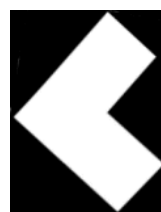


Southside Regional Public Service Authority

Comprehensive Annual Financial Report

Years Ended June 30, 2019 and 2018



***Creedle, Jones
& Associates, P.C.***
Certified Public Accountants

Southside Regional Public Service Authority

Table of Contents

Year Ended June 30, 2019

	Pages
Independent Auditor's Report	i-ii
Management's Discussion and Analysis	1-3
BASIC FINANCIAL STATEMENTS	
Exhibits	
A Statements of Net Position	4
B Statements of Revenues, Expenses, and Changes in Net Position	5
C Statements of Cash Flows	6
Notes to the Financial Statements	7-32
Required Supplementary Information	
Schedule of Changes in the Political Subdivision's Net Pension Liability and Related Ratios	33
Schedule of Employer Contributions	34
Notes to Required Supplementary Information	35-36
Schedule of Employer's Share of Net OPEB Liability – Group Life Insurance Program	37
Schedule of Employer Contributions for OPEB Group Life Insurance Program	38
Notes to Required Supplementary Information – GLI OPEB	39-41
COMPLIANCE	
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 <i>Government Auditing Standards</i>	42-43



**Creedle
Jones
& Associates**

A Professional Corporation

*Robin B. Jones, CPA, CFP
Denise C. Williams, CPA, CSEP
Kimberly W. Jackson, CPA*

*Nadine L. Chase, CPA
Zachary T. Wolfe, CPA*

Sherwood H. Creedle, Emeritus

*Members of
American Institute of Certified Public Accountants
Virginia Society of Certified Public Accountants*

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
Southside Regional Public Service Authority
Boydton, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Southside Regional Public Service Authority, as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Southside Regional Public Service 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 opinions 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 and specifications 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 opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of the Southside Regional Public Service Authority, as of June 30, 2019 and 2018, and the respective changes in financial position and cash flows, thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

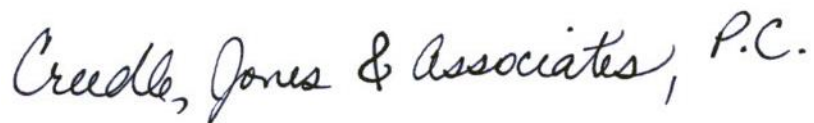
Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedules related to pension and OPEB funding on pages 1-3 and 33-41 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 Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 17, 2019 on our consideration of the Southside Regional Public Service Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Southside Regional Public Service Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Southside Regional Public Service Authority's internal control over financial reporting and compliance.

A handwritten signature in dark ink that reads "Creedle, Jones & Associates, P.C." in a cursive, flowing script.

Creedle, Jones & Associates, P.C.
Certified Public Accountants

South Hill, Virginia
October 17, 2019

Southside Regional Public Service Authority

Management's Discussion and Analysis

As of June 30, 2019 and 2018

Our discussion and analysis of the Southside Regional Public Service Authority's financial performance provides an overview of the Authority's financial activities for the fiscal years ended June 30, 2019 and 2018. Please read this information in conjunction with Southside Regional Public Service Authority's basic financial statements.

OVERVIEW OF THE FINANCIAL STATEMENTS

The Southside Regional Public Service Authority (the "Authority") presents three basic financial statements. These are: (1) Statements of Net Position; (2) Statements of Revenues, Expenses, and Changes in Net Position; and (3) Statements of Cash Flows.

Our financial position is measured in terms of resources (assets) we own and obligations (liabilities) we owe on a given date. This information is reported on the Statements of Net Position, which reflects the Authority's assets in relation to its debt to creditors. The excess of our assets over liabilities is our equity, or net position.

Information regarding the results of our operation during the years is reported in the Statements of Revenues, Expenses, and Changes in Net Position. These statements show how much our overall net position increased or decreased during the years as a result of our operations and for other reasons.

Our Statements of Cash Flows disclose the flow of cash resources into and out of the Authority during the years and how we applied those funds.

FINANCIAL SUMMARY

Financial Position

A summary of the Authority's Statements of Net Position for 2019 and 2018 is presented below:

	<u>2019</u>	<u>2018</u>
Assets	\$ 19,445,396	\$ 19,718,198
Deferred Outflows of Resources	<u>33,491</u>	<u>25,439</u>
Total Assets and Deferred Outflows of Resources	<u>\$ 19,478,887</u>	<u>\$ 19,743,637</u>
Liabilities	\$ 13,748,624	\$ 15,062,850
Deferred Inflows of Resources	178,177	227,520
Net Position		
Net investment in capital assets	7,366,628	4,948,479
Restricted	367,679	3,915,338
Unrestricted	<u>(2,182,221)</u>	<u>(4,410,550)</u>
Total Net Position	<u>5,552,086</u>	<u>4,453,267</u>
Total Liabilities, Deferred Inflows of Resources and Net Position	<u>\$ 19,478,887</u>	<u>\$ 19,743,637</u>

Change in Net Position

A summary of the Authority's Condensed Statements of Revenues, Expenses, and Changes in Net Position for 2019 and 2018 is presented below:

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

	<u>2019</u>	<u>2018</u>
Operating Revenues	\$ 3,106,545	\$ 3,002,840
Operating Expenses	<u>(1,949,668)</u>	<u>(5,392,034)</u>
Net Operating Income (Loss)	1,156,877	(2,389,194)
Non-Operating Revenue	119,438	32,881
Non-Operating Expense	<u>(177,496)</u>	<u>(165,416)</u>
Special Item	<u>-</u>	<u>(691,587)</u>
Changes in Net Position	<u>\$ 1,098,819</u>	<u>\$ (3,213,316)</u>

During the year, the Authority's operating income was \$3,106,545 and operating expenses were \$1,949,668. Non-operating revenues were \$119,438 and non-operating expenses were \$177,496. Changes in net position were an overall increase of \$1,098,819.

Cash Flows

A summary of the Authority's Condensed Statements of Cash Flows for 2019 and 2018 is presented below:

Condensed Statements of Cash Flows

	<u>2019</u>	<u>2018</u>
Cash Provided by (Used in)		
Operating activities	\$ 890,608	\$ (996,757)
Noncapital financing activities	6,026	10,261
Capital and related financing activities	<u>(2,970,668)</u>	<u>5,070,188</u>
Investing activities	<u>73,412</u>	<u>22,620</u>
Net Increase (Decrease) in Cash	<u><u>\$(2,000,622)</u></u>	<u><u>\$ 4,106,312</u></u>

Capital Assets

As of June 30, 2019, the Authority's business-type activities net capital assets total \$13,304,265, an increase of \$1,706,241 or 14.71% over the previous fiscal year.

Change in Capital Assets

	<u>Balance July 1, 2018</u>	<u>Net Additions and Deletions</u>	<u>Balance June 30, 2019</u>
Land	\$ 821,717	\$ -	\$ 821,717
Construction-in-progress	1,414,749	1,824,696	3,239,445
Land improvements	8,783,585	-	8,783,585
Buildings and improvements	396,530	-	396,530
Equipment and vehicles	2,805,396	21,648	2,827,044
Total Capital Assets	14,221,977	1,846,344	16,068,321
Less: Accumulated depreciation	2,623,953	140,103	2,764,056
Total Capital Assets, Net	<u>\$ 11,598,024</u>	<u>\$ 1,706,241</u>	<u>\$ 13,304,265</u>

Long-Term Debt

As of June 30, 2019, the Authority's long-term obligations total \$13,648,491.

The Authority's long-term obligations are presented as follows:

Change in Long-Term Debt

	<u>Balance July 1, 2018</u>	<u>Net Additions and Deletions</u>	<u>Balance June 30, 2019</u>
Caterpillar Financial Services	\$ -	\$ 289,140	\$ 289,140
Caterpillar Financial Services	513,087	(140,951)	372,136
BB&T, Revenue Bond Series 2018	4,000,000	(757,000)	3,243,000
Virginia Resources Authority, Revenue Bond Series 2016	1,790,000	(80,000)	1,710,000
Total Outstanding Debt	6,303,087	(688,811)	5,614,276
Add: Unamortized Premium on 2016 Bond	346,458	(23,097)	323,361
Landfill Closure	7,537,491	173,363	7,710,854
Total Long-Term Liabilities	<u>\$ 14,187,036</u>	<u>\$ (538,545)</u>	<u>\$ 13,648,491</u>

REQUESTS FOR INFORMATION

This financial report is designed to provide our citizens, taxpayers, customers, investors, and creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. Questions concerning this report or requests for additional information should be directed to Wayne Carter, Executive Director, who as Treasurer is the Fiscal Agent for Southside Regional Public Service Authority, P. O. Box 307, Boydton, Virginia 23917, telephone 434-738-6191.

BASIC FINANCIAL STATEMENTS

Southside Regional Public Service Authority

Statements of Net Position

June 30, 2019 and 2018

	<u>2019</u>	<u>2018</u>
Assets and Deferred Outflows of Resources		
Current Assets		
Cash and investments	\$ 5,500,875	\$ 3,953,838
Cash, restricted	367,679	3,915,338
Accounts receivable	<u>272,577</u>	<u>250,998</u>
Total Current Assets	6,141,131	8,120,174
Capital Assets, Net	<u>13,304,265</u>	<u>11,598,024</u>
Total Assets	19,445,396	19,718,198
Deferred Outflows of Resources		
Deferred outflows - GLI OPEB	4,896	3,407
Deferred outflows - pension	<u>28,595</u>	<u>22,032</u>
Total Assets and Deferred Outflows of Resources	<u>\$ 19,478,887</u>	<u>\$ 19,743,637</u>
Liabilities, Deferred Inflows of Resources, and Net Position		
Liabilities		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 1,210	\$ 775,148
Current portion of long-term debt	<u>1,169,155</u>	<u>1,001,015</u>
Total Current Liabilities	1,170,365	1,776,163
Long-Term Liabilities		
Equipment lease payable	384,218	372,169
Landfill closure and post-closure costs	7,710,854	7,537,491
Net pension liability	78,343	80,326
Net GLI OPEB liability	20,580	20,340
Notes payable	<u>4,384,264</u>	<u>5,276,361</u>
Total Long-Term Liabilities	<u>12,578,259</u>	<u>13,286,687</u>
Total Liabilities	13,748,624	15,062,850
Deferred Inflows of Resources		
Deferred inflows - GLI OPEB	1,890	2,250
Deferred inflows - pension	28,423	56,926
Deferred inflows - refunding of debt	<u>147,864</u>	<u>168,344</u>
Net Position		
Net investment in capital assets	7,366,628	4,948,479
Restricted	367,679	3,915,338
Unrestricted	<u>(2,182,221)</u>	<u>(4,410,550)</u>
Total Net Position	<u>5,552,086</u>	<u>4,453,267</u>
Total Liabilities, Deferred Inflows of Resources, and Net Position	<u>\$ 19,478,887</u>	<u>\$ 19,743,637</u>

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

Southside Regional Public Service Authority

Statements of Revenues, Expenses, and Changes in Net Position

Years Ended June 30, 2019 and 2018

	<u>2019</u>	<u>2018</u>
Operating Revenues		
Landfill charges	\$ <u>3,106,545</u>	\$ <u>3,002,840</u>
Total Operating Revenues	<u>3,106,545</u>	<u>3,002,840</u>
Operating Expenses		
Salaries and wages	310,828	275,230
Fringe benefits and payroll taxes	76,915	66,535
Administrative fees	4,700	2,200
Advertising	2,195	4,886
Depreciation	567,906	647,356
Dues and permits	15,186	25,298
Electrical services	4,604	4,905
Engineering fees	58,248	113,432
Hauling of leachate	355,447	90,443
Insurance	24,489	25,843
Landfill closure costs	173,363	2,904,001
Locality reimbursements	-	891,464
Office supplies	4,236	5,715
Professional fees	9,235	8,755
Miscellaneous	169	17,207
Recycling	10,004	7,283
Repair and maintenance	99,308	118,209
Site maintenance	70,807	50,830
Uniforms	5,879	4,101
Supplies, gas, and oil	148,645	56,206
Telephone	1,678	3,602
Vehicle	28	63,052
Well monitoring	<u>5,798</u>	<u>5,481</u>
Total Operating Expenses	<u>1,949,668</u>	<u>5,392,034</u>
Operating Income (Loss)	<u>1,156,877</u>	<u>(2,389,194)</u>
Non-Operating Revenues (Expenses)		
Interest income	73,412	22,620
Other income	6,026	10,261
Gain/loss on sale of asset	40,000	-
Interest expense and bond costs	<u>(177,496)</u>	<u>(165,416)</u>
Net Non-Operating Revenues (Expenses)	<u>(58,058)</u>	<u>(132,535)</u>
Special item - impairment loss on capital assets	<u>-</u>	<u>(691,587)</u>
Change in Net Position	<u>1,098,819</u>	<u>(3,213,316)</u>
Total Net Position - Beginning of Year	<u>4,453,267</u>	<u>7,666,583</u>
Total Net Position - End of Year	<u>\$ 5,552,086</u>	<u>\$ 4,453,267</u>

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

Southside Regional Public Service Authority

Statements of Cash Flows Years Ended June 30, 2019 and 2018

	2019	2018
Cash Flows from Operating Activities		
Receipts from landfill charges	\$ 3,084,966	\$ 3,012,331
Payments for personnel costs and fringe benefits	(426,401)	(373,207)
Payments for operating expenses	<u>(1,767,957)</u>	<u>(3,635,881)</u>
Net Cash Provided by (Used in) Operating Activities	890,608	(996,757)
Cash Flows from Noncapital Financing Activities		
Other income	<u>6,026</u>	<u>10,261</u>
Net Cash Provided by Noncapital Financing Activities	6,026	10,261
Cash Flows from Capital and Related Financing Activities		
Adjustment on estimated closure and post-closure costs	173,363	2,904,001
Acquisition and construction of capital assets	(2,274,147)	(2,040,718)
Gain/loss on sale of asset	40,000	-
Principal payment on long-term debt and leases	(1,072,091)	(253,648)
Proceeds from revenue bonds and leases	383,280	4,625,969
Interest paid on long-term debt (includes debt refunding)	<u>(221,073)</u>	<u>(165,416)</u>
Net Cash Provided by (Used in) Capital and Related Financing Activities	(2,970,668)	5,070,188
Cash Flows from Investing Activities		
Interest income	<u>73,412</u>	<u>22,620</u>
Net Cash Provided by Investing Activities	<u>73,412</u>	<u>22,620</u>
Net Increase (Decrease) in Cash and Cash Equivalents	(2,000,622)	4,106,312
Cash and Cash Equivalents - Beginning of Year	<u>7,869,176</u>	<u>3,762,864</u>
Cash and Cash Equivalents - End of Year	<u>\$ 5,868,554</u>	<u>\$ 7,869,176</u>
Reconciliation of Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities		
Operating income (loss)	\$ 1,156,877	\$ (2,389,194)
<i>Adjustments to Reconcile Operating Income (Loss) to Net Cash Provided by (Used in) Operating Activities</i>		
Depreciation	567,906	647,356
<i>Changes in assets and liabilities</i>		
Receivables	(21,579)	9,491
Accounts payable and accrued liabilities	(773,938)	767,032
Net GLI OPEB liability	240	(3,120)
Net pension liability	(1,983)	(77,197)
Deferred outflows - GLI OPEB	(1,489)	(2,117)
Deferred outflows - pension	(6,563)	31,487
Deferred inflows - GLI OPEB	(360)	2,250
Deferred inflows - pension	<u>(28,503)</u>	<u>17,255</u>
Net Cash Provided by (Used in) Operating Activities	<u>\$ 890,608</u>	<u>\$ (996,757)</u>

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

Southside Regional Public Service Authority

Notes to the Financial Statements

Year Ended June 30, 2019

1 Organization, Description of the Entity, and Its Activities

The Southside Regional Public Service Authority (the "Authority") was created under the authority of the Virginia State Corporation Commission on September 21, 2004.

The Authority consists of a six-member Board made up of two members from each locality for a term of four years. The Board operates independently of the localities.

2 Significant Accounting Policies

Financial Statement Presentation

The financial statements of the Southside Regional Public Service Authority have been prepared in conformity with the specifications promulgated by the Auditor of Public Accounts (APA) of the Commonwealth of Virginia, and the accounting principles generally accepted in the United States as specified by the Governmental Accounting Standards Board. The more significant of the Authority's accounting policies are described below:

Basis of Accounting

The financial statements have been prepared on the accrual basis of accounting under which revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred through the receipt of goods and services. All supplies and materials are expensed when purchased and fixed assets are capitalized and depreciated over their estimated useful lives.

Property and Equipment

Depreciation is provided principally on the straight-line method over the estimated useful lives of the assets.

Use of Estimates

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

Pensions

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

Group Life Insurance

The Virginia Retirement System (VRS) Group Life Insurance Program is a multiple employer, cost-sharing plan. It provides coverage to state employees, teachers, and employees of participating political subdivisions. The Group Life Insurance Program was established pursuant to §51.1-500 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. The Group Life Insurance Program is a defined benefit plan that provides a basic group life insurance benefit for employees of participating employers. For purposes of measuring the net Group Life Insurance Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Group Life Insurance Program OPEB, and Group Life Insurance Program OPEB expense, information about the fiduciary net position of the VRS Group Life Insurance program OPEB and the additions to/deductions from the VRS Group Life Insurance Program OPEB's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Adoption of New GASB Statements

The Authority did not adopt any new GASB statements during the fiscal year ended June 30, 2019.

3 Deposits and Investments

Deposits

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

Investments

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

The Authority does not have a formal investment policy.

Custodial Credit Risk

This is the risk that in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The Authority does not have custodial credit risk policies for investments.

Interest Rate Risk

Through its investment policy, the Authority manages its exposure to fair value losses arising from increasing interest rates by limiting the duration of its investment portfolio. As of June 30, investments held in the portfolio can be liquidated daily.

Concentration of Credit Risk

The Authority places no limit on the amount the Treasurer may invest in any one issuer. 100 percent of the Authority's investments are in the Local Government Investment Pool.

The following is a summary of cash and investments:

<u>Asset Type</u>	<u>Balance June 30, 2019</u>
Petty cash	\$ -
Deposit accounts	2,360,280
Investments	
Local Government Investment Pool	<u>3,508,274</u>
Total Cash and Investments	<u>\$ 5,868,554</u>

The following is a summary and reconciliation of the pooled cash and investments at June 30, 2019:

Cash and investments	\$ 5,500,875
Restricted cash	<u>367,679</u>
Total	<u>\$ 5,868,554</u>

4 Amount of Allowance for Uncollectible Accounts

The Authority calculates its allowance for uncollectible accounts using historical collection data and, in certain cases, specific account analysis. Management estimates no allowance was required for the year ended June 30, 2019.

5 Capital Assets

The schedule below shows the breakdown of capital assets by category at June 30, 2019:

	<u>Balance July 1, 2018</u>	<u>Increase</u>	<u>Decrease</u>	<u>Balance June 30, 2019</u>
Land	\$ 821,717	\$ -	\$ -	\$ 821,717
Construction-in-progress	1,414,749	1,824,696	-	3,239,445
Land improvements	8,783,585	-	-	8,783,585
Buildings and improvements	396,530	-	-	396,530
Equipment and vehicles	<u>2,805,396</u>	<u>449,451</u>	<u>(427,803)</u>	<u>2,827,044</u>
Total Capital Assets	14,221,977	2,274,147	(427,803)	16,068,321
Less: Accumulated depreciation	<u>2,623,953</u>	<u>567,906</u>	<u>(427,803)</u>	<u>2,764,056</u>
Net Capital Assets	<u>\$ 11,598,024</u>	<u>\$ 1,706,241</u>	<u>\$ -</u>	<u>\$ 13,304,265</u>

Capital assets of the Authority are stated at cost. Depreciation of the cost of capital assets is provided on a straight-line basis over their estimated useful lives as follows:

Land improvements	25 years
Buildings and improvements	40 years
Equipment and vehicles	5 to 10 years

6 Long-Term Debt

Annual requirements to amortize long-term debt and related interest are as follows:

<u>Details of Long-Term Indebtedness</u>	<u>Balance July 1, 2018</u>	<u>Increase</u>	<u>Decrease</u>	<u>Balance June 30, 2019</u>	<u>Due Within One Year</u>
Caterpillar Financial Services Corporation - lease payable in 36 monthly installments of \$11,644; interest at the rate of 4.19%, secured by equipment.	\$ -	\$ 383,280	\$ (94,140)	\$ 289,140	\$ 130,106
Caterpillar Financial Services Corporation - lease payable in 36 monthly installments of \$13,314 with a balloon payment of \$200,000; interest at the rate of 4.20%, secured by equipment.	513,087	-	(140,951)	372,136	146,952
Solid Waste Revenue Bond, Series 2018, \$4,000,000 issued March 29, 2018 with BB&T; interest at a rate of 2.70%, payable semiannually over 5 years maturing April 2023.	4,000,000	-	(757,000)	3,243,000	779,000
Solid Waste Revenue Refunding Bond, Series 2016, \$1,875,000 issued May 25, 2016 with Virginia Resources Authority; interest ranging from 3.813% to 5.125% payable semiannually over 16 years maturing October 2032.	1,790,000	-	(80,000)	1,710,000	90,000
Subtotals	6,303,087	383,280	(1,072,091)	5,614,276	1,146,058
Add: Unamortized Premium on Bond 2016 Series	346,458	-	(23,097)	323,361	23,097
Add: Landfill Closure and Post-closure Costs	7,537,491	173,363	-	7,710,854	-
Total Long-Term Liabilities Associated with Debt	<u>\$ 14,187,036</u>	<u>\$ 556,643</u>	<u>\$ (1,095,188)</u>	<u>\$ 13,648,491</u>	<u>\$ 1,169,155</u>

Annual requirements to amortize long-term debt and related interest are as follows:

<u>Year(s) Ended June 30,</u>	<u>Enterprise Fund</u>	
	<u>Principal</u>	<u>Interest</u>
2020	\$ 1,146,058	\$ 177,336
2021	1,255,848	140,400
2022	939,370	112,400
2023	948,000	85,108
2024	110,000	56,837
2025-2029	620,000	197,625
2030-2033	595,000	50,778
Total	5,614,276	\$ 820,484
Add: Unamortized Premium on 2016 Bond	323,361	
Landfill Closure and Post-Closure Costs	7,710,854	
Total Long-Term Debt	<u>\$ 13,648,491</u>	

Advance Refunding

The Authority issued \$1,875,000 of General Obligation Bonds, Series 2016. The net proceeds of \$2,212,986 (after issuance costs of \$31,569, plus premium of \$369,555) were used to advance refund various series bonds with a total principal amount of \$2,160,000. The net proceeds were used to purchase U.S. government securities. Those securities were deposited into an irrevocable trust with an escrow agent to provide for future debt service payments on the refunded bonds. As a result, the refundable bonds are considered to be defeased, and the related liability for the bonds has been removed from the Authority's liabilities. The reacquisition price was less than the net carrying amount of the old debt by \$210,182. This amount is being netted against the new debt and amortized over the remaining life of the refunded debt, which is the same as the life of the new debt issued. This advance refunding was undertaken to reduce total debt service payments over the next 16 years by \$499,398 and resulted in an economic gain of \$417,404. This is reported as a Deferred Inflow of Resources on the Authority's Statement of Net Position.

	<u>Balance</u> <u>July 1, 2018</u>	<u>Increase</u>	<u>Decrease</u>	<u>Balance</u> <u>June 30, 2019</u>	<u>Due Within</u> <u>One Year</u>
Details of Refunding of Debt					
2018 Refunding of Debt	\$ 168,344	\$ -	\$(20,480)	\$ 147,864	\$ 19,473

7 Contingent Liabilities (Including Federally Assisted Programs – Compliance Audits)

If applicable, federal programs in which the Authority participates were audited in accordance with the requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Pursuant to the requirements of the Uniform Guidance, all major programs and certain other programs were tested for compliance with applicable grant requirements. While no matters of noncompliance were disclosed by the audit, the Federal Government may subject grant programs to additional compliance tests which may result in disallowed expenditures. In the opinion of management, any future disallowance of current grant program expenditures, if any, would be immaterial.

8 Landfill Obligation

State and federal laws and regulations require the Authority to place a final cover on its landfill site when it stops accepting waste and to perform certain maintenance and monitoring functions at the site for ten years after closure.

The Authority recognizes the estimated closure and post-closure costs of \$7,710,854. These amounts are based on what it would cost to perform all closure care as of June 30, 2019. Actual costs may be higher due to inflation, changes in technology, or changes in regulations. The Authority is paying these costs on an annual pay-as-you-go basis.

9 Related Parties

The following schedule presents significant transactions between the Authority and its jointly governed localities during the year ended June 30, 2019:

<u>Locality</u>	<u>Services</u> <u>Rendered</u>	<u>Total Amount</u> <u>Charged</u> <u>in FY19</u>	<u>Total Amount</u> <u>Paid in FY19</u> <u>Related to FY19</u>	<u>Total Amount</u> <u>Paid in FY19</u> <u>Related to PY</u>	<u>Amount</u> <u>Accrued</u> <u>and Unpaid</u>
Mecklenburg County	Landfill charges	\$ 815,206	\$ 745,584	\$ 68,416	\$ 69,622
Halifax County	Landfill charges	931,636	855,871	75,398	75,765
Charlotte County	Landfill charges	229,489	210,943	18,370	18,546

10 Pension

Plan Description

All full-time, salaried permanent employees of the Political Subdivision are automatically covered by VRS Retirement Plan upon employment. This 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 are paying 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 benefit structures has different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are set out in the table below:

RETIREMENT PLAN PROVISIONS

PLAN 1

About 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.

Eligible Members

Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.

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.

PLAN 2

About 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.

Eligible Members

Employees are in 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.

HYBRID RETIREMENT PLAN

About the Hybrid Retirement Plan

The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan.

- 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 - 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

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.

PLAN 1

Retirement Contributions

Employees contribute 5% 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.

PLAN 2

Retirement Contributions

Same as Plan 1.

Creditable Service

Same as Plan 1.

Vesting

Same as Plan 1.

HYBRID RETIREMENT PLAN

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.

Creditable Service

Defined Benefit Component:

Under the defined benefit component of the plan, 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.

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.

PLAN 1

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.

Service Retirement Multiplier

VRS: 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%.

Sheriffs and regional jail superintendents: The retirement multiplier for sheriffs and regional jail superintendents is 1.85%.

Political subdivision hazardous duty employees: The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.70% or 1.85% as elected by the employer.

PLAN 2

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

VRS: 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.

Sheriffs and regional jail superintendents: Same as Plan 1.

Political subdivision hazardous duty employees: Same as Plan 1.

HYBRID RETIREMENT PLAN

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 70 1/2.

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. It is used in the retirement formula for the defined benefit component of the plan.

Service Retirement Multiplier

Defined Benefit Component:

VRS: 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.

Sheriffs and regional jail superintendents: Not applicable.

Political subdivision hazardous duty employees: Not applicable.

Defined Contribution Component

Not applicable.

PLAN 1

Normal Retirement Age

VRS: Age 65.

Political subdivisions hazardous duty employees:
Age 60.

Earliest Unreduced Retirement Eligibility

VRS: Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.

Political subdivisions hazardous duty employees:
Age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.

Earliest Reduced Retirement Eligibility

VRS: Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.

Political subdivisions hazardous duty employees:
Age 50 with at least five years of creditable service.

Cost-of-Living Adjustment (COLA) in Retirement

The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.

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.

PLAN 2

Normal Retirement Age

VRS: Normal Social Security retirement age.

Political subdivisions hazardous duty employees:
Same as Plan 1.

Earliest Unreduced Retirement Eligibility

VRS: Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.

Political subdivisions hazardous duty employees:
Same as Plan 1.

Earliest Reduced Retirement Eligibility

VRS: Age 60 with at least five years (60 months) of creditable service.

Political subdivisions hazardous duty employees:
Same as Plan 1.

Cost-of-Living Adjustment (COLA) in Retirement

The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.

Eligibility:

Same as Plan 1

**HYBRID
RETIREMENT PLAN**

Normal Retirement Age

Defined Benefit Component:

VRS: Same as Plan 2.

Political subdivisions hazardous duty employees:
Not applicable.

Defined Contribution Component:

Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Unreduced Retirement Eligibility

Defined Benefit Component:

VRS: Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

Political subdivisions hazardous duty employees:
Not applicable.

Defined Contribution Component:

Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Reduced Retirement Eligibility

Defined Benefit Component:

VRS: Age 60 with at least five years (60 months) of creditable service.

Political subdivisions hazardous duty employees:
Not applicable

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 Plan 2

PLAN 1

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 involuntarily 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.

Disability Coverage

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 towards 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

Exceptions to COLA Effective Dates:

Same as Plan 1

Disability Coverage

Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased, or granted.

Purchase of Prior Service

Same as Plan 1

HYBRID RETIREMENT PLAN

Exceptions to COLA Effective Dates:

Same as Plan 1 and Plan 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 an 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.

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:

	<u>Number</u>
Inactive members or their beneficiaries currently receiving benefits	3
Inactive members:	
Vested inactive members	1
Non-vested inactive members	1
LTD	-
Inactive members active elsewhere in VRS	<u>2</u>
Total inactive members	4
Active members	<u>6</u>
Total covered employees	<u><u>13</u></u>

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.

If the employer used the certified rate: The political subdivision's contractually required contribution rate for the year ended June 30, 2019 was 4.65% 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 employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the political subdivision were \$24,450 and \$22,032 for the years ended June 30, 2019 and June 30, 2018, respectively.

Net Pension Liability

The net pension liability (NPL) 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 – General Employees

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	2.5 percent
Salary increases, including inflation	3.5 percent - 5.35 percent
Investment rate of return	7.0 percent, net of pension plan investment expenses, including inflation*

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

Mortality rates:

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

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

Largest 10 – Non-Hazardous Duty:

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

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

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

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	<u>15.00%</u>	9.53%	<u>1.43%</u>
Total	<u>100.00%</u>		<u>4.80%</u>
	Inflation		<u>2.50%</u>
	*Expected arithmetic nominal return		<u>7.30%</u>

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

Discount Rate

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

Changes in Net Pension Liability

	Total Pension Liability (a)	Increase (Decrease) Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at June 30, 2017	\$ 1,315,451	\$ 1,235,125	\$ 80,326
Changes for the Year			
Service cost	28,132	-	28,132
Interest	89,897	-	89,897
Benefit changes	-	-	-
Assumption changes	-	-	-
Differences between expected and actual experience	5,901	-	5,901
Contributions - employer	-	23,459	(23,459)
Contributions - employee	-	12,555	(12,555)
Net investment income	-	90,767	(90,767)
Benefit payments, including refunds of employee contributions	(62,414)	(62,414)	-
Administrative expenses	-	(790)	790
Other changes	-	(78)	78
Net Changes	61,516	63,499	(1,983)
Balances at June 30, 2018	\$ 1,376,967	\$ 1,298,624	\$ 78,343

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	\$ 259,018	\$ 78,343	\$ (71,822)

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 \$(11,170). 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	\$ 4,145	\$ 13,767
Change in assumptions	-	4,276
Net difference between projected and actual earnings on pension plan investments	-	10,380
Employer contributions subsequent to the measurement date	24,450	-
Total	<u>\$ 28,595</u>	<u>\$ 28,423</u>

\$24,450 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 Ended June 30,	
2020	\$ (9,332)
2021	(1,875)
2022	(12,019)
2023	(1,052)
2024	-
Thereafter	-

Pension Plan Data

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

11 Other Post-Employment Benefits - Group Life Insurance Program

Plan Description

All full-time, salaried permanent employees of the state agencies, teachers and employees of participating political subdivisions are automatically covered by the VRS Group Life Insurance Program upon employment. This plan is administered by the Virginia Retirement System (the System), along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia.

In addition to the Basic 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, it is not included as part of the Group Life Insurance Program OPEB.

The specific information for Group Life Insurance Program OPEB, including eligibility, coverage and benefits is set out in the table below:

GROUP LIFE INSURANCE PROGRAM PLAN PROVISIONS
<p>Eligible Employees</p> <p>The Group Life Insurance Program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program, including the following employers that do not participate in VRS for retirement:</p> <ul style="list-style-type: none"> • City of Richmond • City of Portsmouth • City of Roanoke • <p>City of Norfolk • Roanoke City Schools Board</p> <p>Basic group life insurance coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their accumulated retirement member contributions and accrued interest.</p>
<p>Benefit Amounts</p> <p>The benefits payable under the Group Life Insurance Program have several components.</p> <ul style="list-style-type: none"> • Natural Death Benefit – The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. • Accidental Death Benefit – The accidental death benefit is double the natural death benefit. • Other Benefit Provisions – In addition to the basic natural and accidental death benefits, the program provides additional benefits provided under specific circumstances. These include: <ul style="list-style-type: none"> Accidental dismemberment benefit Safety belt benefit Repatriation benefit Felonious assault benefit Accelerated death benefit option
<p>Reduction in Benefit Amounts</p> <p>The benefit amounts provided to members covered under the Group Life Insurance Program are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value.</p>
<p>Minimum Benefit Amount and Cost-of-Living Adjustment (COLA)</p> <p>For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at \$8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and was increased to \$8,279 effective July 1, 2018.</p>

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2019 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the Group Life Insurance Program from the entity were \$3,756 and \$3,257 for the years ended June 30, 2019 and June 30, 2018, respectively.

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

At June 30, 2019, the entities reported a liability of \$20,580 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2018 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018, the participating employer's proportion was 0.04518% as compared to 0.04504% at June 30, 2017.

For the year ended June 30, 2019, the participating employer recognized GLI OPEB expense of \$240. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

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

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 1,020	\$ 360
Net difference between projected and actual earnings on GLI OPEB program investments	-	660
Change in assumptions	-	870
Changes in proportion	120	-
Employer contributions subsequent to the measurement date	<u>3,756</u>	<u>-</u>
Total	<u>\$ 4,896</u>	<u>\$ 1,890</u>

\$3,756 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the Fiscal Year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

**Year Ended
June 30,**

2020	\$ (270)
2021	(270)
2022	(270)
2023	(90)
2024	60
Thereafter	90

Actuarial Assumptions

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

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

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

Mortality rates – General State Employees

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85.

Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115% of rates; females 130% of rates.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70-75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 25%

Mortality rates – Teachers

Pre-Retirement:

RP-2014 White Collar Employee Rates to age 80, White Collar Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020.

Post-Retirement:

RP-2014 White Collar Employee Rates to age 49, White Collar Health Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with Scale BB to 2020; 115% of rates for 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 four-year period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70-75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change

Mortality rates – SPORS Employees

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%

Mortality rates – VaLORS Employees

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%

Mortality rates – JRS Employees

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% compounding increase from ages 70 to 85.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change

Mortality rates – Largest Ten Locality Employers - General Employees

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

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

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Mortality rates – Largest Ten Locality Employers – Hazardous Duty Employees

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

Mortality rates – Non-Largest Ten Locality Employers – Hazardous Duty Employees

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with Scale BB to 2020; males 90% of rates; females set forward 1 year.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:

RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

Net GLI OPEB Liability

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

Group Life Insurance OPEB Program

Total GLI OPEB Liability	\$ 3,113,508
Plan Fiduciary Net Position	<u>1,594,773</u>
Employers' Net GLI OPEB Liability (Asset)	<u><u>\$ 1,518,735</u></u>
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	51.22%

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

Long-Term Expected Rate of Return

The long-term expected rate of return on the System's investments was determined using a lognormal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of System's investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

<u>Asset Class (Strategy)</u>	<u>Target Allocation</u>	<u>Arithmetic Long-Term Expected Rate of Return</u>	<u>Weighted Average Long-Term Expected Rate of Return</u>
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	<u>15.00%</u>	9.53%	<u>1.43%</u>
Total	<u>100.00%</u>		<u>4.80%</u>
	Inflation		<u>2.50%</u>
*Expected arithmetic nominal return			<u>7.30%</u>

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

Discount Rate

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

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

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

	1.00% Increase (6.00%)	Current Discount Rate (7.00%)	1.00% Decrease (8.00%)
Employer's Proportionate Share of the Group Life Insurance Program Net OPEB Liability	\$ 26,880	\$ 20,580	\$ 15,450

Group Life Insurance Program Fiduciary Net Position

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

12 Subsequent Events

Management has performed an analysis of the activities and transactions subsequent to June 30, 2019 to determine the need for any adjustments to and/or disclosures within the audited financial statements for the year ended June 30, 2019. Management has performed their analysis through October 17, 2019.

REQUIRED SUPPLEMENTARY INFORMATION

Southside Regional Public Service Authority

Schedule of Changes in the Political Subdivision's Net Pension Liability and Related Ratios

For the Plan Years Ended June 30, 2014-2018

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Total pension liability					
Service cost	\$ 28,132	\$ 27,743	\$ 27,335	\$ 27,327	\$ 27,154
Interest	89,897	87,517	87,120	83,812	79,539
Changes of benefit terms	-	-	-	-	-
Differences between expected and actual experience	5,901	(12,182)	(49,023)	(9,083)	-
Changes in assumptions	-	(10,341)	-	-	-
Benefit payments, including refunds of employee contributions	(62,414)	(55,049)	(64,495)	(45,088)	(46,213)
Net change in total pension liability	61,516	37,688	937	56,968	60,480
Total pension liability - beginning	1,315,451	1,277,763	1,276,826	1,219,858	1,159,378
Total pension liability - ending (a)	<u>\$ 1,376,967</u>	<u>\$ 1,315,451</u>	<u>\$ 1,277,763</u>	<u>\$ 1,276,826</u>	<u>\$ 1,219,858</u>
Plan fiduciary net position					
Contributions - employer	\$ 23,459	\$ 22,794	\$ 31,865	\$ 30,578	\$ 31,382
Contributions - employee	12,555	12,365	12,913	11,602	11,762
Net investment income	90,767	135,682	19,150	49,330	147,136
Benefit payments, including refunds of employee contributions	(62,414)	(55,049)	(64,495)	(45,088)	(46,213)
Administrative expense	(790)	(786)	(700)	(671)	(787)
Other	(78)	(121)	(8)	(11)	9
Net change in plan fiduciary net position	63,499	114,885	(1,275)	45,740	143,289
Plan fiduciary net position - beginning	1,235,125	1,120,240	1,121,515	1,075,775	932,486
Plan fiduciary net position - ending (b)	<u>\$ 1,298,624</u>	<u>\$ 1,235,125</u>	<u>\$ 1,120,240</u>	<u>\$ 1,121,515</u>	<u>\$ 1,075,775</u>
Political subdivision's net pension liability - ending (a) - (b)	<u>\$ 78,343</u>	<u>\$ 80,326</u>	<u>\$ 157,523</u>	<u>\$ 155,311</u>	<u>\$ 144,083</u>
Plan fiduciary net position as a percentage of the total Pension liability	94.31%	93.89%	87.67%	87.84%	88.19%
Covered--employee payroll	\$ 248,659	\$ 257,985	\$ 252,848	\$ 246,167	\$ 240,132
Political subdivision's net pension liability as a percentage of covered-employee payroll	31.51%	31.14%	62.30%	63.09%	60.00%

Southside Regional Public Service Authority

Schedule of Employer Contributions

For the Years Ended June 30, 2010 through 2019

Date	Contributions in Relation to			Contributions	
	Contractually Required Contribution (1)	Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	as a % of Covered Payroll (5)
2019	\$ 24,450	\$ 24,450	\$ -	\$ 286,732	8.53%
2018	22,032	22,032	-	248,659	8.86%
2017	23,941	23,895	46	257,985	9.26%
2016	33,578	33,452	126	252,848	13.23%
2015	N/A	N/A	N/A	N/A	N/A
2014	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A

For Reference Only:

Column 1 - Employer contribution rate multiplied by the employer's covered payroll.

Column 2 - Actual employer contribution remitted to VRS.

Column 4 - Employer's covered payroll amount for the fiscal year.

Southside Regional Public Service Authority

Notes to Required Supplementary Information

For the Year Ended June 30, 2019

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

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

Largest 10 – Non-Hazardous Duty:

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

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

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

Largest 10 – Hazardous Duty:

Mortality Rates (Pre-retirement, retirement healthy, and disabled)	post-	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates		Lowered rates at older ages
Withdrawal Rates		Adjusted rates to better fit experience
Disability Rates		Increased rates
Salary Scale		No change
Line of Duty Disability		Increase rate from 60% to 70%

All Others (Non 10 Largest) – Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates, and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better fit experience
Salary Scale	No change
Line of Duty Disability	Decrease rate from 60% to 45%

Southside Regional Public Service Authority

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

	<u>2018</u>	<u>2017</u>
Employer's Proportion of the Net GLI OPEB Liability (Asset)	0.04518%	0.04504%
Employer's Proportionate Share of the Net GLI OPEB Liability (Asset)	20,580	20,340
Employer's Covered Payroll	248,659	257,985
Employer's Proportionate Share of the Net GLI OPEB Liability (Asset) as a Percentage of its Covered Payroll	8.28%	7.88%
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	51.22%	48.86%

*Schedule is intended to show information for 10 years.
Since 2018 is the second year of presentation, only two years of
data is available. However, additional years will be
included as they become available.*

For Reference Only

The Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability for the VRS Group Life Insurance Program for each year is presented on page 121 of the VRS 2018 Comprehensive Annual Financial Report (CAFR).

Southside Regional Public Service Authority

Schedule of Employer Contributions for OPEB Group Life Insurance Program

For the Years Ended June 30, 2010 through 2019

Date	Contributions in Relation to			Contributions	
	Contractually Required Contribution (1)	Contractually Required Contribution (2)	Contribution Deficiency (Excess) (3)	Employer's Covered Payroll (4)	as a % of Covered Payroll (5)
2019	\$ 3,756	\$ 3,756	\$ -	\$ 286,732	1.31%
2018	3,257	3,257	-	248,659	1.31%
2017	3,380	3,380	-	257,985	1.31%
2016	3,009	3,009	-	252,848	1.19%
2015	2,929	2,929	-	246,167	1.19%
2014	N/A	N/A	N/A	N/A	N/A
2013	N/A	N/A	N/A	N/A	N/A
2012	N/A	N/A	N/A	N/A	N/A
2011	N/A	N/A	N/A	N/A	N/A
2010	N/A	N/A	N/A	N/A	N/A

For Reference Only:

Column 1 - Employer contribution rate multiplied by the employer's covered payroll.

Column 2 - Actual employer contribution remitted to VRS.

Column 4 - Employer's covered payroll amount for the fiscal year.

Southside Regional Public Service Authority

Notes to Required Supplementary Information – GLI OPEB

For the Year Ended June 30, 2019

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

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

General State Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70-75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 25%

Teachers

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

SPORS Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%

VaLORS Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 50% to 35%

JRS Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change

Largest Ten Locality Employers – General Employees

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

Non-Largest Ten Locality Employers – General Employees

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

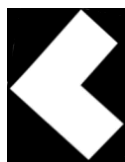
Largest Ten Locality Employers – Hazardous Duty Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%

Non-Largest Ten Locality Employers – Hazardous Duty Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

COMPLIANCE



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

To the Board of Directors
Southside Regional Public Service Authority
Boydton, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and *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 business-type activities of the Southside Regional Public Service Authority, as of and for the year ended June 30, 2019 and the related notes to the financial statements, which collectively comprise the Southside Regional Public Service Authority's basic financial statements, and have issued our report thereon dated October 17, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Southside Regional Public Service Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Southside Regional Public Service Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Southside Regional Public Service 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 a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

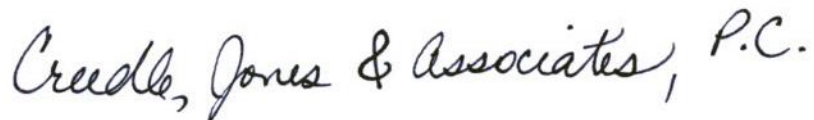
Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not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

Compliance and Other Matters

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

Purpose of this Report

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

A handwritten signature in cursive script that reads "Creedle, Jones & Associates, P.C.".

Creedle, Jones & Associates, P.C.
Certified Public Accountants

South Hill, Virginia
October 17, 2019