009	-
2024	162,357	123,939	323,009	-
2025	165,634	120,662	323,009	-
2026	168,977	117,319	323,009	-
2027	172,388	113,908	323,008	-
2028	175,867	110,429	323,008	-
2029	179,417	106,879	323,008	-
2030	183,038	103,258	323,008	-
2031	186,733	99,563	323,008	-
2032	190,502	95,794	-	-
2033	194,347	91,949	-	-
2034	198,270	88,026	-	-
2035	202,272	84,024	-	-
2036	206,355	79,941	-	-
2037	210,520	75,776	-	-
2038	214,769	71,527	-	-
2039	219,104	67,192	-	-
2040	223,526	62,770	-	-
2041	228,038	58,258	-	-
2042	232,641	53,655	-	-
2043	237,337	48,959	-	-
2044	242,127	44,169	-	-
2045	247,014	39,282	-	-
2046	252,000	34,296	-	-
2047	257,087	29,209	-	-
2048	262,276	24,020	-	-
2049	267,569	18,726	-	-
2050	272,970	13,326	-	-
2051	278,480	7,816	-	-
2052	239,519	2,230	-	-
Total	$ 7,249,067	$ 2,531,784	$ 3,876,103	$ -

For the year ended June 30, 2019 the City of Lexington and County of Rockbridge each contributed one-half of the Sewer Revenue Bond debt payment.

Note 6—Interfund Balances:

Amounts reported as due to and from other funds totaled $177,102 at June 30, 2019. This balance represents water fund expenses that were paid for by the sewer fund.

Note 7—Concentration of Revenue:

The Maury Service Authority receives substantially all its revenues from the City of Lexington and the Rockbridge County Public Service Authority. For the year ended June 30, 2019, the Water Fund had sales of $841,135 and $608,755 with the City of Lexington and Rockbridge County Service Authority, respectively, while the Sewer Fund had sales of $1,711,877 and $619,916 with the City and Authority, respectively. As of June 30, 2019, the Water Fund had receivables from the City and Authority of $210,905 and $159,287, respectively and the Sewer Fund had receivables from the City and Authority of $359,316 and $172,288, respectively.

Note 8—Risk Management:

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority joined together with other local governments in the Commonwealth to form the Virginia Municipal League Self Insurance Risk Pool, a public entity risk pool currently operating as a common risk management and insurance program for member governments. The Authority pays an annual premium to the pool for its workers' compensation, general liability, automobile liability, property, crime and public official's insurance coverages. The Agreement for Formation of the pool provides that the pool will be self-sustaining through member premiums. Settled claims have not exceeded pool coverage in any of the past three fiscal years.

Note 9—Pension Plan:

Plan Description

All full-time, salaried permanent employees of the Authority are automatically covered by a VRS Retirement Plan upon employment. This is an agent multiple-employer plan administered by the Virginia Retirement System (the System) along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the Code of Virginia, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave, and previously refunded service.

Benefit Structures

The System administers three different benefit structures for covered employees – Plan 1, Plan 2 and Hybrid. Each of these benefit structures has different eligibility criteria, as detailed below.

a. Employees hired before July 1, 2010, vested as of January 1, 2013, and have not taken a refund, are covered under Plan 1, a defined benefit plan. Non-hazardous duty employees are eligible for an unreduced retirement benefit beginning at age 65 with at least 5 years of creditable service or age 50 with at least 30 years of creditable service. Non-hazardous duty employees may retire with a reduced benefit as early as age 55 with at least 5 years of creditable service or age 50 with at least 10 years of creditable service.

Note 9—Pension Plan: (Continued)

Benefit Structures: (Continued)

b. Employees hired on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013 are covered under Plan 2, a defined benefit plan. Non-hazardous duty employees are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of creditable service or when the sum of their age and service equals 90. Non-hazardous duty employees may retire with a reduced benefit as early as age 60 with at least 5 years of creditable service.

c. Non-hazardous duty employees hired on or after January 1, 2014 are covered by the Hybrid Plan combining the features of a defined benefit plan and a defined contribution plan. Plan 1 and Plan 2 members also had the option of opting into this plan during the election window held January 1 – April 30, 2014 with an effective date of July 1, 2014. Employees covered by this plan are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of creditable service, or when the sum of their age and service equal 90. Employees may retire with a reduced benefit as early as age 60 with at least 5 years of creditable service. For the defined contribution component, members are eligible to receive distributions upon leaving employment, subject to restrictions.

Average Final Compensation and Service Retirement Multiplier

The VRS defined benefit is a lifetime monthly benefit based on a retirement multiplier as a percentage of the employee's average final compensation multiplied by the employee's total creditable service. Under Plan 1, average final compensation is the average of the employee's 36 consecutive months of highest compensation and the multiplier is 1.7% for non-hazardous duty employees. Under Plan 2, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the retirement multiplier is 1.65% for non-hazardous duty employees. Under the Hybrid Plan, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the multiplier is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.

Cost-of-Living Adjustment (COLA) in Retirement and Death and Disability Benefits

Retirees with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service are eligible for an annual COLA beginning July 1 after one full calendar year from the retirement date. Retirees with a reduced benefit and who have less than 20 years of creditable service are eligible for an annual COLA beginning on July 1 after one calendar year following the unreduced retirement eligibility date. Under Plan 1, the COLA cannot exceed 5.00%. Under Plan 2 and the Hybrid Plan, the COLA cannot exceed 3.00%. The VRS also provides death and disability benefits. Title 51.1 of the Code of Virginia, as amended, assigns the authority to establish and amend benefit provisions to the General Assembly of Virginia.

Note 9—Pension Plan: (Continued)

Employees Covered by Benefit Terms

As of the June 30, 2017 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	1
Inactive members:	
Vested inactive members	1
Active members	15
Total covered employees	17

Contributions

The contribution requirement for active employees is governed by §51.1-145 of the Code of Virginia, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement.

The Authority's contractually required employer contribution rate for the year ended June 30, 2019 was 12.70% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $103,181 and $76,438 for the years ended June 30, 2019 and June 30, 2018, respectively.

Net Pension Asset

The net pension liability (asset) (NPLA) is calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For the Authority, the net pension asset was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability (asset) was determined by an actuarial valuation performed as of June 30, 2017 rolled forward to the measurement date of June 30, 2018.

Note 9—Pension Plan: (Continued)

Actuarial Assumptions – General Employees

The total pension liability for General Employees in the Authority's Retirement Plan was based on an actuarial valuation as of June 30, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

Inflation	2.5%
Salary increases, including inflation	3.5% – 5.35%
Investment rate of return	7.0%, net of pension plan investment expenses, including inflation*

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates:

Largest 10 – Non-Hazardous Duty: 20% of deaths are assumed to be service related

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

All Others (Non 10 Largest) – Non-Hazardous Duty: 15% of deaths are assumed to be service related

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Note 9—Pension Plan: (Continued)

Actuarial Assumptions – General Employees (Continued)

All Others (Non 10 Largest) – Non-Hazardous Duty: 15% of deaths are assumed to be service related: (Continued)

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 – Non-Hazardous Duty:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

All Others (Non 10 Largest) – Non-Hazardous Duty:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

Note 9—Pension Plan: (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System 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 System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
		Inflation	2.50%
		*Expected arithmetic nominal return	7.30%

* The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; the Authority was also provided with an opportunity to use an alternative employer contribution rate. For the year ended June 30, 2018, the alternate rate was the employer contribution rate used in FY 2012 or 90% of the actuarially determined employer contribution rate from the June 30, 2015 actuarial valuations, whichever was greater. From July 1, 2018 on, participating employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Note 9—Pension Plan: (Continued)

Changes in Net Pension Asset

		Increase (Decrease)	
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) - (b)
Balances at June 30, 2017	$ (68)	$ 105,265	$ (105,333)
Changes for the year:			
Service cost	$ 99,909	$ -	$ 99,909
Interest	(32)	-	(32)
Differences between expected and actual experience	95,699	-	95,699
Contributions - employer	-	76,397	(76,397)
Contributions - employee	-	34,076	(34,076)
Net investment income	-	10,462	(10,462)
Benefit payments, including refunds of employee contributions	(789)	(789)	-
Administrative expenses	-	6	(6)
Other changes	-	(14)	14
Net changes	$ 194,787	$ 120,138	$ 74,649
Balances at June 30, 2018	$ 194,719	$ 225,403	$ (30,684)

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

The following presents the net pension asset of the Authority using the discount rate of 7.00%, as well as what the Authority's net pension asset would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

		Rate	
	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
Authority's Net Pension Asset	$ (4,239)	$ (30,684)	$ (52,705)

Note 9—Pension Plan: (Continued)

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

For the year ended June 30, 2019, the Authority recognized pension expense of $69,867. At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 79,959	$ -
Net difference between projected and actual earnings on pension plan investments	-	1,273
Changes in proportion	8,037	8,037
Employer contributions subsequent to the measurement date	103,181	-
Total	$ 191,177	$ 9,310

$103,181 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Asset in the fiscal year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year Ended June 30	
2020	$ 15,266
2021	15,266
2022	15,265
2023	15,890
2024	15,740
Thereafter	1,259

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

Note 10—Group Life Insurance (GLI) Program (OPEB Plan):

Plan Description

The Group Life Insurance (GLI) Program was established pursuant to §51.1-500 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. All full-time, salaried permanent employees of the state agencies, teachers, and employees of participating political subdivisions are automatically covered by the VRS GLI Program upon employment. This is a cost-sharing multiple-employer plan administered by the Virginia Retirement System (the System), along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia.

In addition to the Basic GLI benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional GLI Program. For members who elect the optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured program, it is not included as part of the GLI Program OPEB.

The specific information for GLI Program OPEB, including eligibility, coverage and benefits is described below:

Eligible Employees

The GLI Program was established July 1, 1960, for state employees, teachers, and employees of political subdivisions that elect the program. Basic GLI coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their accumulated retirement member contributions and accrued interest.

Benefit Amounts

The GLI Program is a defined benefit plan with several components. The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. The accidental death benefit is double the natural death benefit. In addition to basic natural and accidental death benefits, the program provides additional benefits provided under specific circumstances that include the following: accidental dismemberment benefit, safety belt benefit, repatriation benefit, felonious assault benefit, and accelerated death benefit option. The benefit amounts are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value. For covered members with at least 30 years of creditable service, the minimum benefit payable was set at $8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and was increased to $8,279 effective July 1, 2018.

Contributions

The contribution requirements for the GLI Program are governed by §51.1-506 and §51.1-508 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% x 60%) and the employer component was 0.52% (1.31% x 40%). Employers may elect to pay all or part of the employee contribution; however, the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2019 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the GLI Program from the entity were $4,362 and $3,676 for the years ended June 30, 2019 and June 30, 2018, respectively.

Note 10—Group Life Insurance (GLI) Program (OPEB Plan): (Continued)

GLI OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Program OPEB

At June 30, 2019, the entity reported a liability of $57,000 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2018 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Program for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018, the participating employer's proportion was .00372% as compared to .00335% at June 30, 2017.

For the year ended June 30, 2019, the participating employer recognized GLI OPEB expense of $10,000. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2019, the employer reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 3,000	$ 1,000
Net difference between projected and actual earnings on GLI OPEB program investments	-	2,000
Change in assumptions	-	2,000
Changes in proportion	47,000	-
Employer contributions subsequent to the measurement date	4,362	-
Total	$ 54,362	$ 5,000

$4,362 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the fiscal year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OEPB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year Ended June 30	
2020	$ 9,000
2021	9,000
2022	9,000
2023	10,000
2024	6,000
Thereafter	2,000

Note 10—Group Life Insurance (GLI) Program (OPEB Plan): (Continued)

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018. The assumptions include several employer groups as noted below. Mortality rates included herein are for relevant employer groups. Information for other groups can be referenced in the VRS CAFR.

Inflation	2.5%
Salary increases, including inflation:	
General state employees	3.5% – 5.35%
Teachers	3.5%-5.95%
SPORS employees	3.5%-4.75%
VaLORS employees	3.5%-4.75%
JRS employees	4.5%
Locality - General employees	3.5%-5.35%
Locality - Hazardous Duty employees	3.5%-4.75%
Investment rate of return	7.0%, net of investment expenses, including inflation*

*Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of OPEB liabilities.

Mortality Rates – Largest Ten Locality Employers – General Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:
RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

Note 10—Group Life Insurance (GLI) Program (OPEB Plan): (Continued)

Actuarial Assumptions: (Continued)

Mortality Rates – Largest Ten Locality Employers – General Employees: (Continued)

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

Mortality Rates – Non-Largest Ten Locality Employers – General Employees

Pre-Retirement:
RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:
RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:
RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

Note 10—Group Life Insurance (GLI) Program (OPEB Plan): (Continued)

Actuarial Assumptions: (Continued)

Mortality Rates – Non-Largest Ten Locality Employers – General Employees: (Continued)

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

NET GLI OPEB Liability

The net OPEB liability (NOL) for the GLI Program represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of the measurement date of June 30, 2018, NOL amounts for the GLI Program are as follows (amounts expressed in thousands):

		Group Life Insurance OPEB Program
Total GLI OPEB Liability	$	3,113,508
Plan Fiduciary Net Position		1,594,773
Employers' Net GLI OPEB Liability (Asset)	$	1,518,735
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability		51.22%

The total GLI OPEB liability is calculated by the System's actuary, and each plan's fiduciary net position is reported in the System's financial statements. The net GLI OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the System's notes to the financial statements and required supplementary information.

Note 10—Group Life Insurance (GLI) Program (OPEB Plan): (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on the System's 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 System's investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
		Inflation	2.50%
		*Expected arithmetic nominal return	7.30%

*The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total GLI OPEB liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ended June 30, 2018, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2018 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

Note 10—Group Life Insurance (GLI) Program (OPEB Plan): (Continued)

Sensitivity of the Employer's Proportionate Share of the Net GLI OPEB Liability to Changes in the Discount Rate

The following presents the employer's proportionate share of the net GLI OPEB liability using the discount rate of 7.00%, as well as what the employer's proportionate share of the net GLI OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	Rate		
	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
Authority's proportionate share of the Group Life Insurance Program Net OPEB Liability	$ 74,000	$ 57,000	$ 43,000

GLI Program Fiduciary Net Position

Detailed information about the GLI Program's Fiduciary Net Position is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Note 11—Compensated Absences:

The Authority has accrued the liability arising from outstanding compensated absences. Full-time employees accrue paid leave at varying rates as services are provided. The liability totals $62,283 at year-end.

Note 12—Adoption of Accounting Principles:

The Authority implemented the financial reporting provisions of Governmental Accounting Standards Board Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements* during the fiscal year ended June 30, 2019. This Statement clarifies which liabilities governments should include when disclosing information related to debt. It also requires that additional essential information related to debt be disclosed in notes to financial statements. No restatement was required as a result of this implementation.

Note 13—Subsequent Events:

In December 2019, the Board approved a water piping project of $1,016,836 and negotiation with PSA the $130,000 portion of the water piping work to be the PSA's responsibility. The PSA/County has to approve their portion of the work for the project to proceed. Financing options for the project are being explored.

Required Supplementary Information

Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
For the Measurement Dates of June 30, 2017 through June 30, 2018

	2018	2017
Total pension liability		
Service cost	$ 99,909	$ -
Interest	(32)	(2)
Differences between expected and actual experience	95,699	-
Benefit payments, including refunds of employee contributions	(789)	(66)
Net change in total pension liability	$ 194,787	$ (68)
Total pension liability - beginning	(68)	-
Total pension liability - ending (a)	$ 194,719	$ (68)
Plan fiduciary net position		
Contributions - employer	$ 76,397	$ 68,109
Contributions - employee	34,076	30,602
Net investment income	10,462	6,570
Benefit payments, including refunds of employee contributions	(789)	(66)
Administrative expense	6	60
Other	(14)	(10)
Net change in plan fiduciary net position	$ 120,138	$ 105,265
Plan fiduciary net position - beginning	105,265	-
Plan fiduciary net position - ending (b)	$ 225,403	$ 105,265
Authority's net pension liability (asset) - ending (a) - (b)	$ (30,684)	$ (105,333)
Plan fiduciary net position as a percentage of the total pension liability	115.76%	-154801.47%
Covered payroll	$ 699,040	$ 618,940
Authority's net pension liability (asset) as a percentage of covered payroll	-4.39%	-17.02%

Schedule is intended to show information for 10 years. The Authority began participation in the VRS pension plan on July 1, 2016.

Schedule of Employer Contributions - Pension Plan
For the Years Ended June 30, 2017 through June 30, 2019

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2019	$ 103,181	$ 103,181	$ -	$ 831,960	12.40%
2018	76,438	76,438	-	699,040	10.93%
2017	68,455	68,455	-	618,940	11.06%

Schedule is intended to show information for 10 years. The Authority began participation in the VRS pension plan on July 1, 2016.

Notes to Required Supplementary Information - Pension Plan
For the Year Ended June 30, 2019

Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

Changes of assumptions – The following changes in actuarial assumptions were made effective June 30, 2016 based on the most recent experience study of the System for the four-year period ending June 30, 2016:

Largest 10 – Non-Hazardous Duty:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

All Others (Non 10 Largest) – Non-Hazardous Duty:

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

Schedule of Authority's Share of Net OPEB Liability
Group Life Insurance Program
For the Measurement Dates of June 30, 2017 through June 30, 2018

Date (1)	Employer's Proportion of the Net GLI OPEB Liability (Asset) (2)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) (3)	Employer's Covered Payroll (4)	Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage of Covered Payroll (3)/(4) (5)	Plan Fiduciary Net Position as a Percentage of Total GLI OPEB Liability (6)
2018	0.00372%	$ 57,000	$ 706,893	8.06%	51.22%
2017	0.00335%	51,000	618,940	8.24%	48.86%

Schedule is intended to show information for 10 years. The Authority began participation in the VRS GLI plan on July 1, 2016.

Schedule of Employer Contributions
Group Life Insurance Program
For the Years Ended June 30, 2017 through June 30, 2019

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (5)
2019	$ 4,362	$ 4,362	$ -	$ 838,825	0.52%
2018	3,676	3,676	-	706,893	0.52%
2017	3,218	3,218	-	618,940	0.52%

Schedule is intended to show information for 10 years. The Authority began participation in the VRS GLI plan on July 1, 2016.

Notes to Required Supplementary Information
Group Life Insurance Program
For the Year Ended June 30, 2019

Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

Changes of assumptions – The following changes in actuarial assumptions were made effective June 30, 2016 based on the most recent experience study of the System for the four-year period ending June 30, 2016:

Largest Ten Locality Employers - General Employees

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

Non-Largest Ten Locality Employers - General Employees

Mortality Rates (pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table - RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

Supporting Schedules

MAURY SERVICE AUTHORITY **Schedule 1**

Schedule of Revenues and Expenses - Budget and Actual - Water Fund

Year Ended June 30, 2019

	Budget	Actual	Variance Favorable (Unfavorable)
REVENUE:			
Water sales	$ 1,297,440	$ 1,449,890	$ 152,450
Interest income	-	8,434	8,434
Contribution for debt service payments	35,655	35,618	(37)
Miscellaneous	10,000	5,126	(4,874)
Total revenue	$ 1,343,095	$ 1,499,068	$ 155,973
EXPENSES:			
Wages	$ 310,250	$ 315,503	$ (5,253)
Payroll taxes	23,734	21,189	2,545
VRS	43,094	26,698	16,396
Insurance - health	52,116	45,259	6,857
Accountant	4,520	1,617	2,903
Audit fee	9,840	-	9,840
Chemicals	97,300	85,956	11,344
Contract services	2,285	1,418	867
Dues	3,168	3,093	75
Education	2,000	3,498	(1,498)
Electricity	160,475	181,634	(21,159)
Gas, grease, oil	2,000	5,889	(3,889)
Generator expense	5,000	35	4,965
Honoraria	1,950	720	1,230
Insurance - general	35,668	41,023	(5,355)
IT contract	7,774	9,104	(1,330)
Janitorial supplies	2,462	1,382	1,080
Lab supplies	6,000	5,232	768
Legal and advisory services	5,000	591	4,409
Maintenance	16,406	95,707	(79,301)
Monitoring	5,000	2,116	2,884
Office expenses	2,000	3,829	(1,829)

Schedule of Revenues and Expenses - Budget and Actual - Water Fund
Year Ended June 30, 2019

	Budget	Actual	Variance Favorable (Unfavorable)
EXPENSES: (Continued)			
Professional fees	$ 10,000	$ 17,202	$ (7,202)
Safety	1,000	5,919	(4,919)
Special projects	10,000	1,277	8,723
Telephone	3,500	4,957	(1,457)
Travel	1,000	1,085	(85)
Vehicles	1,000	317	683
Wearing apparel	1,500	2,918	(1,418)
Landfill contract	-	470	(470)
Payment on water plant bond:			
Principal	170,000	170,000	-
Interest	21,757	21,757	-
Loan payment on Loop Project:			
Principal	146,914	146,913	1
Interest	139,382	139,382	-
Asset repair and replacement	39,000	33,500	5,500
Total expenses	$ 1,343,095	$ 1,397,190	$ (54,095)
Net income (loss)	$ -	$ 101,878	$ 101,878

Reconciliation to Statement of Revenues, Expenses and Changes in Net Position:

Net income (loss) - Budgetary Basis	$ 101,878
Principal payments on bonds and loans	316,913
Depreciation	(372,314)
Interest accrual and premium/deferred loss amortization	5,440
Capital asset additions	33,500
Rounding	1
Change in Net Position - GAAP Basis	$ 85,418

This schedule is presented on the Authority's budgetary basis of accounting. Depreciation is excluded from the schedule and loan payments are included.

Schedule of Revenues and Expenses - Budget and Actual - Sewer Fund
Year Ended June 30, 2019

	Budget	Actual	Variance Favorable (Unfavorable)
REVENUE:			
Sewer sales	$ 1,614,000	$ 2,331,793	$ 717,793
Interest	10,000	7,691	(2,309)
Contribution for debt service payments	-	323,009	323,009
Miscellaneous	10,000	176,993	166,993
Total revenue	$ 1,634,000	$ 2,839,486	$ 1,205,486
EXPENSES:			
Wages	$ 641,400	$ 617,457	$ 23,943
Payroll taxes	49,072	48,666	406
VRS	89,870	71,779	18,091
Insurance - health	180,917	166,840	14,077
Accountant	3,000	27,469	(24,469)
Audit fee	4,920	-	4,920
Chemicals	60,000	141,942	(81,942)
Contract Services	1,500	1,658	(158)
Dues	2,400	5,841	(3,441)
Education	500	12,489	(11,989)
Electricity	235,000	274,053	(39,053)
Gas, grease, oil	10,000	14,605	(4,605)
Generator expense	5,000	25,479	(20,479)
Honoraria	1,950	710	1,240
Insurance - general	29,858	32,799	(2,941)
Janitorial supplies	5,000	8,222	(3,222)
Lab supplies	10,000	57,431	(47,431)
Legal and advisory services	4,000	124	3,876
Maintenance	65,013	315,826	(250,813)
Monitoring	5,000	32,914	(27,914)
Office expenses	2,000	7,234	(5,234)
Permits expense	11,000	11,695	(695)

Schedule of Revenues and Expenses - Budget and Actual - Sewer Fund
Year Ended June 30, 2019

	Budget	Actual	Variance Favorable (Unfavorable)
EXPENSES: (Continued)			
Professional fees	$ 10,000	$ 84,244	$ (74,244)
Safety	1,000	3,518	(2,518)
Solids handling	-	19,088	(19,088)
Special projects	10,000	2,763	7,237
Telephone	4,500	5,143	(643)
Travel	2,100	2,805	(705)
Vehicles	15,000	14,126	874
Wearing apparel	2,500	8,461	(5,961)
IT contract	7,500	8,355	(855)
Landfill contract	4,000	4,320	(320)
Special projects			
Loan payment on sewer plant bonds:			
Principal	-	323,009	(323,009)
Asset repair and replacement	160,000	188,983	(28,983)
Total expenses	$ 1,634,000	$ 2,540,048	$ (906,048)
Net income (loss)	$ -	$ 299,438	$ 299,438

Reconciliation to Statement of Revenues, Expenses and Changes in Net Position:

Net income (loss) - Budgetary Basis	$ 299,438
Principal payments on bonds	323,009
Depreciation	(821,317)
Capital asset additions	188,983
Change in Net Position - GAAP Basis	$ (9,887)

This schedule is presented on the Authority's budgetary basis of accounting. Depreciation is excluded from the schedule and loan payments are included.

Compliance

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Directors
Maury Service Authority
Lexington, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions,* issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the Maury Service Authority as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Maury Service Authority's financial statements and have issued our report thereon dated February 18, 2020.

Internal Control over Financial Reporting

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

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. However, as described in the accompanying schedule of findings and responses, we did identify certain deficiencies in internal control that we consider to be material weaknesses.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. We consider the deficiency described in the accompanying schedule of findings and responses as item 2019-001 to be a material weakness.

Compliance and Other Matters

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

Maury Service Authority's Response to Finding

Maury Service Authority's response to the finding identified in our audit is described in the accompanying schedule of findings and responses. Maury Service Authority's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

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

Robinson, Farmer, Cox Associates

Charlottesville, Virginia
February 18, 2020

Maury Service Authority

Schedule of Findings and Responses
For the Year Ended June 30, 2019

Section I - Summary of Auditors' Results

Financial Statements

Type of auditors' report issued:	Unmodified
Internal control over financial reporting:	
Material weakness(es) identified?	Yes
Significant deficiency(ies)?	None reported
Noncompliance material to financial statements noted?	No

Section II - Financial Statement Findings

2019-001
Criteria:

Identification of a material adjustment to the financial statements that was not detected by entity's internal controls indicates that a material weakness may exist.

Condition:

The Authority's financial statements required material adjustments by the Auditor to ensure such statements complied with Generally Accepted Accounting Principles (GAAP).

Context:

Management contracts with a CPA to provide general ledger services. However, significant adjustments were identified and proposed by the auditors.

Effect:

There is a reasonable possibility that a material misstatement of the financial statements will not be prevented or detected by the entity's internal controls over financial reporting.

Cause:

Management and the contracted bookkeeper failed to identify and record all year-end accounting adjustments necessary for the books to be prepared in accordance with current reporting standards. The Authority does not have proper controls in place to detect and record governmental GAAP accruals in closing their year end financial statements.

Recommendation:

We recommend that accrual activity (accounts payable, accrued leave, interfund balances, pension and OPEB activity, etc.) be recorded prior to audit fieldwork to limit the auditor’s involvement in recording adjusting journal entries and making significant adjustments to the general ledger.

Management's Response:

MSA has made significant changes to the bookkeeping system used for financial accountability. The QuickBooks software is now an integral part of the day-to-day financial transactions. Adjustments are being made in the way we identify accounts payable, accrued leave, etc. to ensure the information is more accurate and accessibility is enhanced. Additionally, our plan is to have a third party review our financial information at the end of each fiscal year so we know the appropriate information is more readily available and in a better format when the Auditors arrive.

Section III - Status of Prior Year Findings

Finding 2018-001 is repeated as 2019-001.