Albemarle County Service Authority

Serving Conserving

Comprehensive Annual Financial Report

For the Fiscal

Year Ended

June 30, 2019

Charlottesville, Virginia

ALBEMARLE COUNTY SERVICE AUTHORITY

CHARLOTTESVILLE, VIRGINIA

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended
June 30, 2019

Prepared by:

Department of Finance
168 Spotnap Road
Charlottesville, Virginia 22911
(434) 977-4511

ALBEMARLE COUNTY SERVICE AUTHORITY

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Albemarle County
Service Authority

Serving Conserving

October 14, 2019

Board of Directors
Albemarle County Service Authority
Charlottesville, Virginia

Ladies and Gentlemen:

The Comprehensive Annual Financial Report (CAFR) of the Albemarle County Service Authority (Authority) is submitted herewith. With such modifications as apply to our status as an enterprise fund of governmental units, and as an independently chartered corporation, this report has been prepared in conformity with the reporting and accounting standards promulgated by the Governmental Accounting Standards Board (GASB) and the Government Finance Officers Association's (GFOA) *Governmental Accounting, Auditing, and Financial Reporting.*

Based upon a comprehensive framework of internal control that has been established for this purpose, the Authority management assumes full responsibility for the accuracy of the data and for the completeness and reliability of the information contained in this report. The information in this report is believed by Authority management to be sufficient to fully represent the financial result of the Authority's operations for the year ended June 30, 2019 and to provide an accurate and useful picture of the Authority's status as of that date.

State law and outstanding bond resolutions require an annual audit of the books and records of the Authority. This requirement has been satisfied by the engagement of independent certified public accountants, Brown, Edwards and Company, LLP, whose opinion is located at the front of the financial section of this report.

Management's discussion and analysis (MD&A), which provides a narrative introduction, overview, and analysis of the basic financial statements immediately follows the independent auditor's report. The MD&A complements this letter of transmittal, and should be read in conjunction with it.

Organization and Function

Located in central Virginia, 100 miles southwest of Washington, DC and less than 65 miles west of Richmond, the Authority was established in 1964, pursuant to the *Virginia Water and Waste Authorities Act*, to provide water and sewer service to those jurisdictional areas in the County of Albemarle (County) designated by the County's Board of Supervisors. The current service

Organization and Function (continued)

areas include the urbanized ring around the City of Charlottesville (City), the communities of Crozet and Scottsville, Red Hill, and the Village of Rivanna. A six-member Board of Directors, appointed by the County Supervisors for renewable four-year terms, appoints the Executive Director and governs Authority operations and policies. We have determined, after an examination of the factors involved in the Governmental Accounting Standards Board's definition of "component unit" for financial reporting purposes, that we are not a component unit of the County of Albemarle and will not be included in their financial report. Justification for this decision is outlined in Note 1 to the financial statements.

In June 1973, the Authority and the City entered into a Service Agreement with the Rivanna Water and Sewer Authority, which wholesales finished water and sewer treatment services to the Authority and to the City. In 1975, the Authority purchased from the City the facilities to serve all current water and sewer customers outside the City limits; since then it has been the sole public retailer of these services in the County.

In addition to retailing finished water distribution and sewer collection services, the Authority constructs pumping stations and line extensions; purchases, connects to the system, and upgrades private water systems; installs water supply and sewage collector systems; inspects water delivery and sanitary sewage systems installed and contributed to it by developers; and maintains these constructed and contributed facilities.

Economic Conditions

In the Albemarle Community Profile(1) update, the Virginia Employment Commission's Economic Information Services Division (VEC) reported a slight decrease in the County's 2018 unemployment rate of 2.7% as compared to Virginia 3.0% and to the Country 3.9% as a whole. The total number of jobs in Albemarle County was 56,103. The relative stability of the local economy is attributed to positive trends in the unemployment rate and raises in a key economic indicator such as sales tax revenues (1.4% increase) and food and beverage (8.0% increase)(2). The housing market is down slightly from last year, with home sales down 0.2% compared to a year earlier, and median home sale prices were up 1% from one year ago(3).

(1) Virginia Community Profile – Albemarle County, Virginia Employment Commission, updated October 4, 2019;
(2) The Albemarle Quarterly Economic Vitality Indicators, December 31, 2018 (comparison of 2nd quarters of fiscal years 2018 and 2019);
(3) CAAR (Charlottesville Area Association of REALTORS) 2019 2nd Quarter and Mid-Year Market Report

Economic Conditions (continued)

Residential and commercial growth within the Authority's Urban and Crozet service areas has historically mirrored the economic indicators of the County. In fact, the County's economic indicators play a significant role in forecasting and projecting the Authority's revenues and expenses each year; the customer buy-in and connection fee revenues for fiscal year 2019 provided no exception. There has been a rebound in the number of new connections for the past three years (2017 – 493 connections, 2018 – 481 connections, 2019 – 514 connections), with growth continuing each year(4); averaging 496 new connections for this three-year period(4). We continue to be conservative in the estimate of revenues derived from growth as both 2009 (204 new connections) and 2011 (233 new connections) showed a slowdown to indicate a need to be cautious in revenue projections. We believe though that future years will likely see a similar number of new Authority connections which would coincide with the Albemarle County Community Development Department's reported(5) issuances of building permits. The County reported 630 new residential building permits in 2018, with the total value of building permits for year 2016 ($346,190,151), to 2017 ($325,576,688) to 2018 ($347,859,013). If the balance of prepaid (unearned) connection fees, and the rise in the number of new connections are reliable indicators, as we believe them to be, we will continue to see growth each year in total customers served by the Authority.

(4) Albemarle County Service Authority Annual Financial Report 2017, 2018, 2019, Table 11
(5) County of Albemarle, Community Development Department, 2018 Year End Building Report

Major Initiatives and Accomplishments

- Developed an operating and capital improvement budget for fiscal year 2019 that aligned with our strategic plan. To that end, our goals were 1) to meet anticipated operating and capital improvement expenses by responsibly increasing water and sewer volume charges which were based upon a formal rate study, and to ensure that current operating expenses will be paid with current operating revenues; 2) to keep customer buy-in and connection charges constant while maintaining our policy of "growth paying for growth;" and 3) to maintain, improve, and extend system infrastructure through capital investments.

- Developed and distributed customer surveys to all Authority customers to understand levels of satisfaction related to Authority services including quality of water, water rates, customer service, and overall satisfaction. The information received from those that responded is being used to prepare the next iteration of the Authority's Strategic Plan.

Major Initiatives and Accomplishments (continued)

- The Authority proactively manages its investment in infrastructure with many projects in various stages of completion. Major capital improvement projects completed during the fiscal year include:

  - Barterbrook Phase 2 Water Main Replacement
  - Orchard Acres Water Main Replacement
  - Scottsville Tank Recoating
  - Camelot Drainage Basin Sanitary Sewer Rehabilitation
  - Glenmore Drainage Basin Sanitary Sewer Rehabilitation

- Future projects of the Authority include deployment of an automated metering infrastructure (AMI) system to benefit Authority customers; a computerized maintenance management system (CMMS) which will automate and enhance the Authority's ability to manage operating and maintenance responsibilities; continued addition to system redundancy; a facility master plan; and a new strategic plan.

Operations

For Fiscal Year 2019, Operating Revenues ($27,410,346) from water and sewer sales and service connection fees increased by 2.33% as compared to Fiscal Year 2018. Associated operating expenses ($29,855,920) reflected an increase of 14.70% as compared to Fiscal Year 2018, primarily driven by a major increase in sewer treatment expenses from the Rivanna Water and Sewer Authority. These increases were attributable to an abnormally wet year which resulted in higher than normal treatment of rainwater infiltrating the sewer system and subsequently being treated.

Unlike the revenues derived from customer buy-in and connection fees, the difference in projected and actual operating revenues and expenses is more predictable except for treatment plant charges. While weather conditions can play a large role in discretionary use of water, such as irrigation usage, domestic usage is typically more predictable. Actual water, sewer and service charge revenues were more than the prior year due to the planned increase in the water/sewer rate charged to customers in Fiscal Year 2019 (increase of water and sewer rate by 4.0% and 3.0%, respectively, effective for Fiscal Year 2019). Please refer to Page 14 for detailed information related to operating and non-operating revenues and expenses.

Accounting, Budgetary Controls, and Long-term Financial Planning

The Authority's management is responsible for establishing and maintaining a system of internal accounting controls. The objectives of internal controls are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and financial records for preparing financial statements and maintaining asset accountability are reliable. The concept of reasonable assurance recognizes that estimates and judgements made by management are required to assess the expected benefits and related costs of internal accounting control procedures and that the cost of the control should not exceed the benefits likely to be derived. Management reviews internal controls on a continuing basis.

The Authority is required by Trust Agreements for its Bond to prepare and adopt an annual operating budget. On a fiscal year basis, department heads prepare preliminary operating budgets and submit them to the Executive Director for consideration. Rates are established based upon required revenue projections and associated costs, which include operating expenses, debt service, capital projects, and reserves. An adequate operating reserve is important to furnish funds for unplanned minor repairs or other significant repairs; it can also be utilized during unusually wet years, when anticipated revenues are reduced due to lesser than anticipated consumption levels. An adequate repair, replacement, and rehabilitation reserve (3R) is important to furnish funds for unexpected major repairs, as well as planned replacement or rehabilitation of equipment or other major capital assets. The Executive Director submits a proposed budget and rate recommendation to the Board of Directors for adoption.

After adoption, increases or decreases to the budget are made only upon Board approval, and the budget lapses at the end of the fiscal year for all accounts except multi-year construction projects and specific re-appropriations for funds committed at year-end for which goods and/or services have not been received. Department heads and the Board of Directors receive monthly reports on revenues and expenses.

Awards and Acknowledgements

Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Albemarle County Service Authority for its comprehensive annual financial report for the fiscal year ended June 30, 2018. This was the thirty-seventh consecutive year that the Authority has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

Awards and Acknowledgements (continued)

The preparation of this report would not have been possible without the help of the Authority staff and the Leadership and Management team at the ACSA; their dedication is very much appreciated. We would like to especially express our gratitude and appreciation to Barb Hermann, Tonya Foster, Jennifer Bryant and Crystal Hall, who have each made significant contributions to the CAFR, and to the Board of Directors for their interest in, and support of, the Authority's pursuit of financial reporting excellence.

Sincerely,

Gary B. O'Connell
Executive Director

Quin G Lunsford
Director of Finance

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Albemarle County Service Authority

Virginia

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO

ALBEMARLE COUNTY SERVICE AUTHORITY

DIRECTORY OF PRINCIPAL OFFICIALS
June 30, 2019

BOARD MEMBERS

Mr. Clarence W. Roberts, Chairman

Ms. Jennifer Sulzberger, Vice-Chairman

Mr. Richard Armstrong

Mr. Bill Kittrell

Ms. Kimberly Swanson

Mr. Charles Tolbert

EXECUTIVE DIRECTOR

Mr. Gary B. O'Connell

DIRECTOR OF FINANCE

Mr. Quin G Lunsford

TRUSTEE

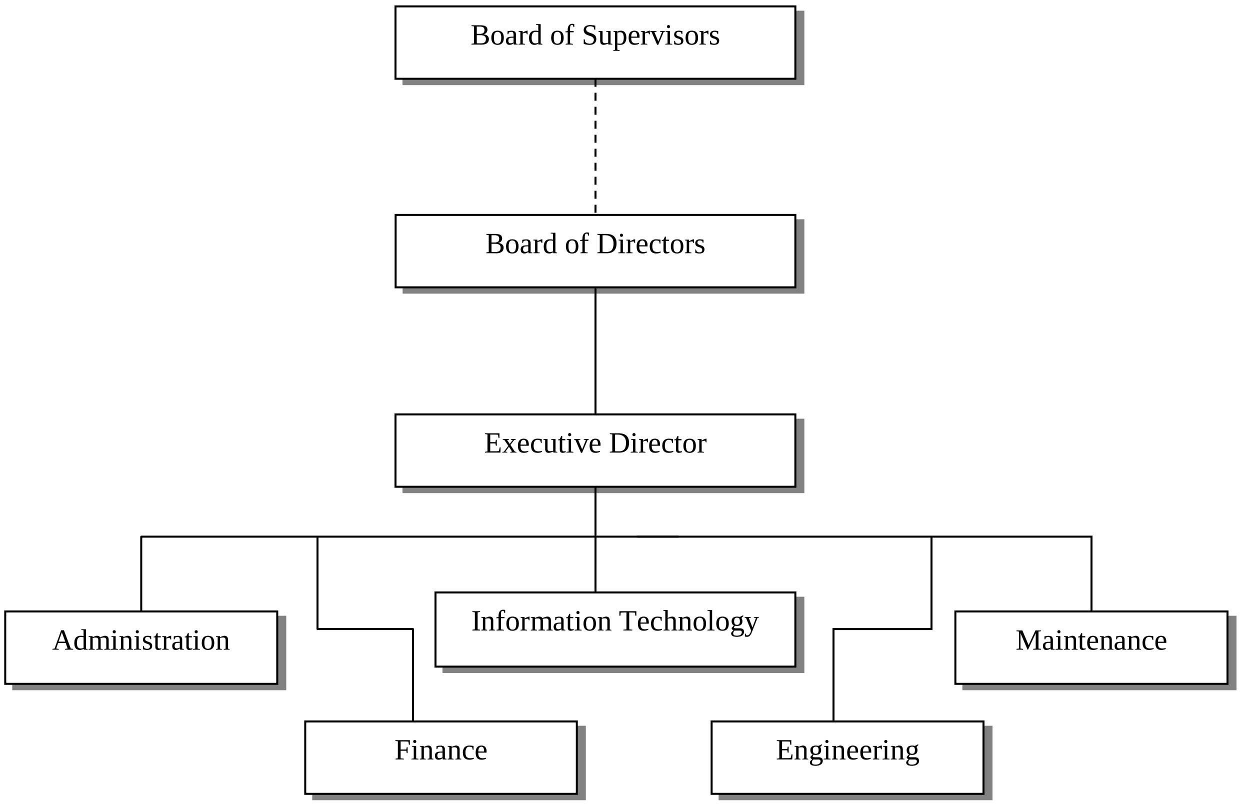
Bank of New York Mellon

INDEPENDENT AUDITORS

Brown, Edwards & Company, L.L.P.

ALBEMARLE COUNTY SERVICE AUTHORITY

ORGANIZATIONAL CHART



FINANCIAL SECTION

Financial Section contains the Basic Financial Statements.

BROWNEDWARDS
certified public accountants

INDEPENDENT AUDITOR'S REPORT

To the Honorable Members of the Board of Directors
Albemarle County Service Authority
Charlottesville, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the Albemarle County Service Authority (the "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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, and *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 auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Your Success is Our Focus

1909 Financial Drive • Harrisonburg, VA 22801 • 540-434-6736 • Fax: 540-434-3097 • www.BEcpas.com

Opinion

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

Other Matters

Required Supplementary Information

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

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The introductory and statistical sections are presented for purposes of additional analysis and are not a required part of the basic financial statements. The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Report on Comparative Information

We have previously audited the Authority's 2018 financial statements, and our report dated October 31, 2018, expressed an unmodified opinion on those financial statements. The 2018 financial information is provided for comparative purposes only. In our opinion, the comparative information presented herein as of and for the year ended June 30, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 14, 2019, on our consideration of the 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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Harrisonburg, Virginia
October 14, 2019

Management's Discussion and Analysis

The management of the Albemarle County Service Authority (the "Authority") presents this analysis of the Authority's financial performance during the fiscal year ended June 30, 2019 as a supplement to the Authority's basic financial statements. This analysis should be read in conjunction with the basic financial statements that follow, as well as the Letter of Transmittal, which can be found on pages i through vi of this financial report.

Overview of the Financial Statements

The CAFR is presented in four sections: introductory, financial, statistical, and compliance.

The introductory section includes a letter of transmittal submitted by the Authority's Executive Director and Director of Finance, a listing of the Authority's Board of Directors and organizational chart as of the end of the past fiscal year, and a copy of the Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting that has been awarded to the Authority for the fiscal year ended June 30, 2018.

The financial section consists of the Independent Auditor's Report, Management's Discussion and Analysis, and the Authority's basic financial statements, including notes to the statements and required supplementary information, which are discussed below.

The *Statement of Net Position* reports the Authority's assets and deferred outflows of resources and liabilities and deferred inflows of resources, providing information about the nature and amounts of investments in resources (assets), consumption of net position applicable to future periods (deferred outflows), obligations to creditors (liabilities), and acquisition of net position applicable to future periods (deferred inflows). These statements may be used to evaluate the capital structure, liquidity, and financial flexibility of the Authority. The *Statement of Revenues, Expenses and Changes in Fund Net Position* reflect revenue and expense activity of the Authority for the fiscal year. This statement allows the user to measure the Authority's profitability and credit worthiness by the financial performance of the Authority's operations, and to determine whether the Authority has successfully recovered its operating costs through user fees and other charges. The *Statement of Cash Flows* presents the Authority's inflows and outflows of cash during the financial reporting period, by reporting cash receipts, cash payments, and the net changes in cash. Cash flows are categorized by operating, non-capital financing, capital and related financing, and investing activities. The *Notes to the Financial Statements* and the *Required Supplementary Information* provide necessary disclosures that are essential to a full understanding of the data provided in the aforementioned basic financial statements.

The statistical section includes selected financial, operational, and demographic information presented on a multi-year basis.

The Authority operates as an enterprise fund. Enterprise funds are a type of proprietary fund and function similar to a private business in that user charges and fees are expected to cover costs. The Authority's basic financial statements are presented using the accrual basis of accounting, which provides for revenue recognition in the period in which water and reclamation services are provided and expense recognition when goods and services are received. Additionally, the Authority's basic financial statements utilize the flow of economic resources measurement focus, in which all assets and liabilities are reflected on the Statement of Net Position and the Statement of Revenues, Expenses and Changes in Fund Net Position includes all transactions, such as revenues and expenses that increase or decrease net position.

Financial Highlights

- The assets and deferred outflows of resources of the Authority exceeded its liabilities and deferred inflows of resources at the close of the most recent fiscal year by $186,025,113 (*net position)*. Of this amount $37,580,516 *(unrestricted net position)* may be used to meet the ACSA's ongoing obligations to customers and creditors.
- The Authority's total liabilities as a percentage of net position decreased from 9.44% at June 30, 2018 to 9.28% at June 30, 2019. The decrease is attributable to changes in reductions in long-term debt and continued growth in capital contributions related to new customers connecting to the Authority's system.
- Fiscal year 2019 operating revenues increased 2.33% to $27,410,346 as compared to fiscal year 2018 while operating expenses increased 14.70% to $29,855,920 during the same period.
- System development and capacity charges were robust during the fiscal year and totaling $8,127,803 for fiscal year 2019. This is a decrease of $1,833,082 or a decrease of 18.4% compared to the prior fiscal year. The Authority's service area continues to develop, and this activity is the main driver for this revenue.
- The Authority realized greater returns on investments in the current fiscal year, totaling $946,599. This is an increase of $598,027 or an increase of 171.56% compared to the prior fiscal year. The increase is attributable to higher returns on LGIP investments maintained by the Authority and significant contributions to the LGIP during the fiscal year.

Financial Analysis

The Statement of Net Position and the Statement of Revenues, Expenses and Changes in Fund Net Position report information about the Authority's activities to determine if, overall, the financial position improved over the year. These two statements report the net position of the Authority and changes in them. Analyzing the Authority's net position is one way to measure financial health. Non-financial factors such as economic conditions, population growth and new or changed government legislation need to be considered as well. The Authority improved its financial position in 2019.

Net Position

The Authority's net position increased by $9,522,874 during fiscal year 2019, which represents a 5.40% increase from the beginning of the fiscal year net position. At June 30, 2019, total net position was $186,025,113 as compared to the prior year net position of $176,502,239.

FINANCIAL ANALYSIS (continued)

The following table depicts the Authority's condensed summary of net position at June 30, 2019 and 2018.

Condensed Statement of Net Position

	2019	2018
Current Assets	$ 44,888,532	$ 42,390,681
Investments	4,025,650	3,919,050
Capital assets, net	154,529,799	147,076,221
Total Assets	203,443,981	193,385,952
Deferred Outflows of Resources	471,433	454,059
Current Liabilities	6,910,946	5,625,307
Long-term Liabilities	10,351,910	11,041,871
Total Liabilities	17,262,856	16,667,178
Deferred Inflows of Resources	627,445	670,594
Net investment in capital assets	148,180,254	140,238,885
Restricted for debt service	264,343	255,835
Unrestricted	37,580,516	36,007,519
Total Net Position	$ 186,025,113	$ 176,502,239

FINANCIAL ANALYSIS (continued)

The following table summarizes changes in revenues and expenses between fiscal year 2019 and 2018.

Condensed Statements of Revenues, Expenses, and Changes in Fund Net Position

	2019	2018
Revenues:		
Operating Revenues:		
Water Sales	$ 14,365,666	$ 14,221,088
Sewer Service	12,688,282	12,232,244
Other	356,398	331,838
Non-operating Revenue:		
Investment income	946,599	348,572
Rental income	16,603	16,603
Miscellaneous revenues	34,447	535,983
Fed. Subsidy, Build America Bonds	108,746	115,634
Total Revenues	$ 28,516,741	$ 27,801,962
Expenses:		
Operating Expenses:		
Purchase of bulk water	$ 9,524,927	$ 8,778,168
Purchase of sewer treatment	8,629,730	6,511,112
Depreciation	3,625,254	3,336,765
Administration	876,845	814,056
Engineering	1,591,761	1,498,209
Finance	1,776,871	1,633,523
Information Technology	832,370	689,895
Maintenance	2,998,162	2,768,796
Non-operating Expenses:		
Interest Expense	332,183	353,776
Miscellaneous expenses	438,731	55,201
Total Expenses	$ 30,626,834	$ 26,439,501
Income (loss) before capital contributions	$ (2,110,093)	$ 1,362,461
Capital Contributions	11,632,967	15,173,477
Change in net position	9,522,874	16,535,938
Net position – beginning of year	176,502,239	159,966,301
Net position – end of year	$ 186,025,113	$ 176,502,239

Operating Revenues and Expenses

Operating revenues totaled $27,410,346 in fiscal year 2019, an increase of $625,176 from 2018. This slight increase can be attributed to an increase in the water and sewer rates that took effect July 2018 and a decrease in consumption by customers compared to the prior fiscal year. Operating expenses totaled $29,855,920 in 2019, an increase of $3,825,396 mainly due to an increase in purchased water and sewer treatment costs.

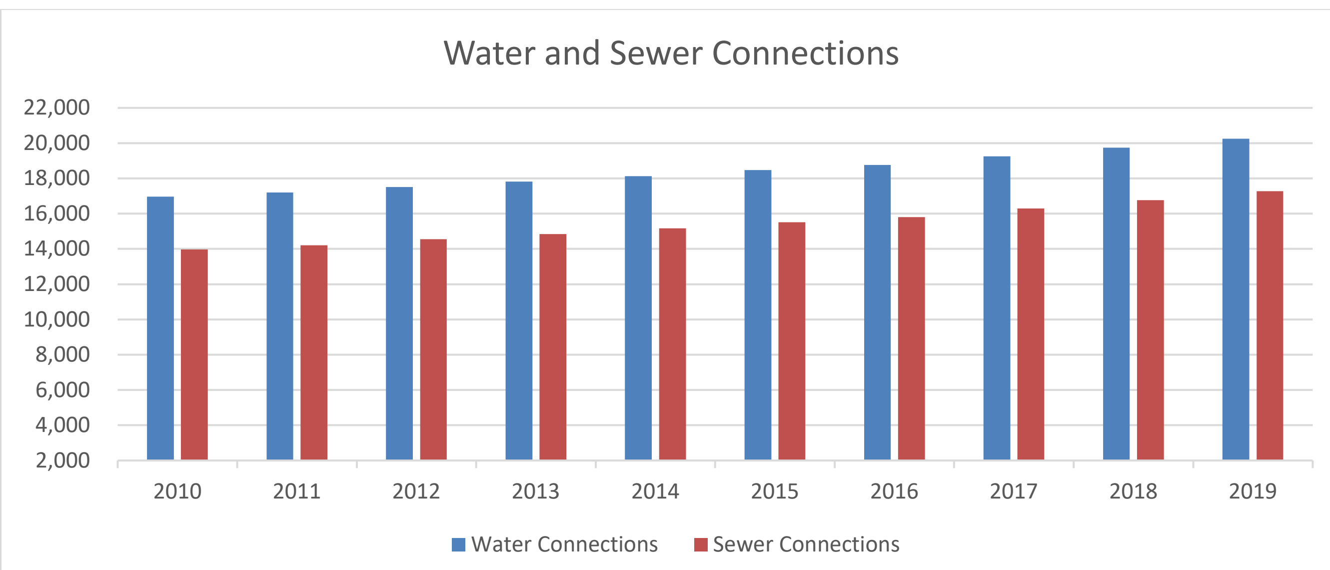
Loss Before Capital Contributions

The loss before capital contributions totaled $2,110,093 for fiscal year 2019 compared to fiscal year 2018 income before capital contribution of $1,362,461. This change is mainly due to an increase in water and sewer treatment expenses of 8.5% and 32.5% respectively.

Review of Operations

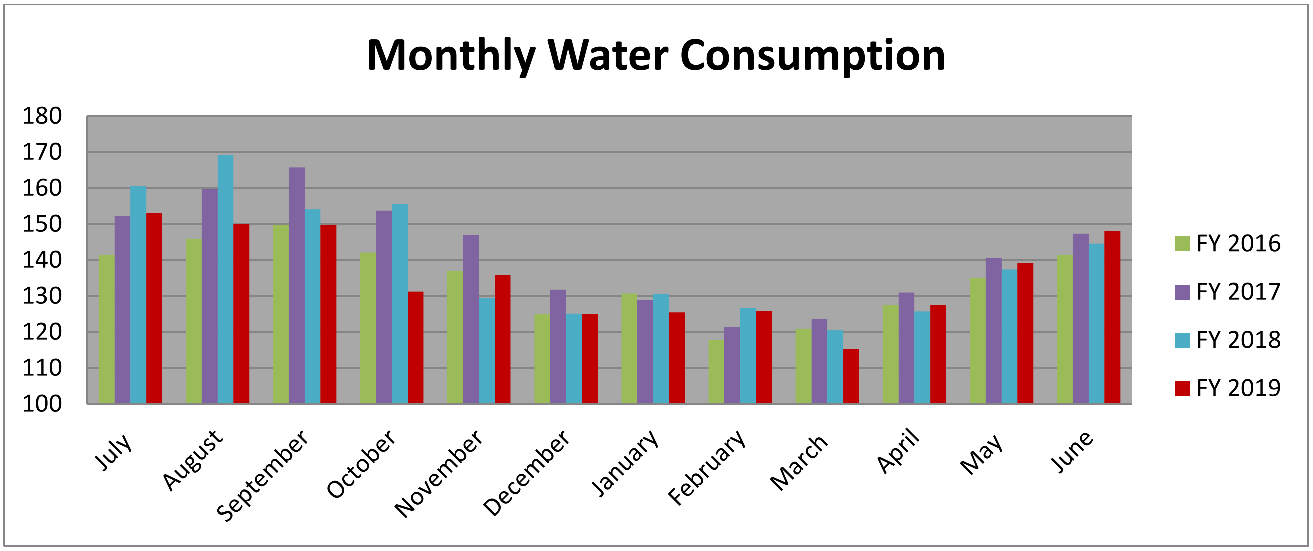
The Authority's water customer base grew to 20,252 accounts by the end of the 2019 fiscal year, an increase from the prior year total of 19,738. Considering multiple units behind master meters, as in apartment complexes, the Authority now serves approximately 32,176 housing units, businesses, industries and institutions, which is an increase of 2.19%.

The Authority had significant growth in water connections for 2019 of 514 new connections. The connections for 2019 are 44% higher than the Authority's ten-year average annual increase in new connections. This growth is attributable to the continued expansion of existing residential neighborhoods and continued commercial and multi-family development.

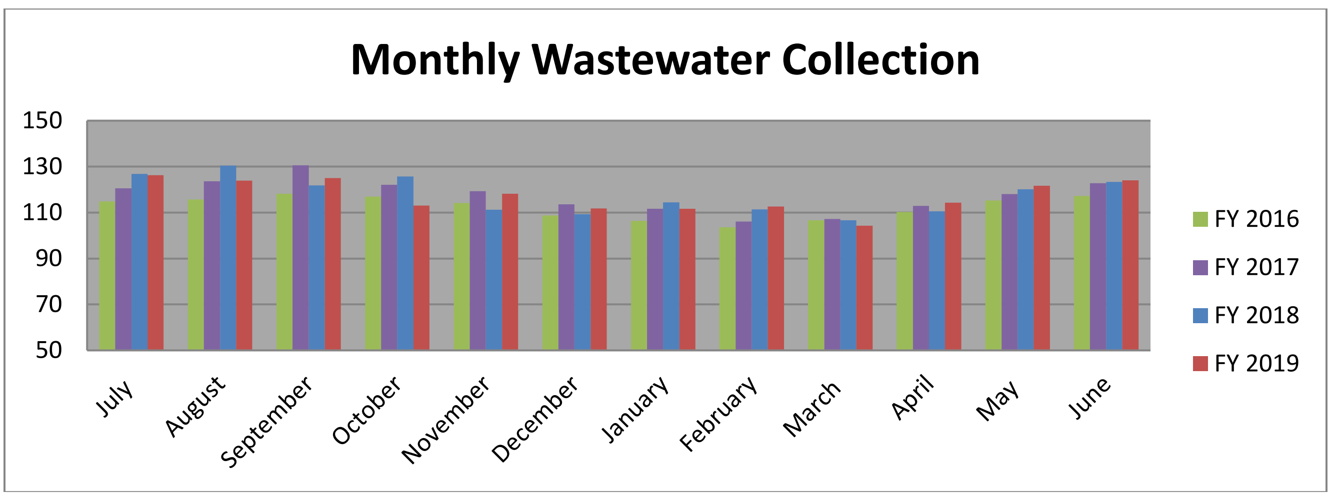


Review of Operations (Continued)

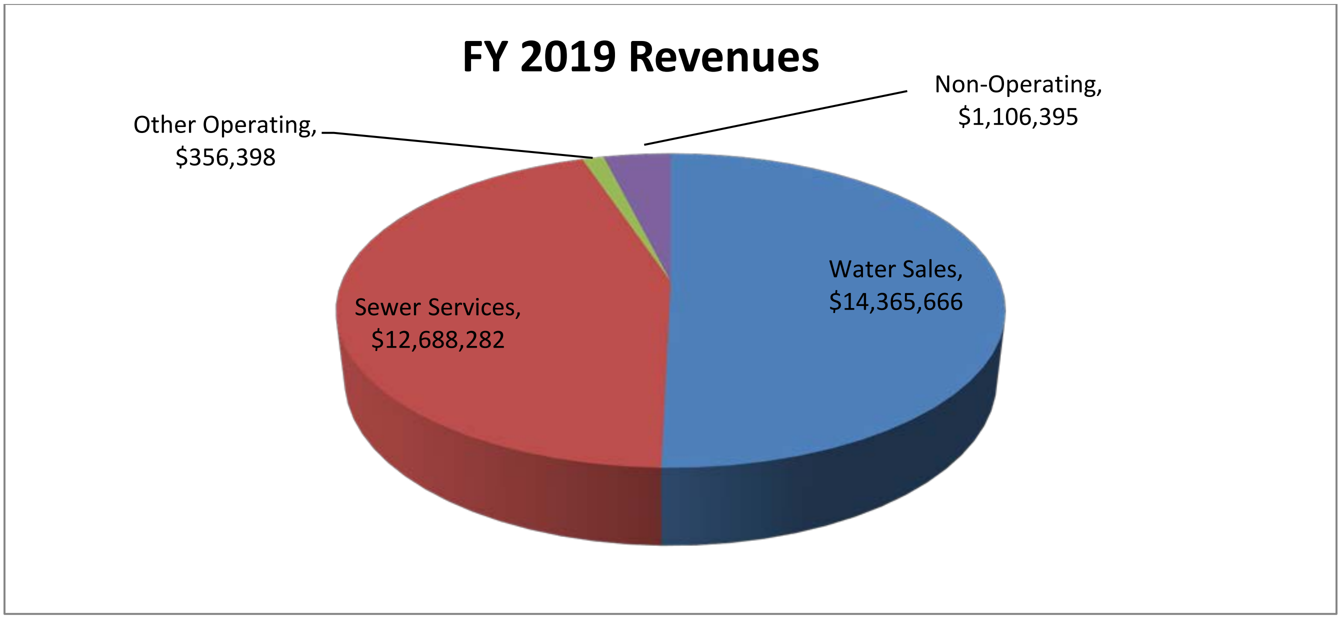
Billed water usage in fiscal year 2019 decreased by 53 million gallons as compared to fiscal year 2018. Billed water usage in fiscal year 2019 was 1.63 billion gallons and was 3.16% less than billed water usage in fiscal year 2018 (1.68 billion gallons) and is 4.49% less than 2017 (1.70 billion gallons). The seasonal variations can be seen in the chart below.



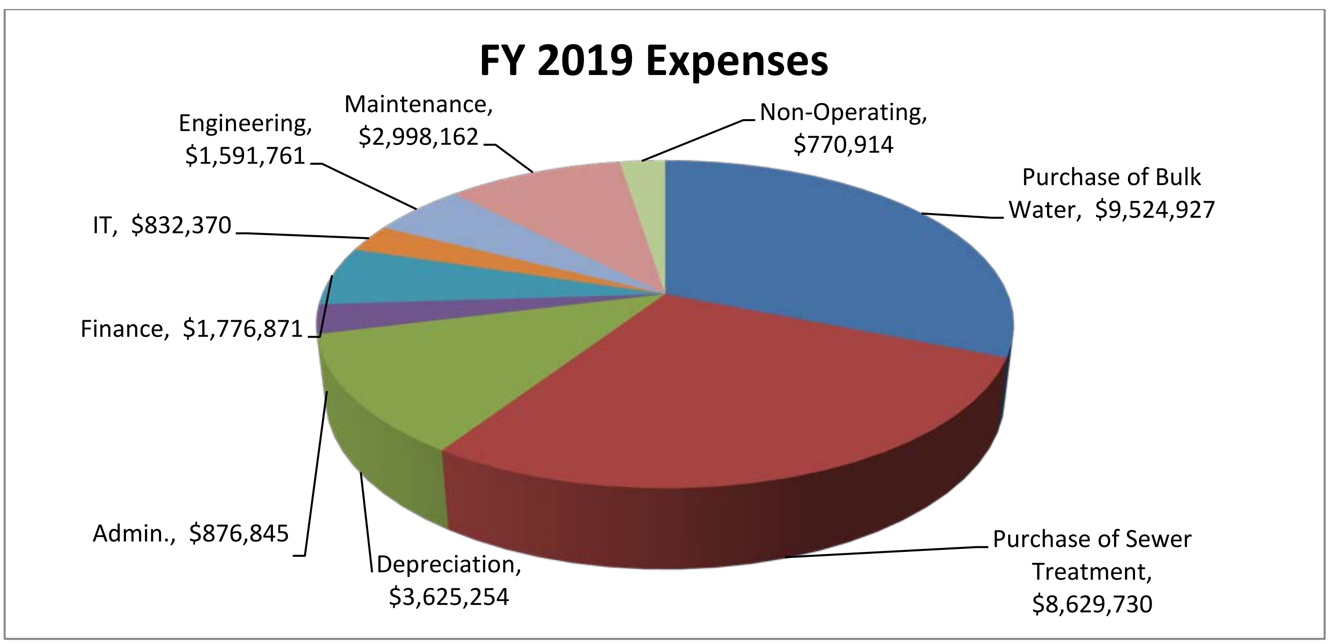
The Authority's wastewater customer base grew to 17,273 by the end of the fiscal year, up from 16,764 connections at the end of the fiscal year 2018. Billed wastewater collections totaled 1.41 billion gallons for fiscal year 2019 which is comparable with both fiscal years 2018 and 2017 (also 1.41 billion gallons in fiscal years 2018 and 2017).



Revenues. Revenues for fiscal year 2019 increased in comparison with fiscal year 2018. Total revenues for 2019 were $28,516,741 as compared to $27,801,962 in 2018, a 2.57% increase year to year. This increase is due in part to an increase in customer rates and improved returns on investments held by the Authority.



Expenses. Total expenses for fiscal year 2019 were $30,626,834 as compared to $26,439,501 in 2018, a 15.84% increase, which was primarily due to increases in purchased water and sewer treatment from the Rivanna Water and Sewer Authority and increases in departmental expenses. In 2019, the total cost of purchased water was $9,524,927, which is 8.51% greater than the 2018 total of $8,778,168. Similarly, the total cost of sewer treatment in fiscal year 2019 ($8,629,730) increased 32.54% in comparison to fiscal year 2018 ($6,511,112). These costs are based on a variety of factors and can vary significantly based upon these factors including Authority consumption for a given period and the Authority's proportional allocation of costs based on our flow in comparison to the Authority's water/wastewater treatment provider's other customer. Our service area experienced above average rainfall in fiscal year 2019, which contributed to an increase in sewer treatment related to infiltration and inflow into the sewer system.



CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets. The Authority's investment in capital assets as of June 30, 2019 amounted to $154,529,799 (net of accumulated depreciation). This investment in capital assets includes land, structures and improvements, equipment, and construction in progress. The total increase in the Authority's investment in capital assets for the current fiscal year was 5.1%. Additional information related to capital assets can be located in Note 4.

Capital Assets

	2019	2018
Land (including easements)	$ 1,914,876	$ 1,914,876
Structures and improvements	192,418,039	185,013,438
Equipment	4,986,160	4,699,750
Construction in progress	9,392,718	6,325,642
Total book value	208,711,793	197,953,706
Less accumulated depreciation	(54,181,994)	(50,877,485)
Net capital assets	$ 154,529,799	$ 147,076,221

Long-Term Debt. Outstanding debt includes one Water and Sewer System Revenue Bond (Taxable – Build America Bond) that was issued in November of 2010 for $10,357,000. Revenue bond coverage, the ratio of gross revenues less direct operational expenses to debt service requirements, was 17.20 in fiscal year 2019. The minimum coverage required by outstanding bond indentures is 1.20. At June 30, 2019, outstanding long-term debt, including the current amount payable, totaled $6,963,000. Details of this indebtedness may be found in Note 5 of the financial statements.

RESERVES

Operating Reserve. The Authority has established an operating reserve to provide funds for unplanned minor repairs or significant cash outlays. This type of reserve is also valuable when less than anticipated water consumption occurs, during unusually wet years (less outdoor watering occurs), which generally results in less revenue. As part of the budgeting process, a review of the reserve is performed. This reserve, combined with the 3R Reserve, the Capacity/System Development Reserve and unrestricted cash and investments is to maintain a days cash on hand floor of 270 days of operating expenses as calculated from the previous fiscal year. Water and wastewater rates are to be set accordingly to ensure these reserves maintain this 270 day target.

Capital Costs and 3R Reserve. The Authority has established a Repair, Replacement and Rehabilitation (3R) Reserve to provide funds to pay for unexpected major repairs and planned replacement or rehabilitation of equipment or other major capital assets. This reserve is calculated based on the estimated useful life and replacement cost of equipment held by the Authority. For fiscal year 2019, the Authority budgeted $360,000 for this purpose.

Capacity and System Development Reserve. The Authority has established a Capacity and System Development Reserve to provide funds for capacity or growth-related system development costs or charges. These reserves are funded by the RWSA Capacity Charge and the ACSA System Development Charge which have been designed to offset growth related capital costs of backbone capacity in the ACSA water and sewer system and costs associated with the RWSA's charges to the ACSA that are related to increases in capacity.

LONG-TERM TRENDS

Operations. Careful planning and budgeting in combination with the use of established reserves has been a stabilizing factor in our rate-setting process for many years. This process has allowed our customers (through the years) to realize relatively low rates for the provision of their water and sewer service, particularly as compared to other regional utilities.

With new development, in combination with aging infrastructure, comes the challenge of meeting both the water supply and the sewer treatment needs and requirements of the growing Albemarle community. Since the Authority employs a "pay-as-you-go" methodology of recovering the costs of operations and most capital projects, increased costs will be passed on to our customers through higher rates and fees. Current customers bear the current cost of operations, while future customers, through new development, bear the cost of expansion through connection, development, and capacity fees.

Capital Program. Water capital improvement project cost projections per year for the next five years range from \$4,100,000 to \$7,300,000 and sewer capital improvement project cost projections per year for the next five years range from \$1,500,000 to \$3,500,000. The Authority intends to fund these projects through the use of established reserves.

Requests for Information. This financial report is designed to provide a general overview of the Albemarle County Service Authority's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Finance Department at 168 Spotnap Road, Charlottesville, Virginia 22911, through our website www.serviceauthority.org or by telephone (434) 977-4511.

BASIC
FINANCIAL STATEMENTS

ALBEMARLE COUNTY SERVICE AUTHORITY

Exhibit 1

STATEMENT OF NET POSITION
June 30, 2019

	2019	(For Comparative Purposes Only) 2018
ASSETS		
Current assets		
Cash and cash equivalents (Note 2)	$ 38,763,940	$ 36,875,789
Accounts receivable (Note 3)	4,005,670	3,472,273
Inventory	459,326	376,143
Prepaids	148,058	156,359
Cash and cash equivalents, restricted (Note 1)	1,511,538	1,510,117
Total current assets	44,888,532	42,390,681
Noncurrent assets		
Investments (Note 2)	4,025,650	3,919,050
Capital assets: (Note 4)		
Nondepreciable	11,307,594	8,240,518
Depreciable, net	143,222,205	138,835,703
Total noncurrent assets	158,555,449	150,995,271
Total assets	203,443,981	193,385,952
DEFERRED OUTFLOWS OF RESOURCES		
Deferred outflows related to pensions (Note 7)	280,402	289,074
Deferred outflows related to other postemployment benefits (Notes 8,9)	191,031	164,985
Total deferred outflows of resources	471,433	454,059
LIABILITIES		
Current liabilities		
Accounts payable	2,865,958	2,004,538
Accrued liabilities	59,559	49,021
Customer deposits	458,178	467,964
Interest payable	146,803	156,860
Compensated absences (Note 5)	77,229	71,875
Unearned revenues	2,812,219	2,398,049
Current maturities of long-term debt (Note 5)	491,000	477,000
Total current liabilities	6,910,946	5,625,307
Long-term liabilities		
Compensated absences (Note 5)	459,741	404,928
Net pension liability (Note 7)	1,551,829	1,636,200
Net other post-employment benefits liability (Notes 8,9)	1,868,340	2,037,743
Long-term debt – due in more than one year (Note 5)	6,472,000	6,963,000
Total long-term liabilities	10,351,910	11,041,871
Total liabilities	17,262,856	16,667,178
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows related to pensions (Note 7)	383,147	628,632
Deferred inflows related to other postemployment benefits (Notes 8,9)	244,298	41,962
Total deferred inflows of resources	627,445	670,594
NET POSITION		
Net investment in capital assets	148,180,254	140,238,885
Restricted for debt service	264,343	255,835
Unrestricted	37,580,516	36,007,519
Total net position	$ 186,025,113	$ 176,502,239

The Notes to Financial Statements are an integral part of this statement.

Exhibit 2

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION
Year Ended June 30, 2019

	2019	(For Comparative Purposes Only) 2018
OPERATING REVENUES		
Water sales	$ 14,365,666	$ 14,221,088
Sewer service	12,688,282	12,232,244
Other	221,391	191,387
Water and sewer connection fees	135,007	140,451
Total operating revenues	27,410,346	26,785,170
OPERATING EXPENSES		
Purchase of bulk water	9,524,927	8,778,168
Purchase of sewer treatment	8,629,730	6,511,112
Depreciation	3,625,254	3,336,765
Administration	876,845	814,056
Engineering	1,591,761	1,498,209
Finance	1,776,871	1,633,523
Information Technology	832,370	689,895
Maintenance	2,998,162	2,768,796
Total operating expenses	29,855,920	26,030,524
Operating income (loss)	(2,445,574)	754,646
NONOPERATING REVENUES (EXPENSES)		
Investment income	946,599	348,572
Rental income	16,603	16,603
Miscellaneous revenues	34,447	535,983
Federal subsidy, Build America Bonds	108,746	115,634
Bond interest charges	(332,183)	(353,776)
Miscellaneous expenses	(438,731)	(55,201)
Total nonoperating revenues (expenses)	335,481	607,815
Income (loss) before capital contributions	(2,110,093)	1,362,461
CAPITAL CONTRIBUTIONS (Note 6)	11,632,967	15,173,477
Change in net position	9,522,874	16,535,938
NET POSITION – BEGINNING AT JULY 1	176,502,239	159,966,301
NET POSITION – ENDING AT JUNE 30	$ 186,025,113	$ 176,502,239

The Notes to Financial Statements are
an integral part of this statement.

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF CASH FLOWS
Year Ended June 30, 2019

	2019	(For Comparative Purposes Only) 2018
OPERATING ACTIVITIES		
Cash received from customers	$ 26,870,297	$ 26,560,122
Cash paid for goods and services	(20,981,668)	(17,191,448)
Cash paid to employees	(5,950,429)	(5,403,899)
Other receipts	361,073	527,781
Net cash provided by operating activities	299,273	4,492,556
CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital contributed by developers, customers, and local governments	8,538,839	10,484,853
Acquisition of capital assets	(7,138,592)	(6,347,559)
Principal paid on long-term borrowings	(477,000)	(463,000)
Interest paid on long-term borrowings	(342,240)	(363,538)
Federal subsidy, Build America Bonds	108,746	115,634
Proceeds from sale of capital assets	60,547	7,121
Net cash provided by capital and related financing activities	750,300	3,433,511
INVESTING ACTIVITIES		
Interest received	839,999	449,112
Net cash provided by investing activities	839,999	449,112
Net increase in cash and cash equivalents	1,889,572	8,375,179
CASH AND CASH EQUIVALENTS		
Beginning at July 1	38,385,906	30,010,727
Ending at June 30	$ 40,275,478	$ 38,385,906
RECONCILIATION TO STATEMENT OF NET POSITION		
Cash and cash equivalents	$ 38,763,940	$ 36,875,789
Cash and cash equivalents, restricted	1,511,538	1,510,117
	$ 40,275,478	$ 38,385,906

(Continued)

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF CASH FLOWS
Year Ended June 30, 2019

	2019	(For Comparative Purposes Only) 2018
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating income (loss)	$ (2,445,574)	$ 754,646
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:		
Depreciation	3,625,254	3,336,765
Excess of employer contributions over pension expense	(321,184)	(212,842)
Excess of employer contributions over other postemployment benefits expense	6,887	33,116
Other nonoperating revenues/expenses	(75,855)	523,720
Change in assets and liabilities:		
(Increase) decrease in:		
Accounts receivable	(533,397)	(242,166)
Inventory	(83,183)	40,837
Prepaids	8,301	(22,369)
Increase (decrease) in:		
Accounts payable	53,971	188,734
Accrued liabilities	10,538	13,541
Customer deposits	(9,786)	4,997
Compensated absences	60,167	61,456
Unearned connection fees	3,134	12,121
Net cash provided by operating activities	$ 299,273	$ 4,492,556
NONCASH CAPITAL AND RELATED FINANCING ACTIVITIES		
Contributions of capital assets	$ 3,505,164	$ 5,212,592
Capital asset additions financed by accounts payable	$ 1,143,566	$ 336,117
Increase (decrease) in fair value of investments	$ 106,000	$ (100,540)

ALBEMARLE COUNTY SERVICE AUTHORITY
NOTES TO FINANCIAL STATEMENTS
JUNE 30, 2019

Note 1. Summary of Significant Accounting Policies

(a) Reporting Entity

The Albemarle County Service Authority (the Authority) was created by a resolution of the Board of Supervisors (BOS) of Albemarle County, Virginia (the County) in April 1964. The Authority is chartered by the State Corporation Commission and is an independent public body responsible for undertaking projects as may be specified for the distribution and sale of potable water to retail customers and for the collection of wastewater from retail customers and delivery of such wastewater to the Rivanna Water and Sewer Authority (RWSA). The management of the Authority is vested in a board of six members appointed by the County's BOS.

To determine the appropriate reporting entity for the Authority, its relationship with the County was considered. Although the members of the Authority's Board of Directors are appointed by the Board of County Supervisors, the County is not financially accountable for the Authority. In addition, there is no potential for the Authority to provide specific financial benefits to, or impose specific financial burdens on, the County, and the Authority is not fiscally dependent on the County. Accordingly, based on these criteria, the Authority is not included as a component unit in the County's financial statements.

The following is a summary of the Authority's significant accounting policies:

(b) Basis of Presentation and Accounting

The accounting policies of the Authority conform to accounting principles generally accepted in the United States of America as applicable to enterprise funds of governmental units. An enterprise fund is a proprietary type fund used to account for operations that are financed and operated in a manner similar to private business enterprises. The Authority's intent is that the costs of providing goods or services to customers on a continuing basis be financed or recovered primarily through user charges. Periodic determination of revenues earned, expenses incurred, and/or changes in net position is appropriate for capital maintenance, public policy, management control and accountability.

The Authority follows the accrual basis of accounting. Under this basis of accounting, revenue is recognized when earned and expenses are recorded when incurred. Operating revenues and expenses consist of those revenues and expenses that result from the ongoing principal operations of the Authority. Operating revenues consist primarily of charges for water consumption and wastewater treatment. Operating expenses consist of bulk water purchases, sewer treatment, administrative expenses, and depreciation of capital assets. Non-operating revenues and expenses consist of those revenues and expenses that are related to financing and investing type activities and result from non-exchange transactions or ancillary services.

When an expense is incurred for purposes in which both restricted and unrestricted net assets are available, it is the Authority's policy to first apply restricted resources.

Note 1. Summary of Significant Accounting Policies (Continued)

(c) <u>Cash and Investments</u>

Cash and temporary investments include amounts in demand deposits as well as short-term investments with an original maturity of three months or less.

Restricted cash and temporary investments include amounts held in money market funds as well as short-term investments with an original maturity of three months or less. These amounts consist of reserves for debt service and deposits from customers for service.

Investments include United States government and agency obligations of the Commonwealth of Virginia and its subdivisions. All investments are stated at fair value. Interest income from investments is recorded in the year earned.

(d) <u>Fair Value Measurements</u>

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and are described as follows:

- Level 1 inputs are quoted prices in active markets for identical assets;
- Level 2 inputs are significant other observable inputs;
- Level 3 inputs are significant unobservable inputs.

(e) <u>Accounts Receivable</u>

All continuing service receivables are recognized when earned with no allowance for uncollectibles, as delinquent accounts attach as an enforceable lien on property if not collected within a certain period of time once notification has been given to the owner.

An estimated amount has been recorded for services rendered but not yet billed as of the close of the fiscal year.

(f) <u>Inventory</u>

Inventory is valued using the weighted-average method. Inventories are recorded as an operating expense when consumed rather than when purchased.

(g) <u>Restricted Assets</u>

Restricted assets represent resources designated for specific purposes and include developers' advances and customer deposits.

Note 1. Summary of Significant Accounting Policies (Continued)

(h) Capital Assets

The Authority capitalizes all property and permanent right-of-way easements, equipment, and infrastructure assets with a cost greater than $5,000 and an estimated useful life of more than one year.

Capital assets are stated at historical cost. Donated assets are recorded at acquisition value at the time received. Expenses for repairs and upgrading which materially add to the value or life of an asset are capitalized. Other maintenance and repair costs are expensed as incurred.

Depreciation and amortization for both purchased and contributed assets is recorded as depreciation and amortization expense on a straight-line basis over the following estimated useful lives:

Land improvements	10-20 years
Structures and improvements	10-60 years
Equipment	3-10 years

(i) Construction in Progress

Construction in progress includes design and construction costs that accumulate until completion of the respective project, at which time the total cost is transferred to depreciable capital assets.

(j) Compensated Absences

Authority employees are granted annual leave in varying amounts based on years of service. In the event of termination, an employee is reimbursed for accumulated annual leave in full. Annual leave is considered a liability and is accrued as earned. The Authority does not accrue sick pay when earned since its employees do not have vested rights to receive such pay except to the extent of time not worked due to sickness.

(k) Unearned Revenues

Unearned connection fees consist of advances to the Authority under prescribed conditions by developers in exchange for credit vouchers to be used to pay facility fees (both water and sewer) in order to connect to the Authority's system. The Authority recognizes the revenue when the credit voucher is redeemed. Also included in unearned revenues are over payments by customers that will be recognized as revenue as charges for water/sewer treatment are incurred.

Note 1. Summary of Significant Accounting Policies (Continued)

(l) <u>Deferred outflows/inflows of resources</u>

In addition to assets, the statement that presents net position reports a separate section for deferred outflows of resources. These items represent a consumption of net position that applies to future periods and so will *not* be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statement that presents financial position reports a separate section for deferred inflows of resources. These items represent an acquisition of net position that applies to future periods and so will not be recognized as an inflow of resources (revenue) until that time.

The Authority has the following items that qualify for reporting as deferred inflows or outflows:

- Contributions subsequent to the measurement date for pensions and OPEB are always a deferred outflow; this will be applied to the net pension or OPEB liability in the next fiscal year.
- Differences between expected and actual experience for economic/demographic factors and changes of assumptions in the measurement of the total pension or OPEB liability. This difference will be recognized in pension or OPEB expense over the expected average remaining service life of all employees provided with benefits in the plan and may be reported as a deferred inflow or outflow as appropriate.
- Difference between projected and actual earnings on pension and OPEB plan investments. This difference will be recognized in pension or OPEB expense over the closed five-year period and may be reported as a deferred outflow or inflow as appropriate.
- Changes in proportionate share that will be recognized in the pension or OPEB expense over the average expected remaining service lives of all employees provided with benefits. This may be reported as a deferred outflow or deferred inflow as appropriate.

(m) <u>Pensions and Other Postemployment Benefits (OPEB)</u>

For purposes of measuring all financial statement elements related to pensions and OPEB plans information about the fiduciary net position of the Authority's Retirement Plan and the additions to/deductions from the Authority's Plans 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.

(n) <u>Net Position</u>

Net position is the difference between assets and deferred outflows of resources and 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. Net investment in capital assets excludes unspent debt proceeds. Net position is reported as restricted when there are limitations imposed on its use either through the

Note 1. Summary of Significant Accounting Policies (Continued)

enabling legislation adopted by the Authority or through external restrictions imposed by creditors, grantors, or laws or regulations of other governments.

(o) Capital Contributions

Capital contributions are recorded for the receipt of funds, property, lines and improvements by developers, customers or other governments.

(p) Comparative Information

The basic financial statements include certain prior year summarized comparative information in total, but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the Authority's financial statements for the prior year from which the summarized information was derived.

(q) Estimates

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

(r) Accounting Pronouncements

The Governmental Accounting Standards Board (GASB) has issued the following Statements which are not yet effective.

GASB Statement No. 84, *Fiduciary Activities* establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. This Statement will be effective for the year ending June 30, 2020.

GASB Statement No. 87, *Leases* establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. This Statement will be effective for the year ending June 30, 2021.

Note 1. Summary of Significant Accounting Policies (Continued)

GASB Statement No. 90, *Major Equity Interests, an amendment of GASB Statements No. 14 and No. 61,* improves the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and improves the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or a permanent fund. Those governments and funds should measure the majority equity interest at fair value. For all other holdings a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit. This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in cash flow statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition. This statement will be effective for the year ending June 30, 2020 and should be applied retroactively, except for the provisions related to (1) reporting a majority equity interest in a component unit and (2) reporting a component unit if the government acquires a 100 percent equity interest. Those provisions should be applied on a prospective basis.

Management has not determined the effects these new GASB Statements may have on prospective financial statements.

Note 2. Deposits and Investments

<u>Deposits</u>

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.

<u>Investments</u>

Statutes authorize local governments and other public bodies to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions

Note 2. Deposits and Investments (Continued)

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 fair value of the position in LGIP is the same as the value of the pool shares. As the pool is not SEC registered, regulatory oversight of the pool rests with the Virginia State Treasury. LGIP maintains a policy to operate in a manner consistent with GASB Statement No. 79. Due to the nature of LGIP, it is considered a cash and cash equivalent on the Statement of Net Position.

The Authority's investments are subject to interest rate, credit, concentration of credit, and custodial credit risk as described herein.

The Authority has recurring fair value measurements as of June 30, 2019. Those include U. S. Bonds classified in Level 1 of the fair value hierarchy and valued using prices quoted in active markets for those bonds.

Interest rate risk: Interest rate risk is the risk that the fair value of the securities in the portfolio will decline due to rising interest rates. As a means of limiting this exposure, the Authority's investment guidelines restrict duration of maturity to 24 months without approval of the Executive Director.

Credit risk: Credit risk is the risk of loss due to the failure of the security issuer or backer to repay its obligations and may also apply where there is a loss of fair value of the investment due to a deterioration of an issuer's credit rating.

Concentration of credit risk: Concentration of credit risk is the risk of loss attributed to the magnitude of investments held from a single issuer. The Authority's investment portfolio as of June 30, 2019 is concentrated in securities issued by the Federal Home Loan Bank (FHLB) (49.9%), the Federal National Mortgage Association (FNMA) (25.0%), and the Federal Farm Credit Bank (FFCB) (25.0%).

Note 2. Deposits and Investments (Continued)

The table below details the fair value and rating as determined by Standard & Poor's for each issuer of the Authority's investments as well as deposits, as of June 30, 2019:

	Deposits and Investments			
	AA+	AAAm	Deposits	Total
U.S. Agencies	$4,025,650	$ -	$ -	$4,025,650
Local Government Investment Pool	-	31,788,623	-	31,788,623
U.S. Treasury Money Market	-	827,602	-	827,602
Cash	-	-	7,659,253	7,659,253
	$4,025,650	$32,616,225	$7,659,253	$44,301,128

Reconciliation of deposits and investments to Exhibit 1:

Cash and cash equivalents, unrestricted	$38,763,940
Cash and cash equivalents, restricted	1,511,538
Investments	4,025,650
Total Deposits and Investments:	$44,301,128

Investment Type	Investment Maturities		
	Fair Value	1-5 Years	6-10 Years
U.S. Agencies	$ 4,025,650	$ 4,025,650	$ -

Custodial credit risk: Custodial credit risk is the risk that the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of an outside custodial party. All of the securities purchased by the Authority are held in safekeeping by a third party custodial bank or institution in the Authority's name, and therefore, the Authority is not exposed to custodial credit risk.

Note 3. Accounts Receivable

Accounts receivable consist of the following:

	Billed	Unbilled	Total
Receivables, current:			
Water	$ 1,283,317	$ 882,553	$ 2,165,870
Sewer	1,044,016	712,068	1,756,084
Other	83,716	-	83,716
	$ 2,411,049	$ 1,594,621	$ 4,005,670

Note 4. Capital Assets

Changes in capital assets for the year are as follows:

	Balance July 1, 2018	Additions	Reductions/ Reclassifications	Balance June 30, 2019
Capital assets, not being depreciated				
Land and land rights	$ 1,914,876	$ -	$ -	$ 1,914,876
Construction in progress	6,325,642	7,465,633	(4,398,557)	9,392,718
Total capital assets, not being depreciated	8,240,518	7,465,633	(4,398,557)	11,307,594
Capital assets, being depreciated				
Structures and improvements	185,013,438	3,505,164	3,899,437	192,418,039
Equipment	4,699,750	480,408	(193,998)	4,986,160
Total capital assets, being depreciated	189,713,188	3,985,572	3,705,439	197,404,199
Less accumulated depreciation for:				
Structures and improvements	(47,428,674)	(3,234,463)	63,101	(50,600,036)
Equipment	(3,448,811)	(390,791)	257,644	(3,581,958)
Total accumulated depreciation	(50,877,485)	(3,625,254)	320,745	(54,181,994)
Total capital assets being depreciated, net	138,835,703	360,318	4,026,184	143,222,205
Total capital assets, net	$ 147,076,221	$ 7,825,951	$ (372,373)	$ 154,529,799

Note 4. Capital Assets (Continued)

Construction commitments:

The Authority's active construction projects as of June 30, 2019 are as follows:

Project	Spent-to-Date	Remaining Commitment
Wastewater line rehabilitations or relinings	$ 547,495	$ 725,871
Water line replacements	2,231,481	2,800,546
Other	698,526	154,471
	$ 3,477,502	$ 3,680,888

Note 5. Long-Term Liabilities

Long-term liability activity for the year ended June 30, 2019 was as follows:

	Balance July 1, 2018	Additions	Reductions	Balance June 30, 2019	Amounts Due Within One Year
Revenue bond	$ 7,440,000	$ -	$ (477,000)	$ 6,963,000	$ 491,000
Compensated absences	476,803	386,711	(326,544)	536,970	77,229
	$ 7,916,803	$ 386,711	$ (803,544)	$ 7,499,970	$ 568,229

A single revenue bond for $10,357,000 was issued as a Build America Bond (BAB) on November 1, 2010. Proceeds from the sale were used to (1) provide new money funding for the North Fork Regional Pump Station project and to (2) pay the cost of issuance. All water and sewer revenues are pledged equally and ratably to secure payment of the principal and interest on the revenue bond. This Bond bears interest at the rate of 4.6%, payable semiannually. The true interest cost, after application of the BAB subsidy, is 2.98%.

The revenue bond debt service requirements to maturity are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Anticipated BAB Subsidy	Net Interest
2020	$ 491,000	$ 320,298	$ (112,104)	$ 208,194
2021	506,000	297,712	(104,199)	193,513
2022	521,000	274,436	(96,053)	178,383
2023	536,000	250,470	(87,665)	162,805
2024	552,000	225,814	(79,035)	146,779
2025-2029	3,019,000	732,504	(256,376)	476,128
2030-2031	1,338,000	92,782	(32,474)	60,308
	$ 6,963,000	$ 2,194,016	$ (767,906)	$ 1,426,110

Note 5. Long-Term Liabilities (Continued)

Debt covenants and Federal arbitrage regulations:

The Authority is required to deliver to the Trustee for deposit both interest and principal amounts as prescribed in the Agreement of Trust. The Authority is in compliance with these covenants.

The Authority is required to adhere to the rebate and reporting requirements of the federal tax code pertaining to arbitrage. The Authority is in compliance with federal arbitrage regulations. Any potential liabilities arising from arbitrage have been deemed immaterial in relation to the financial statements.

Note 6. Capital Contributions

Capital contributions for the year are summarized as follows:

Developer and customer contributions of capital assets	$	3,505,164
Crozet water and sewer – System/capacity fees		1,784,445
Urban water and sewer – System/capacity fees		6,250,083
North Fork Regional Pump Station -- Special Rate District Fee		93,275
	$	11,632,967

Note 7. Defined Benefit Pension Plan

Plan Description

All full-time, salaried permanent employees of Albemarle County Service Authority, (the "Political Subdivision") are automatically covered by VRS Retirement Plan upon employment. This multi-employer agent plan is 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.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and Hybrid. Each of these benefits structures has different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan is as follows:

Plan 1 - Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013 and have not taken a refund.

Note 7. Defined Benefit Pension Plan (Continued)

Plan Description (Continued)

- **Hybrid Opt-In Election** - VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.

- **Retirement Contributions -** Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.

- **Creditable Service -** Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

- **Vesting -** Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund. Members are always 100% vested in the contributions that they make.

- **Calculating the Benefit -** The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier, and total service credit at retirement. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.

- **Average Final Compensation -** A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.

Note 7. Defined Benefit Pension Plan (Continued)

- **Service Retirement Multiplier –**The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.

- **Normal Retirement Age –** Age 65.

- **Earliest Unreduced Retirement Eligibility -** Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.

- **Earliest Reduced Retirement Eligibility –** Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.

- **Cost-of-Living Adjustment (COLA) in Retirement -** The Cost-of-Living Adjustment (COLA) matches the first 3.00% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4.00%) up to a maximum COLA of 5.00%.

    - **Eligibility –** For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.

    - **Exceptions to COLA Effective Dates –** The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:

        - The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.
        - The member retires on disability.
        - The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP).
        - The member is voluntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.
        - The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.

Note 7. Defined Benefit Pension Plan (Continued)

- **Disability Coverage** for members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased, or granted.

- **Purchase of Prior Service –** Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.

Plan 2 - Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is 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.

- **Hybrid Opt-In Election** - Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014. If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.

- **Retirement Contributions -** Employees contribute 5.00% of their compensation each month to their member contribution account through a pre-tax salary reduction.

- **Creditable Service -** Same as Plan 1.

- **Vesting -** Same as Plan 1.

- **Calculating the Benefit -** See definition under Plan 1.

- **Average Final Compensation -** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.

- **Service Retirement Multiplier -** Same as Plan 1 for service earned, purchased, or granted prior to January 1, 2013. For non-hazardous duty members, the retirement multiplier is 1.65% for creditable service earned, purchased, or granted on or after January 1, 2013.

- **Normal Retirement Age -** Normal Social Security retirement age.

Note 7. Defined Benefit Pension Plan (Continued)

- **Earliest Unreduced Retirement Eligibility -** Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.

- **Earliest Reduced Retirement Eligibility -** Age 60 with at least five years (60 months) of creditable service.

- **Cost-of-Living Adjustment (COLA) in Retirement -** The Cost-of-Living Adjustment (COLA) matches the first 2.00% increase in the CPI-U and half of any additional increase (up to 2.00%), for a maximum COLA of 3.00%.

    - **Eligibility –** Same as Plan 1.
    - **Exceptions to COLA Effective Dates –** Same as Plan 1.

- **Disability Coverage –** Same as Plan 1 except that the retirement multiplier is 1.65%.

- **Purchase of Prior Service –** Same as Plan 1.

Hybrid Retirement Plan - The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. The defined benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

- **Eligible Members -** Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes political subdivision employees; members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1 through April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.
- **Non-Eligible Members -** Some employees are not eligible to participate in the Hybrid Retirement Plan. They include political subdivision employees who are covered by enhanced benefits for hazardous duty employees and those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
- **Retirement Contributions -** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

Note 7. Defined Benefit Pension Plan (Continued)

- **Creditable Service –**
  - **Defined Benefit Component:** Under the defined benefit component of the plan, creditable service includes active service. Members earn credible service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional credible service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.

  - **Defined Contributions Component:** Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.
- **Vesting –**
  - **Defined Benefit Component:** Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.

  - **Defined Contributions Component:** Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. After two years, a member is 50% vested and may withdraw 50% of employer contributions. After three years, a member is 75% vested and may withdraw 75% of employer contributions. After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.

- **Calculating the Benefit –**

  - **Defined Benefit Component:** See definition under Plan 1.

  - **Defined Contribution Component:** The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.

- **Average Final Compensation -** Same as Plan 2 for the defined benefit component of the plan.

Note 7. Defined Benefit Pension Plan (Continued)

- **Service Retirement Multiplier –** The retirement multiplier for the defined benefit component 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. This is not applicable to sheriffs, regional jail superintendents, or hazardous duty employees.

- **Normal Retirement Age –**

    - **Defined Benefit Component:** Same as Plan 2, however, not applicable for hazardous duty employees.

    - **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.

- **Earliest Unreduced Retirement Eligibility –**

    - **Defined Benefit Component:** Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90. This is not applicable to hazardous duty employees.

    - **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.

- **Earliest Reduced Retirement Eligibility –**

    - **Defined Benefit Component:** Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service. This is not applicable to hazardous duty employees.

    - **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.

- **Cost-of-Living Adjustment (COLA) in Retirement**

    - **Defined Benefit Component:** Same as Plan 2.

    - **Defined Contribution Component –** Not Applicable.

    - **Eligibility –** Same as Plan 1 and 2.

    - **Exceptions to COLA Effective Dates –** Same as Plan 1 and 2.

- **Disability Coverage -** Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides and employer-paid comparable program for its members. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.

Note 7. Defined Benefit Pension Plan (Continued)

- **Purchase of Prior Service –**
  - **Defined Benefit Component –** Same as Plan 1, with the following exceptions:
    - Hybrid Retirement Plan members are ineligible for ported service.
  - **Defined Contribution Component –** Not applicable.

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	32
Inactive members:	
Vested inactive members	8
Non-vested inactive members	17
Inactive members active elsewhere in VRS	16
Total inactive members	41
Active members	70
Total covered employees	143

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 political subdivision's contractually required contribution rate for the year ended June 30, 2019 was 5.80% 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

Note 7. Defined Benefit Pension Plan (Continued)

liability. Contributions to the pension plan from the political subdivision were $234,877 and $244,563 for the years ended June 30, 2019 and June 30, 2018, respectively.

Net Pension Liability

The net pension liability 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 political subdivisions, the net pension liability was measured as of June 30, 2018. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2017 rolled forward to the measurement date of June 30, 2018.

Actuarial Assumptions

The total pension liability for General Employees in the Political Subdivision'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	2.50%
Salary increases, including inflation	3.50 – 5.35%
Investment rate of return	7.00%, net of pension plan investment expense, 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 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 returned 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: General employees – 15% to 20% of deaths are assumed to be service related. Mortality is projected using the applicable RP-2014 Mortality Table Projected to 2020 with various set backs or set forwards for both males and females.

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:

Note 7. Defined Benefit Pension Plan (Continued)

General Employees - Largest 10 – Non-Hazardous Duty and all Others (Non 10 Largest): Update mortality table; lowered retirement rates at older ages, changed final retirement from 70 to 75; lowered disability rates; no change to salary scale.

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 for 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 rate of 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 2.5%.

Note 7. Defined Benefit Pension Plan (Continued)

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, political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2018, the alternate rate was the employer contribution rate used in the fiscal year 2012 or 90% of the actuarially determined employer contribution rate from the June 30, 2015, actuarial valuations, whichever is greater. From July 1, 2018 on, participating employers are assumed 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.

Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at June 30, 2017	$ 15,469,673	$ 13,833,473	$ 1,636,200
Changes for the year:			
Service cost	282,089	-	282,089
Interest	1,062,604	-	1,062,604
Benefit changes	-	-	-
Assumption changes	-	-	-
Differences between expected and actual experience	19,186	-	19,186
Contributions – employer	-	244,563	(244,563)
Contributions – employee	-	188,757	(188,757)
Net investment income	-	1,024,636	(1,024,636)
Benefit payments, including refunds of employee contributions	(579,237)	(579,237)	-
Refunds of employee contributions			
Administrative expenses	-	(8,793)	8,793
Other changes	-	(913)	913
Net changes	784,642	869,013	(84,371)
Balances at June 30, 2018	$ 16,254,315	$ 14,702,486	$ 1,551,829

Note 7. Defined Benefit Pension Plan (Continued)

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

The following presents the net pension liability of the political subdivision using the discount rate of 7.00%, as well as what the political subdivision's net pension 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:

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
Political subdivision's net pension liability (asset)	$ 3,654,839	$ 1,551,829	$ (195,444)

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

For the year ended June 30, 2019, the political subdivision recognized pension expense of $(86,305). At June 30, 2019, the political subdivision 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	$ 45,525	$ 111,556
Change of assumptions	-	140,419
Net difference between projected and actual earnings on pension plan investments	-	131,172
Employer contributions subsequent to the measurement date	234,877	-
Total	$ 280,402	$ 383,147

Note 7. Defined Benefit Pension Plan (Continued)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (Continued)

The $234,877 reported as deferred outflows of resources related to pensions resulting from the Political Subdivision's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended 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 as follows:

Year Ending June 30,	Increase (Reduction) to Pension Expense
2020	$ (102,634)
2021	(70,397)
2022	(152,525)
2023	(12,066)
2024	-
Thereafter	-

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plans 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 https://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 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan

In addition to their participation in the pension plans offered through the Virginia Retirement System (VRS), the Authority also participates in a cost-sharing and other postemployment benefit plan, described as follows.

Plan Descriptions

Group Life Insurance Program

All full-time employees of the Authority are automatically covered by the VRS Group Life Insurance (GLI) Program upon employment.

In addition to the Basic Group Life Insurance Benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance 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,

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan (Continued)

it is not included as part of the GLI Program OPEB.

Specific information for the GLI is available at https://www.varetire.org/members/benefits/life-insurance/basic-group-life-insurance.asp

The GLI is administered by the VRS along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia. This plan is considered a multiple employer, cost sharing plan.

Contributions

Contributions to the VRS OPEB program was based on actuarially determined rates from actuarial valuations as of June 30, 2017. The actuarially determined rates were expected to finance the cost of benefits earned by employees during the year, with an additional amount to fund any unfunded accrued liability. Specific details related to the contributions for the VRS OPEB program is as follows:

Group Life Insurance Program

Governed by:	*Code of Virginia* 51.1-506 and 51.1-508 and may be impacted as a result of funding provided to school divisions and governmental agencies by the Virginia General Assembly.
Total rate:	1.31% of covered employee compensation. Rate allocated 60/40; 0.79% employee and 0.52% employer. Employers may elect to pay all or part of the employee contribution.
June 30, 2019 Contribution	$22,492
June 30, 2018 Contribution	$20,401

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

The net OPEB liabilities were measured as of June 30, 2018 and the total OPEB liabilities used to calculate the net OPEB liabilities were determined by actuarial valuations as of that date. The covered employer's proportion of the net OPEB liabilities were based on the covered employer's actuarially determined employer contributions for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers.

Group Life Insurance Program

June 30, 2019 proportionate share of liability	$313,000
June 30, 2018 proportion	.02063%
June 30, 2017 proportion	.02038%
June 30, 2019 expense	$3,000

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan (Continued)

Since there was a change in proportionate share between measurement dates, a portion of the OPEB expense above was related to deferred amount from changes in proportion.

At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

Group Life Insurance Program

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 15,000	$ 6,000
Change of assumptions	-	13,000
Net difference between projected and actual earnings on OPEB plan investments	-	10,000
Changes in proportion	3,000	-
Employer contributions subsequent to the measurement date	22,492	-
Total	$ 40,492	$ 29,000

The deferred outflows of resources related to OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net OPEB liability in the year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Group Life Insurance Program

Year Ending June 30,	Increase (Reduction) to OPEB Expense
2020	$ (4,000)
2021	(4,000)
2022	(4,000)
2023	(2,000)
2024	1,000
Thereafter	2,000

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan (Continued)

Actuarial Assumptions and Other Inputs

The total OPEB liability was determined using the following assumptions based on an actuarial valuation date of June 30, 2017, 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:	
• Locality- general employees	3.5 – 5.35%
Healthcare cost trend rates:	
• Under age 65	7.75 – 5.00%
• Ages 65 and older	5.75 – 5.00%
Investment rate of return, net of expenses, including inflation*	GLI: 7.0%

* 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 rate for GASB purposes of slightly more than the assumed percent above. However, since the difference was minimal, and a more conservative 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 the percent noted above to simplify preparation of OPEB liabilities.

Mortality rates used for the various VRS OPEB plans are the same as those used for the actuarial valuations of the VRS pension plans. The mortality rates are discussed in detail at Note 7.

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan (Continued)

Net OPEB Liabilities

The net OPEB liabilities represent the total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2018, net OPEB liability amounts for the various VRS OPEB programs are as follows (amounts expressed in thousands):

	Group Life Insurance Program
Total OPEB Liability	$ 3,113,508
Plan fiduciary net position	1,594,773
Employers' net OPEB liability (asset)	$ 1,518,735
Plan fiduciary net position as a percentage of total OPEB liability	51.22%

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

Long-Term Expected Rate of Return

Group Life Insurance

The long-term expected rate of return on VRS 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 OPEB 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:

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan (Continued)

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 for 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 rate of 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 2.5%.

Discount Rate

The discount rate used to measure the GLI OPEB 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 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 ending June 30, 2018, the rate contributed by the employer for the OPEB liability will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the OPEB plans' 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 OPEB liability.

Note 8. Other Postemployment Benefits Liability – Virginia Retirement System Plan (Continued)

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

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

	1.00% Decrease (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
GLI Net OPEB liability	$ 409,000	$ 313,000	$ 235,000

OPEB Plan Fiduciary Net Position

Information about the various VRS OPEB plan 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 https://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 9. Other Post-Employment Benefits Liability – Local Plan

Plan description:

The Authority offers other post-employment benefits (OPEB) under a single employer plan by allowing qualifying retirees to continue to participate in the Authority's health insurance plan. Retirees must pay the cost of the premium but receive an implicit rate subsidy by virtue of participating in the Authority's plan.

The Authority's Voluntary Early Retirement Incentive Program (VERIP) provides an additional health insurance subsidy for up to five years for employees who retire and meet the requirements of the plan. VERIP participants may choose to apply this subsidy to Authority sponsored health insurance premiums or to purchase other insurance. For fiscal year 2019, the Authority's health and benefit contribution was $776 per month. VERIP benefits are paid monthly for a period of five years after retirement or until age 65, whichever comes first.

Note 9. Other Post-Employment Benefits Liability – Local Plan (Continued)

Participants in the Authority's VERIP must meet the following requirements: employees must be eligible for early or full retirement under the provisions of the VRS, must have been employed by the Authority for 10 years prior to retirement, and must be at least 50 years of age. Any employees retiring under the disability provisions of VRS and/or Social Security will not be eligible for VERIP.

Employees Covered by Benefit Terms:

As of the June 30, 2019 measurement date, the following employees were covered by the benefit terms of the plan:

	Number
Inactive employees or beneficiaries:	
Currently receiving benefits	2
Entitled to but not yet receiving benefits	-
Total inactive employees	2
Active plan members	73
Total employees covered by benefit terms	$ 75

Total OPEB Liability:

The Authority's total OPEB liability of $1,555,340 was measured as of June 30, 2019 and was determined based on an actual valuation performed as of June 30, 2019.

Actuarial Assumptions and other inputs:

The total OPEB liability was determined using the following assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.5% per year
Salary increases, including inflation	3.25% plus the salary merit increases, which are based on the VRS actuarial valuation as of June 30, 2017
Healthcare cost trend rates	4.5% - 8.5%
Retirees' share of benefit-related costs	Retirees are responsible for the full cost of coverage less the VERIP subsidy for those who qualify
Mortality rates	Health retirees: RPH-2017 Total Dataset Mortality Table fully generational using scale MP-2017; Disabled retirees: RPH-2017 Disabled Mortality Table fully generational using scale MP-2017;

Note 9. Other Post-Employment Benefits Liability – Local Plan (Continued)

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period from July 1, 2018 through June 30, 2019.

There have been no substantive plan provision changes since the last full valuation, which was for the fiscal year ending June 30, 2018.

Changes in assumptions and other inputs:

- The actuarial cost method has been updated from Projected Unit Credit with linear proration to decrement to Entry Age Normal Level % of Salary. In conjunction with this change, the payroll growth assumption has been set the same as those used in the VRS actuarial valuation as of June 30, 2017. This assumption was not previously needed for valuation purposes. This change has caused an increase in liabilities.
- Discount rate as of the Measurement Date has been updated to be based on a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale) tax-exempt, high quality 20-year municipal bonds. The prior full valuation used a discount rate of 3.50%. The current valuation uses a discount rate of 3.87% as of beginning of the year and 3.51% as of the end of the year. This change has caused a decrease in liabilities as of the beginning of the year and a decrease in liabilities during the year. The discount rate will be updated annually to reflect market conditions as of the Measurement Date.
- Mortality assumption has been updated as follows:
  - Healthy retirees: from RPH-2015 Total Dataset Mortality Table fully generational using scale MP-2015 to RPH-2017 Total Dataset Mortality Table fully generational using scale MP-2017
  - Disabled retirees: from RPH-2015 Disabled Mortality Table fully generational using scale MP-2015 to RPH-2017 Disabled Mortality Table fully generational using scale MP-2017
- Health care trend rates have been reset to an initial trend of 8.5% decreasing by 0.5% annually to an ultimate rate of 4.5% according to the schedule in the Health Care Trend Rates section of the Actuarial Methods and Assumptions. This change caused an increase in the Authority's liabilities.

<u>Changes in the Total OPEB Liability</u>:

Balance at June 30, 2018	
Changes for the year:	$ 1,730,743
Service Cost	68,079
Interest	67,654
Benefit Changes	-
Assumptions or other input changes	41,846
Differences between expected and actual experience	(250,714)
Benefit payments	(102,268)
Balance at June 30, 2019	$ 1,555,340

Note 9. Other Post-Employment Benefits Liability – Local Plan (Continued)

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.51%) or one percentage point higher (4.51%) than the current discount rate:

	1.00% Decrease (2.51%)	Current Discount Rate (3.51%)	1.00% Increase (4.51%)
Total OPEB liability	$ 1,678,228	$ 1,555,340	$ 1,442,302

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability of the Authority, as well as what the Authority's total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (7.50%) or one percentage point higher (9.50%) than the current healthcare cost trend rates:

	1.00% Decrease (7.50%)	Current Healthcare Cost Trend Rate (8.50%)	1.00% Increase (9.50%)
Total OPEB liability	$ 1,381,538	$ 1,555,340	$ 1,760,414

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2019, the Authority recognized OPEB expense of $128,246. At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Note 9. Other Post-Employment Benefits Liability – Local Plan (Continued)

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 115,667	$ 208,928
Change in assumptions	34,872	6,370
Employer contributions subsequent to the measurement date	N/A	N/A
Total	$ 150,539	$ 215,298

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

Year Ending June 30,	Increase to OPEB Expense
2020	$ (7,487)
2021	(7,487)
2022	(7,487)
2023	(7,490)
2024	(34,808)
Thereafter	-

Note 10. Service Contracts

The Authority purchases all water and sewage treatment services from RWSA. These purchases amounted to $9,524,927 for water and $8,629,730 for sewage treatment services for the current year.

RWSA was formed in 1972 as a joint venture of the City of Charlottesville, the County of Albemarle, and the Authority. The RWSA operates under the terms of a Service Agreement which was signed in 1973 and is expected to continue indefinitely. Under the terms of the agreement, as well as several supplemental agreements since that time, the City of Charlottesville and the Authority have covenanted to purchase water and sewer services from RWSA. RWSA constructs and maintains the capital assets necessary to provide these water and sewer services, and has issued debt to fund these projects. RWSA's charges to the Authority included a component for operations as well as a component for current and future estimated debt service.

In the current year, the charges that were associated with debt service were $7,781,304.

Note 11. Risk Management

The Risk Management Programs of the Authority are as follows:

The Authority is a member of the VML Insurance program. The liability coverage includes: local government liability, auto, property, boiler/machinery, Cyber Liability, fidelity/crime, workers compensation and general liability coverages. VML Insurance program is a self-administered risk pool which, for premiums paid, protects Virginia State and local government entities. Settlement amount under these policies have not exceeded insurance coverage for the last three fiscal years.

The limits of the pools' liability to the Authority are as follows:

- Local Government Liability – $1,000,000
- Auto – $1,000,000
- Property – $23,809,598
- Boiler/Machinery – $15,000,000
- Cyber Liability - $1,000,000
- Fidelity/Crime – $250,000
- General Liability – $1,000,000 (plus Excess of $4,000,000)
- Workers Compensation – Specific excess limits as per statute, aggregate excess limits up to the limits of the Aggregate Excess Loss Fund. Employers' Liability: $1,000,000 for each bodily injury accident for each employee.

The Authority continues to carry commercial insurance for all other risks of loss, namely employee health insurance. Claims have not exceeded coverage for the last three fiscal years.

Note 12. Deferred Compensation Plan

Since 1988 the Authority has offered its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The Plan, available to all Authority employees, permits them to defer a maximum of 100% of their salary or $19,000 per year, whichever is less. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency.

Note 13. Contingency – Off-Site Extensions

Off-site extensions of water and/or sanitary sewer lines to serve new developments shall be the responsibility of the developer. An off-site extension is defined as an extension of a water and/or sanitary sewer line by a developer from the developer's property boundary as determined by the Authority to existing Authority facilities. Under specific circumstances, upon completion of the project and acceptance into the Authority's system, the Authority shall enter into a written agreement granting the developer credit against future water and/or sewer system development charges. The credit can only be used for the property for which the off-site extension is constructed. The credit does not constitute a priority for water or sewer service. As water and/or sewer connections are made, the developer must use its existing credit first. The credit shall expire ten years after acceptance of the off-site water and/or sewer line extension into the Authority's system. If all requirements for use of credits are met, the total amount of unrecorded but potential credits is $55,551 at June 30, 2019.

REQUIRED SUPPLEMENTARY INFORMATION

Exhibit 4

ALBEMARLE COUNTY SERVICE AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
June 30, 2019

	2018	2017	2016	2015	2014
Total Pension Liability					
Service cost	$ 282,089	$ 302,117	$ 306,250	$ 319,994	$ 303,515
Interest on total pension liability	1,062,604	1,021,852	971,270	945,438	891,399
Changes in benefit terms	-	-	-	-	-
Changes in assumptions	-	(261,995)	-	-	-
Difference between expected and actual experience	19,186	57,961	(77,660)	(456,292)	-
Benefit payments, including refunds of employee contributions	(579,237)	(496,301)	(458,221)	(421,994)	(423,861)
Net change in total pension liability	784,642	623,634	741,639	387,146	771,053
Total pension liability – beginning	15,469,673	14,846,039	14,104,400	13,717,254	12,946,201
Total pension liability – ending	16,254,315	15,469,673	14,846,039	14,104,400	13,717,254
Plan Fiduciary Net Position					
Contributions – employer	244,563	235,653	330,458	317,575	326,450
Contributions – employee	188,757	181,895	177,386	171,283	170,882
Net investment income	1,024,636	1,516,452	217,142	535,330	1,576,735
Benefit payments, including refunds of employee contributions	(579,237)	(496,301)	(458,221)	(421,994)	(423,861)
Administrative expenses	(8,793)	(8,670)	(7,476)	(7,154)	(8,347)
Other	(913)	(1,352)	(91)	(110)	84
Net change in plan fiduciary net position	869,013	1,427,677	259,198	594,930	1,641,943
Plan fiduciary net position – beginning	13,833,473	12,405,796	12,146,598	11,551,668	9,909,725
Plan fiduciary net position – ending	14,702,486	13,833,473	12,405,796	12,146,598	11,551,668
Net pension liability – ending	$ 1,551,829	$ 1,636,200	$ 2,440,243	$ 1,957,802	$ 2,165,586
Plan fiduciary net position as a percentage of total pension liability	90%	89%	84%	86%	84%
Covered payroll	$ 3,922,995	$ 3,757,862	$ 3,635,900	$ 3,474,178	$ 3,355,469
Net pension liability as a percentage of covered employee payroll	40%	44%	67%	56%	65%

The plan years above are reported in the entity's financial statements in the fiscal year following the plan year - i.e., plan year 2014 information was presented in the entity's fiscal year 2015 financial report.

This schedule is intended to show information for 10 years. Since fiscal year 2015 (plan year 2014) was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

The Notes to Required Supplementary Information are an integral part of this schedule.

Exhibit 5

ALBEMARLE COUNTY SERVICE AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF PENSION CONTRIBUTIONS
June 30, 2019

Year Ended June 30	Actuarially Determined Contribution	Contributions in Relation to Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
2015	$ 311,615	$ 311,615	$ -	$ 3,474,178	8.97%
2016	330,458	330,458	-	3,635,900	9.09%
2017	235,653	235,653	-	3,757,862	6.27%
2018	244,561	244,561	-	3,922,995	6.23%
2019	234,877	234,877	-	4,325,421	5.43%

Schedule is intended to show information for 10 years. Since 2015 was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

The Notes to Required Supplementary Information are an integral part of this schedule.

Exhibit 6

ALBEMARLE COUNTY SERVICE AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN OPEB LIABILITY AND RELATED RATIOS - LOCAL PLAN
June 30, 2019

	Plan Year 2019	Plan Year 2018
Total OPEB Liability		
Service cost	$ 68,079	$ 69,786
Interest on total OPEB liability	67,654	56,003
Changes in benefit terms	-	-
Difference between expected and actual experience	(250,714)	173,501
Changes in assumptions	41,846	(9,554)
Benefit payments	(102,268)	(106,141)
Net change in total OPEB liability	(175,403)	183,595
Total OPEB liability - beginning	1,730,743	1,547,148
Total OPEB liability - ending	$ 1,555,340	$ 1,730,743
Covered employee payroll	$ 4,404,509	$ 3,899,735
Total OPEB liability as a percentage of covered payroll	35.3%	44.4%

This schedule is intended to show information for 10 years. Since fiscal year 2018 is the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

Exhibit 7

ALBEMARLE COUNTY SERVICE AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF OPEB CONTRIBUTIONS
June 30, 2019

Fiscal Year Ended June 30	Actuarially Determined Employer Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Employer Covered Payroll	Contributions as a percentage of Covered Payroll
VRS - Group Life Insurance - General Employees					
2018	$ 20,401	$ 20,401	$ -	$ 3,922,995	0.52%
2019	$ 22,492	$ 22,492	$ -	$ 4,325,421	0.52%

Schedule is intended to show information for 10 years. Since 2018 was the first year for this presentation, no earlier data is available. However, additional years will be included as they become available.

The covered payroll amounts above are for the entity's fiscal year - i.e. the covered payroll on which required contributions were based for the same year.

The Notes to Required Supplementary Information are an integral part of this schedule.

Exhibit 8

ALBEMARLE COUNTY SERVICE AUTHORITY

REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYERS SHARE OF NET OPEB LIABILITY
June 30, 2019

Entity Fiscal Year Ended June 30	Employer's Proportion of the Net OPEB Liability (Asset)	Employer's Proportionate Share of the Net OPEB Liability (Asset)	Employer's Covered Payroll	Employer's Proportionate Share of the Net OPEB Liability (Asset) as a percentage of its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability
VRS - Group Life Insurance - General Employees					
2018	0.02038%	$ 307,000	$ 3,757,862	8.17%	48.86%
2019	0.02063%	$ 313,000	$ 3,922,995	7.98%	51.22%

Schedule is intended to show information for 10 years. Since 2018 was the first year for this presentation, no earlier data is available. However, additional years will be included as they become available.

The covered payroll amounts above are for the measurement period, which is the twelve months prior to the entity's fiscal year.

The Notes to Required Supplementary Information are an integral part of this schedule.

ALBEMARLE COUNTY SERVICE AUTHORITY

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2019

Note 1. Changes of Benefit Terms

Pension

There have been no actuarially material changes to the Virginia Retirement System (System) benefit provisions since the prior actuarial valuation.

Other Postemployment Benefits (OPEB)

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

Note 2. 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:

- Update mortality table
- Lowered in rates of service retirement
- Update withdrawal rates to better fit experience
- Lowered in rates of disability retirement
- No changes to salary rates
- Applicable to: Pension and GLI OPEB

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

- Update mortality table
- Lowered rates of retirement at older ages and changed final retirement from 70 to 75
- Update withdrawal rates to better fit experience
- Lowered disability rates
- No changes to salary rates
- Applicable to: Pension and GLI OPEB

STATISTICAL SECTION

The statistical section of the Authority's comprehensive annual financial report presents detailed information as a context for understanding what the information presented in the financial statements, note disclosures and required supplementary information say about the Authority's overall financial health. This information has not been audited by the independent auditor.

<u>Contents</u>

Sources: Unless otherwise noted, the information in these schedules is derived from the Comprehensive Annual Financial Reports for the relevant year.

Table 1

ALBEMARLE COUNTY SERVICE AUTHORITY
NET POSITION BY COMPONENT
LAST TEN FISCAL YEARS
(ACCRUAL BASIS OF ACCOUNTING)

	Fiscal Year									
	2010	**2011**	**2012**	**2013**	**2014**	**2015***	**2016**	**2017**	**2018****	**2019**
Business-type activities										
Net investment in capital assets	$ 96,191,023	$ 101,013,464	$ 105,620,650	$ 108,233,265	$ 115,617,250	$ 119,714,145	$ 126,311,674	$ 131,997,020	$ 140,238,885	$ 148,180,254
Restricted for debt service	157,601	194,307	218,724	223,963	229,688	234,890	240,591	247,015	255,835	264,343
Unrestricted	14,974,733	14,601,950	19,210,751	21,876,992	22,782,549	22,276,215	24,423,916	29,077,339	36,007,519	37,580,516
Total business-type activities net position	$ 111,323,357	$ 115,809,721	$ 125,050,125	$ 130,334,220	$ 138,629,487	$ 142,225,250	$ 150,976,181	$ 161,321,374	$ 176,502,239	$ 186,025,113

* GASB Statement No. 68 was adopted in fiscal year 2015. Information from previous years presented is unavailable.
** GASB Statement No. 75 was adopted in fiscal year 2018. Information from previous years presented is unavailable.

Table 2

ALBEMARLE COUNTY SERVICE AUTHORITY
CHANGES IN NET POSITION
LAST TEN FISCAL YEARS
(ACCRUAL BASIS OF ACCOUNTING)

	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating expenses										
Operating expenses:										
Water	$ 9,391,666	$ 9,592,501	$ 9,981,754	$ 10,686,931	$ 10,262,354	$ 11,204,103	$ 11,872,889	$ 12,816,458	$ 13,029,366	$ 13,762,043
Sewer	8,401,774	7,751,031	8,822,189	9,490,588	10,111,833	9,130,743	9,766,413	9,613,692	9,664,393	12,468,623
Other	2,382,631	2,469,557	2,501,718	2,556,232	2,819,633	3,026,916	3,158,144	3,302,779	3,336,765	3,625,254
Total operating expenses	$ 20,176,071	$ 19,813,089	$ 21,305,661	$ 22,733,751	$ 23,193,820	$ 23,361,762	$ 24,797,446	$ 25,732,929	$ 26,030,524	$ 29,855,920
Operating revenues										
Charges for services:										
Water	$ 10,248,876	$ 10,952,033	$ 10,651,869	$ 10,701,103	$ 10,665,192	$ 12,173,073	$ 12,564,711	$ 13,916,547	$ 14,221,088	$ 14,365,666
Sewer	8,839,336	9,251,466	9,280,346	9,611,718	9,588,948	10,468,470	10,895,970	11,869,460	12,232,244	12,688,282
Connection	91,726	69,869	94,442	550,967	296,724	328,862	329,384	359,660	331,838	356,398
Total operating revenues	$ 19,179,938	$ 20,273,368	$ 20,026,657	$ 20,863,788	$ 20,550,864	$ 22,970,405	$ 23,790,065	$ 26,145,667	$ 26,785,170	$ 27,410,346
Net (expense) revenue	$ (996,133)	$ 460,279	$ (1,279,004)	$ (1,869,963)	$ (2,642,956)	$ (391,357)	$ (1,007,381)	$ 412,738	$ 754,646	$ (2,445,574)
Nonoperating revenues and expenses										
Investment earnings	$ 219,634	$ 52,937	$ 68,431	$ 19,745	$ 110,135	$ 102,469	$ 215,035	$ 59,576	$ 348,572	$ 946,599
Miscellaneous revenues	421,664	545,294	565,472	218,389	310,340	347,692	363,029	412,944	552,586	51,050
Capital contributions	6,646,082	4,615,713	9,036,424	7,680,924	10,739,627	7,466,312	9,468,629	9,717,312	15,173,477	11,632,967
Other expenses	(81,145)	(1,187,859)	(310,417)	(765,000)	(221,879)	(473,424)	(288,381)	(257,377)	(293,343)	(662,168)
Total nonoperating revenues and expenses	$ 7,206,235	$ 4,026,085	$ 9,359,910	$ 7,154,058	$ 10,938,223	$ 7,443,049	$ 9,758,312	$ 9,932,455	$ 15,781,292	$ 11,968,448
Change in net position	$ 6,210,102	$ 4,486,364	$ 8,080,906	$ 5,284,095	$ 8,295,267	$ 7,051,692	$ 8,750,931	$ 10,345,193	$ 16,535,938	$ 9,522,874

Table 3

ALBEMARLE COUNTY SERVICE AUTHORITY
WATER AND SEWER SOLD BY TYPE OF CUSTOMER
LAST TEN FISCAL YEARS
(IN MILLIONS OF GALLONS)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Type of Water Customer										
Single-family residential	705.40	740.60	710.70	709.20	704.40	715.80	714.07	747.21	751.98	736.24
Multi-family residential	347.20	350.40	354.10	360.10	370.00	376.30	379.59	393.56	392.13	398.38
Commercial (Offices)	44.80	52.90	51.10	49.10	47.40	49.20	64.97	51.50	45.65	44.48
Commercial (Other)	253.20	270.00	245.40	246.40	238.10	246.40	240.93	283.17	269.28	264.36
Industrial	20.50	20.10	17.50	18.30	20.30	16.20	21.59	19.68	17.28	18.41
Institutional	143.80	152.60	179.90	164.80	154.40	172.10	189.99	207.49	203.02	164.35
TOTAL WATER SOLD	1,514.90	1,586.60	1,558.70	1,547.90	1,534.60	1,576.00	1,611.14	1,702.61	1,679.34	1,626.22
Residential & irrigation 0-3,000	$3.32	$3.31	$3.31	$3.44	$3.33	$3.69	$3.80	$3.99	$4.11	$4.27
3,001-6,000	$6.64	$6.62	$6.62	$6.88	$6.66	$7.38	$7.60	$7.98	$8.22	$8.55
6,001-9,000	$9.96	$9.93	$9.93	$10.32	$9.99	$11.07	$11.40	$11.97	$12.33	$12.82
Over 9,000	$13.28	$13.24	$13.24	$13.76	$13.32	$14.76	$15.20	$15.96	$16.44	$17.10
Multi-family & non-residential	$6.19	$6.19	$6.19	$6.43	$6.43	$7.12	$7.33	$7.70	$7.93	$8.25

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Type of Sewer Customer										
Single-family residential	537.00	556.40	548.90	553.00	556.90	565.35	570.61	600.29	604.03	600.17
Multi-family residential	314.20	322.50	324.60	332.90	339.80	347.75	355.89	366.04	366.63	375.80
Commercial (Offices)	36.20	43.50	44.40	41.90	41.40	42.53	58.43	47.37	41.32	39.78
Commercial (Other)	213.80	220.00	203.00	202.40	202.60	209.61	204.30	236.26	239.30	233.57
Industrial	17.70	20.90	14.70	16.70	15.40	15.49	17.45	15.19	15.97	13.60
Institutional	116.20	128.60	157.40	148.00	141.80	152.28	140.99	143.41	144.23	144.03
TOTAL SEWER SOLD	1,235.10	1,291.90	1,293.00	1,294.90	1,297.90	1,333.01	1,347.67	1,408.56	1,411.48	1,406.95
Rate per 1,000 gallons	$7.21	$7.21	$7.21	$7.49	$7.49	$7.86	$8.10	$8.50	$8.67	$8.93

Table 4

ALBEMARLE COUNTY SERVICE AUTHORITY
WATER AND SEWER RATES
LAST TEN FISCAL YEARS

	Fiscal Year									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Monthly Service Charge[1]	$ 6.15	$ 6.15	$ 6.15	$ 6.15	$ 6.15	$ 7.18	$ 7.40	$ 7.73	$ 7.92	$ 8.16
Water Volume										
Single-family/Non-Residential										
0 - 3,000	3.32	3.31	3.31	3.44	3.33	3.69	3.80	3.99	4.11	4.27
3,001 - 6,000	6.64	6.62	6.62	6.88	6.66	7.38	7.60	7.98	8.22	8.55
6,000 - 9,000	9.96	9.93	9.93	10.32	9.99	11.07	11.40	11.97	12.33	12.82
Over 9,000	13.28	13.24	13.24	13.76	13.32	14.76	15.20	15.96	16.44	17.10
Multi-family/Non-Residential										
All Metered Consumption	6.19	6.19	6.19	6.43	6.43	7.12	7.33	7.70	7.93	8.25
Sewer Volume	7.21	7.21	7.21	7.49	7.49	7.86	8.10	8.50	8.67	8.93

[1] Monthly Service charge varies based on meter size. The amount represented here is for our standard 5/8 in meters.

Table 5

ALBEMARLE COUNTY SERVICE AUTHORITY
TOP TEN REVENUE PAYERS
CURRENT YEAR AND NINE YEARS AGO

	Fiscal Year 2019			Fiscal Year 2010		
Customer	**Water Billed (in gallons)**	**Rank**	**Percent of Total Water Sales**	**Water Billed (in gallons)**	**Rank**	**Percent of Total Water Sales**
Old Salem Apartments	22,503,100	1	1.38 %	18,828,300	6	1.24 %
University of Virginia	21,786,500	2	1.34	18,637,500	7	1.23
Southwood Mobile Homes	21,523,000	3	1.32	21,784,000	2	1.44
ACRJ	21,176,000	4	1.30	22,259,000	1	1.47
Martha Jefferson Hospital	20,358,700	5	1.25	-	-	-
SEMF Charleston	20,057,375	6	1.23	-	-	-
Abbington Crossing	19,564,200	7	1.20	20,607,500	3	1.36
Westminster Canterbury	18,359,000	8	1.13	-	-	-
Four Seasons Apts.	16,308,000	9	1.00	20,014,800	4	1.32
Westgate Apartments	16,168,000	10	0.99	-	-	-
County of Albemarle	-	-	-	19,614,900	5	1.29
Blue Ridge Hospital	-	-	-	16,993,225	8	1.12
NGIC	-	-	-	14,920,000	9	0.98
Turtle Creek Apartments	-	-	-	14,666,700	10	0.97
	197,803,875		12.16%	188,325,925		12.43%
Total water consumption:	1,626,227,458			1,514,900,000		

	Fiscal Year 2019			Fiscal Year 2010		
Customer	**Sewer Billed (in gallons)**	**Rank**	**Percent of Total Sewer Sales**	**Sewer Billed (in gallons)**	**Rank**	**Percent of Total Sewer Sales**
Old Salem Apartments	22,503,100	1	1.60 %	18,828,300	4	1.52 %
University of Virginia	21,382,100	2	1.52	18,033,100	5	1.46
SEMF Charleston	20,057,375	3	1.43	-	-	-
ACRJ	20,035,000	4	1.42	22,259,000	1	1.80
Abbington Crossing	19,564,200	5	1.39	20,607,500	2	1.67
Westminster Canterbury	17,359,000	6	1.23	-	-	-
Four Seasons Apts.	16,308,000	7	1.16	20,014,800	3	1.62
Westgate Apartments	16,156,900	8	1.15	11,477,000	10	0.93
Turtle Creek Apts.	15,967,000	9	1.13	14,666,700	7	1.19
Southwood Mobile Homes	15,839,279	10	1.13	12,069,414	9	0.98
Blue Ridge Hospital	-	-	-	16,993,225	6	1.38
Eldercare Gardens	-	-	-	14,260,000	8	1.15
	185,171,954		13.16%	169,209,039		13.70%
Total sewer usage:	1,406,933,089			1,235,100,000		

Table 6

ALBEMARLE COUNTY SERVICE AUTHORITY
OUTSTANDING DEBT PER CONNECTION, PER CAPITA, AND DEBT PER CAPITA AS A PERCENTAGE OF INCOME PER CAPITA
LAST TEN FISCAL YEARS

Fiscal Year	Outstanding Revenue Bond (1)	Number of [1] Connections (2)	Debt per Connection (3) = (1)/(2) (3)	Estimated [2] Population Served (4) = (2) * 2.5 (4)	Debt per Capita (5) = (1)/(4) (5)	Income [3] per Capita (6)	Debt per Capita as a % Income per Capita (7) = (5)/(6) (7)
2010	$ 364,100	16,974	$ 21.45	42,435	$ 8.58	$ 50,558	0.0170 %
2011	10,357,000	17,207	601.91	43,018	240.76	47,779	0.5039
2012	10,022,000	17,512	572.29	43,780	228.92	49,137	0.4659
2013	9,623,000	17,818	540.07	44,545	216.03	52,687	0.4100
2014	9,212,000	18,132	508.05	45,330	203.22	56,979	0.3567
2015	8,788,000	18,466	475.90	46,165	190.36	56,851	0.3348
2016	8,352,000	18,764	445.11	46,910	178.04	58,603	0.3038
2017	7,903,000	19,257	410.40	48,143	164.16	60,294	0.2723
2018	7,440,000	19,738	376.94	49,345	150.78	60,964	0.2473
2019	6,963,000	20,252	343.82	50,630	137.53	67,630	0.2034

[1] Connections from Table 12

[2] The Virginia Department of Health estimates 2.5 residents per connection; this number is used in lieu of the population data in Table 8 which is representative of the entire county.

[3] Per capita income data from Table 8 (Source: U.S. Bureau of Economic Analysis, Charlottesville-Albemarle Area)

Note: The Authority is not subject to legal debt limitations, and has issued no debt which is overlapping with other jurisdictions during the last ten fiscal years.

Table 7

ALBEMARLE COUNTY SERVICE AUTHORITY
PLEDGED-REVENUE COVERAGE
LAST TEN FISCAL YEARS

Fiscal Year	Gross Revenue	Direct Operating Expense[1]	Net Revenue Available for Debt Service	Principal	Interest	Total	Coverage
2010	$ 26,404,819	$ 17,793,440	$ 8,611,379	$ 357,500	$ 15,200	$ 372,700	23.11
2011	25,590,487	17,343,532	8,246,955	364,100	295,636	659,736	12.50
2012	29,649,584	18,803,943	10,845,641	335,000	476,307	811,307	13.37
2013	28,935,078	20,177,519	8,757,559	399,000	452,600	851,600	10.28
2014	31,851,830	20,374,187	11,477,643	411,000	443,993	854,993	13.42
2015	31,021,470	20,334,846	10,686,624	424,000	414,813	838,813	12.74
2016	33,965,596	21,639,302	12,326,294	436,000	395,056	831,056	14.83
2017	36,457,609	22,430,150	14,027,459	449,000	374,726	823,726	17.03
2018	42,975,439	22,693,759	20,281,680	463,000	353,776	816,776	24.83
2019	40,149,708	26,230,666	13,919,042	477,000	332,183	809,183	17.20

[1]Excluding depreciation and amortization

Table 8

ALBEMARLE COUNTY SERVICE AUTHORITY
COUNTY DEMOGRAPHIC AND ECONOMIC STATISTICS
LAST TEN FISCAL YEARS

Calendar Year	Population [1]	Personal Income [2]	Per Capita Income [2]	Per Capita Income as Percent (%) of U.S. Average [2]	School Enrollment [3]	Unemployment Rate [4]
2009	96,247	$ 7,038,250,000	$ 50,558	123 %	13,035	5.1 %
2010	99,150	6,742,806,000	47,779	121	13,222	5.1
2011	98,970	7,014,795,000	49,137	122	13,222	5.1
2012	102,251	7,609,998,000	52,687	124	13,122	5.2
2013	103,000	8,350,340,000	56,979	129	13,263	5.4
2014	104,489	8,420,079,000	56,851	128	13,677	4.7
2015	105,703	8,795,194,000	58,603	127	13,737	3.7
2016	106,878	9,182,721,000	60,294	125	13,792	3.5
2017	107,702	9,375,633,000	60,964	124	13,910	3.3
2018	108,718	10,531,351,000	67,630	131	14,013	2.7

[1] U.S. Census Bureau (estimates based on July 1)

[2] U.S. Bureau of Economic Analysis, Charlottesville-Albemarle Area, Personal Income, Population, Per Capita Personal Income

[3] County of Albemarle, Department of Education

[4] Virginia Labor Market Information, www.virginialmi.com

Calendar year 2019 statistics for the table above are not yet available.

Table 9

ALBEMARLE COUNTY SERVICE AUTHORITY
TEN LARGEST EMPLOYERS (ALBEMARLE COUNTY)
CURRENT YEAR AND NINE YEARS AGO

Employer	Estimated Product/Service	Estimated Employment in 2019	Rank in 2019	Estimated Employment in 2010	Rank in 2010
University of Virginia/Blue Ridge Hospital	Higher education	1,000 - over	1	1,000 - over	1
County of Albemarle	Local government	1,000 - over	2	1,000 - over	2
Sentara Healthcare/Martha Jefferson Hospital	Health care	1,000 - over	3	-	-
U.S. Department of Defense	National security	1,000 - over	4	500 - 999	6
State Farm Mutual Automobile Insurance	Insurance services	500 - 999	5	1,000 - over	3
University of Virginia Medical Center	Health care	500 - 999	6	-	-
Piedmont Virginia Community College	Higher education	500 - 999	7	250 - 499	7
Atlantic Coast Athletic Club	Athletic facility	250 - 499	8	-	-
Crutchfield Corporation	Electronic retailers	250 - 499	9	-	-
Northrop Grumman Corporation	Computer & electronic mfg.	250 - 499	10	500 - 999	5
UVA Health Services Foundation	Health care	-	-	1,000 - over	4
Crutchfield Corporation	Electronic retailers	-	-	250-499	9
State Farm Fire and Casualty Insurance	Insurance services	-	-	250-499	10
Wal-Mart	Deparment stores	-	-	250-499	8

Source: Virginia Employment Commission

Table 10

ALBEMARLE COUNTY SERVICE AUTHORITY
FULL-TIME EMPLOYEES
LAST TEN FISCAL YEARS

	Fiscal Year									
Department	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Administration/I.T.	8	9	9	9	10	10	10	10	10	10
Finance	14	14	14	15	15	16	16	17	17	17
Engineering	15	15	15	16	16	16	16	16	17	17
Maintenance	30	30	30	28	31	32	33	33	33	33
Total	67	68	68	68	72	74	75	76	77	77

Table 11

ALBEMARLE COUNTY SERVICE AUTHORITY
OPERATING INDICATORS
LAST TEN FISCAL YEARS

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
New connections	304	233	305	306	314	334	298	493	481	514
Water meters read[1]	210,320	212,916	217,029	219,483	223,195	227,435	231,275	235,879	241,978	248,182
Service orders processed[2]	11,208	9,909	11,925	11,707	11,823	12,116	12,405	16,988	12,055	8,179
Water main breaks	13	15	8	14	14	16	6	5	11	12
Sewer overflows	4	10	3	-	11	2	3	2	4	7
Sewer blockages	5	5	5	5	7	5	3	2	5	8

[1] Number of meters read for billing.

[2] Includes new service requests, requests for disconnection, meter installations & exchanges, investigations, and miscellaneous customer requests.

Table 12

ALBEMARLE COUNTY SERVICE AUTHORITY
CAPITAL ASSET STATISTICS
LAST TEN FISCAL YEARS

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of water connections	16,974	17,207	17,512	17,818	18,132	18,466	18,764	19,257	19,738	20,252
Number of sewer connections	13,972	14,202	14,549	14,840	15,168	15,508	15,805	16,299	16,764	17,273
Miles of water lines	336.39	339.59	341.90	346.55	351.76	355.00	338.52	344.76	349.40	353.10
Miles of sewer lines	243.46	246.75	248.48	252.81	258.40	261.10	281.67	288.17	292.70	297.60
Fire hydrants	2,149	2,167	2,230	2,302	2,330	2,375	2,511	2,590	2,650	2,747
Water pumping stations	11	11	11	10	9	9	9	8	8	9
Sewer pumping stations	11	11	11	12	12	12	12	12	12	12
Water storage tanks	8	9	9	8	7	7	8	8	8	8

Table 13

ALBEMARLE COUNTY SERVICE AUTHORITY
REVENUES BY SOURCE
LAST TEN FISCAL YEARS

Fiscal Year	Service Charges	Connection Charges	Rental Income	Interest Earnings	Other	Total
2010	$ 19,088,212	$ 91,726	$ 39,972	$ 219,634	$ 381,692	$ 19,821,236
2011	20,203,499	69,869	39,972	52,937	608,497	20,974,774
2012	19,932,215	94,442	32,294	68,431	699,885	20,827,267
2013	20,312,821	102,275	43,656	19,745	836,157	21,314,654
2014	20,254,140	92,788	33,810	110,135	621,330	21,112,203
2015	22,641,543	96,992	33,437	102,469	680,717	23,555,158
2016	23,460,681	117,728	27,645	215,035	675,878	24,496,967
2017	25,786,007	138,553	17,213	59,576	738,948	26,740,297
2018	26,453,332	140,451	16,603	348,572	843,004	27,801,962
2019	27,053,948	135,007	16,603	946,599	364,584	28,516,741

Table 14

ALBEMARLE COUNTY SERVICE AUTHORITY
EXPENSES BY FUNCTION
LAST TEN FISCAL YEARS

Fiscal Year	Water & Sewer Costs	Departmental Operating Expenses	Bond Interest Charges	Depreciation	Other	Total
2010	$ 12,149,203	$ 5,644,236	$ 11,029	$ 2,382,631	$ 70,116	$ 20,257,215
2011	11,560,006	5,783,526	295,636	2,469,557	995,398	21,104,123
2012	12,824,548	5,979,395	275,791	2,501,718	201,333	21,782,785
2013	14,027,324	6,150,195	152,232	2,556,232	825,500	23,711,483
2014	13,849,536	6,524,651	360,711	2,819,633	2,032	23,556,563
2015	13,901,732	6,433,114	414,813	3,026,916	193,203	23,969,778
2016	14,795,643	6,843,659	395,056	3,158,144	22,163	25,214,665
2017	14,928,569	7,501,581	374,726	3,302,779	4,761	26,112,416
2018	15,289,280	7,404,479	353,776	3,336,765	55,201	26,439,501
2019	18,154,657	8,076,009	332,183	3,625,254	438,731	30,626,834

Table 15

ALBEMARLE COUNTY SERVICE AUTHORITY
SCHEDULE OF INSURANCE IN FORCE
June 30, 2019

Insurer	Type of Coverage	Policy Number	Policy Period From	Policy Period To	Annual Premium
Virginia Municipal Group Self Insurance Association	Local Government Liability Boiler & Machinery Cyber Liability General Business Policy: Auto General Liability/Excess Property Fidelity & Crime Workers' Compensation	P-2018-2019-VML-0107-1	7/1/2018	6/30/2019	$94,605

Table 16

ALBEMARLE COUNTY SERVICE AUTHORITY
BILLED SERVICES AND CONNECTIONS
LAST TEN FISCAL YEARS

Fiscal Year	Water Connections	Water Billions Gallons	Consumption Ratio Water/Sewer	Sewer Billions Gallons	Sewer Connections
2010	16,974	1.51	1.2	1.24	13,972
2011	17,207	1.59	1.2	1.29	14,202
2012	17,512	1.56	1.2	1.29	14,549
2013	17,818	1.55	1.2	1.30	14,840
2014	18,132	1.53	1.2	1.30	15,168
2015	18,466	1.57	1.2	1.33	15,508
2016	18,764	1.61	1.2	1.35	15,805
2017	19,257	1.70	1.2	1.41	16,299
2018	19,738	1.68	1.2	1.41	16,764
2019	20,252	1.63	1.2	1.41	17,273

Table 17

ALBEMARLE COUNTY SERVICE AUTHORITY
CONSTRUCTION ACTIVITY, PROPERTY VALUE, AND CASH EQUIVALENTS
LAST TEN FISCAL YEARS

Fiscal Year	Construction	Property Value	Cash & Cash Equivalents
2010	$ 5,487,584	$ 91,067,539	$ 15,581,689
2011	11,194,733	90,835,523	26,087,350
2012	20,811,567	92,313,712	22,953,823
2013	19,677,628	97,096,463	21,163,973
2014	5,832,585	118,282,983	20,896,235
2015	8,531,307	120,017,051	23,466,968
2016	8,420,418	125,645,948	24,367,711
2017	11,673,410	127,628,676	30,010,727
2018	6,325,642	140,750,579	38,385,906
2019	9,392,718	145,137,081	40,275,478

COMPLIANCE SECTION

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

To the Honorable Members of the Board of Directors
Albemarle County Service Authority
Charlottesville, Virginia

We have audited, 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, the financial statements of the Albemarle County Service Authority (the "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, and have issued our report thereon dated October 14, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the 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 the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

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

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

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Compliance and Other Matters

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

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority'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 Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Brown, Edwards & Company, L.L.P.

CERTIFIED PUBLIC ACCOUNTANTS

Harrisonburg, Virginia
October 14, 2019

ALBEMARLE COUNTY SERVICE AUTHORITY

SUMMARY OF COMPLIANCE MATTERS
Year Ended June 30, 2019

As more fully described in the Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards,* we performed tests of the Authority's compliance with certain provisions of the laws, regulations, contracts, and grants shown below.

STATE COMPLIANCE MATTERS

Code of Virginia
Cash and Investment Laws
Local Retirement Systems
Debt Provisions
Procurement Laws
Uniform Disposition of Unclaimed Property Act
Conflicts of Interest