### **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

Fiscal Year Ended June 30, 2019



Central Virginia Waste Management Authority



### Comprehensive Annual Financial Report

July 1, 2018 Through June 30, 2019

Prepared By:

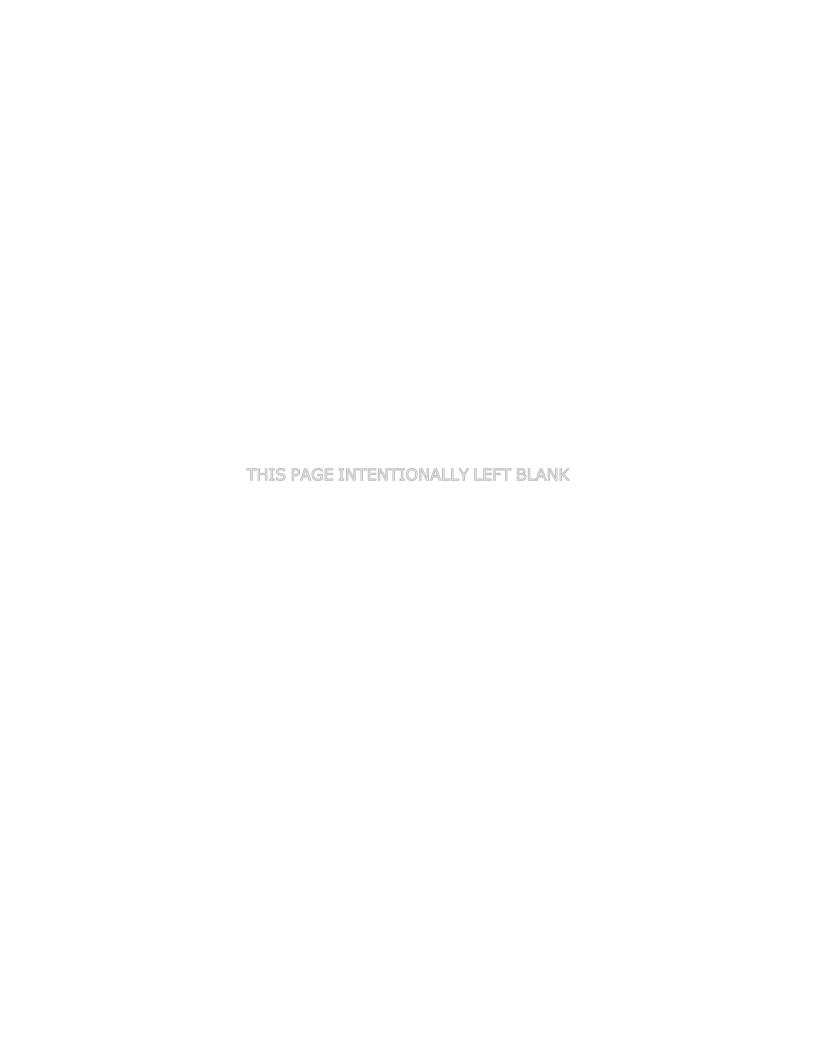
Kenna Shea Accounting and Financial Manager

> Kimberly A. Hynes Executive Director

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## Introductory Section





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September 17, 2019

Board of Directors Central Virginia Waste Management Authority Richmond, Virginia

#### Members of the Board:

The Comprehensive Annual Financial Report ("CAFR") of the Central Virginia Waste Management Authority ("Authority" or "CVWMA") for the year ended June 30, 2019 is submitted herewith. This report was prepared by the Accounting and Financial Manager and the Executive Director. Responsibility for both the accuracy of the presented data and the completeness and fairness of the presentation, including all disclosures, rests with the undersigned management of the Authority. The financial statements have been audited by the independent accounting firm of Brown, Edwards & Company L.L.P., whose report is included herein. The CAFR has been prepared in accordance with accounting principles generally accepted in the United States of America for governmental accounting and reporting as promulgated by the Governmental Accounting Standards Board.

We believe that the data, as presented, is accurate in all material respects; that it is presented in a manner designed to present fairly the financial position and results of operation of the various funds; and that all disclosures necessary to enable the reader to gain an understanding of the Authority's financial activity have been included.

The CAFR is presented in four sections: Introductory, Financial, Statistical and Compliance. The *Introductory* Section contains this transmittal letter, the Certificate of Achievement for Excellence in Financial Reporting, a listing of Authority Board members and administrative staff and the Authority's organizational chart. The *Financial* Section contains the independent auditors' report, management's discussion and analysis, and the financial statements and related notes. The *Statistical* Section includes a number of statistical tables and charts that present financial trends and the fiscal capacity of the Authority. The *Compliance* Section contains the *Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards.* 

A brief history of the Authority, its financial operations and selected accomplishments are presented below. In addition, Management's Discussion and Analysis precedes the basic financial statements.

#### ORGANIZATION AND FUNCTION

The Authority was created in December 1990 under the Virginia Water and Waste Authorities Act (Chapter 51, Title 15.2, Code of Virginia of 1950 as amended) to assist member localities with solid waste planning, satisfying Virginia's recycling requirement and other waste management and recycling initiatives.

The Authority serves thirteen-member local governments: the Cities of Colonial Heights, Hopewell, Petersburg and Richmond; the Town of Ashland; and the Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Prince George. A Board of Directors consisting of one or more representatives appointed by each of the member jurisdictions governs the operations of the CVWMA. The Authority is a primary government with no component units and each member government has a financial interest and responsibility to the Authority.

#### **ECONOMIC CONDITION AND OUTLOOK**

The U.S. economy is healthy and has been growing at an ideal growth rate. Economic growth is expected to slow somewhat toward the end of 2019 into 2020 and 2021. The ideal range of Gross Domestic Product, which measures the nation's production output, is between 2% to 3%. GDP increased at an annual rate of 2% in the second quarter of 2019 from 3% in 2018. GDP is expected to be 2% in 2020 and to slow to 1.8% in 2021 according to the Federal Reserve in June. International trade tensions and foreign economic developments seem to be resulting in projections of a slowing economy.

Labor market conditions remain strong with wages and salaries rising 2.9% and unemployment holding steady at 3.7%. Virginia's unemployment rate (3%) remains below the national average and unemployment in central Virginia is consistent at 3.2%. The increase in disposable income coupled with the continued low unemployment rates and low oil prices has kept the cost of transportation, food and raw materials down resulting in steady consumer spending.

Continued and increased growth in population and consumer confidence means increased waste generation. In CVWMA programs, household waste and recycling increased 1% and 3% in fiscal years 2019 and 2018, respectively and has increased 13% from 4 years ago. The Authority strives to manage our waste balancing environmental and economic impacts. The CVWMA recently completed the required update to the regional solid waste plan which plans for where our waste will go over the next 20 years. The landfill disposal landscape is expected to change over that planning period with several landfills in our region reaching capacity or closing. As a result, landfill tipping fees will likely continue to rise, and thus it will become increasingly important to find alternatives to landfilling our waste.

The continued success of recycling programs locally and globally is dependent upon viable end markets. Despite the continuing challenges faced by recycling companies in finding economically feasible markets for many recycled goods, the U.S. exports increased 7% in 2018 to 40.6 million tons. Although U.S exports to China of recycled commodities declined over 35%, China remains the largest market for scrap recycling. As U.S. scrap exporters developed new markets in response to China's pullback, India has become the largest growth market. Exports have also increased to Canada, Mexico, South Korea among others. Domestic markets, particularly for fiber products are emerging and are expected to grow. Major investments are being made and will continue to evolve over the next few years.

The Southeast is unique in its access to robust recycling markets, not only the close proximity to many Atlantic ports for exporting, but right here within our borders. According to the Southeast Recycling Development Council (SERDC) representing 11 states in the southeast, there are over 350 Southeastern manufacturers utilized recycling feedstock to develop new consumer products. These manufacturers support 98,000 jobs and experience annual sales volume in excess of \$40 billion.

We have experienced a disruption in the industry, but recycling is not dead as a result of China's strict quality standards. There is an over-saturation in the marketplace currently of commodities such as paper, cardboard and plastics which has driven the cost of recycling programs up, particularly residential single stream programs. Traditionally revenue generated from the sale of recyclables covered the cost of processing, sorting, preparing and transporting to market. This reality has revealed the true costs of recycling and as we are adjusting a new normal in the industry, by prioritizing education, updating and investing in technology in material recovery facilities and identifying and diversifying into new markets for recycled goods.

#### **MAJOR INITIATIVES**

The Authority continues to "foster regional collaboration to provide planning, resources and education in order to reduce, reuse, recycle and manage solid waste for our 13 jurisdictions" implementing the goals and objectives of the strategic plan adopted by the Board of Directors in 2016. The Authority continues to explore more opportunities to reduce, reuse, recycle as well as look for other alternatives to landfilling, balancing economics and environmental stewardship.

Although we are paying more for residential recycling programs as a result of down markets, we do not want to lose the momentum, effort and significant benefit recycling provides in our communities, environmentally and economically. In the meantime, we are committed to continuing to work on and enforce cleaning-up the recycling stream so when new markets open, we are prepared with clean, valuable and sought-after commodities. The CVWMA has successfully negotiated several contracts that generate revenue and the majority of the revenue is provided back to the localities based on their participation and volumes. In 2019, the total revenue provided back to localities was nearly cut in half from 2018 rebates, however the revenue is almost double this year compared to annual returns of 5 years ago, indicating not only strong recycling markets for various commodities, but the value of participation, localities place on Authority programs.

Evidenced by our long history of negotiating and working with the private sector, the Authority is a proven and recognized example of success in public-private partnership. We recognize that "one size doesn't always fit all" thus provide a menu of services for member localities to pick and choose from depending on their individual needs. Nearly 95% of the Authority's operating budget is passed-through to the localities based on their participation in various programs. The Authority's administrative budget is provided by a per capita assessment on member localities, assessments in various programs to provide customer service and education and outreach, investment income and income from material sales. As we plan for economic stability of the Authority, conservative budgeting is a priority. Less reliance is placed on investment income after the recessionary period and now as we negotiate new contracts, less reliance is being placed on recycling markets for economic stability and this is proven by a healthy net position.

As the landscape of solid waste management is changing in central Virginia, CVWMA is committed to providing regional planning, initiatives and programs to member localities to balance the economics of an ever-changing industry.

#### **FINANCIAL CONTROLS**

**Internal Controls:** The accounting system of the Authority is dependent upon a strong system of internal accounting controls to ensure that financial information generated is both accurate and reliable. The Authority's internal controls are designed to ensure that the assets of the Authority are protected from loss, theft or misuse, and to ensure that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America.

Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from unauthorized use or disposition, and the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and the evaluation of costs and benefits requires estimates and judgments made by management.

All internal control evaluations occur within the above framework. We believe that the Authority's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

**Budgetary Controls:** The Authority maintains budgetary controls to ensure compliance with the annual appropriated budget approved by the Authority's Board of Directors. Budgets are prepared by program and the Authority maintains monthly budgetary control by presenting budget to actual financial reports to management and the Board of Directors.

#### **INDEPENDENT AUDIT**

State statute requires an annual audit by independent certified public accountants. The public accounting firm of Brown, Edwards & Company, L.L.P. was selected by the Authority's Audit Committee to perform the audit for the fiscal year ended June 30, 2019. The independent auditors' report on the financial statements is included in the financial section of this report.

#### **AWARDS AND ACHIEVEMENTS**

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

A Certificate of Achievement is valid for a period of one year only. We believe that our current Comprehensive Annual Financial Report continues to meet the Certificate of Achievement Program requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

#### **ACKNOWLEDGMENTS**

Through proper financial planning and management, the Authority continues to maintain its sound financial position. The timely preparation of this Comprehensive Annual Financial Report could not have been accomplished without the dedicated services of the entire staff of the Authority. We would like to express our sincere gratitude to the Board of Directors and the staff whose continuing support is vital to the financial stability of the Authority.

Respectfully submitted,

Kimberly A. Hynes CPA

Kimberlyathynes

**Executive Director** 

Kenna Shea

Accounting and Financial Manager

Keuna M Shea



Government Finance Officers Association

## Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Central Virginia Waste Management Authority

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2018

Christopher P. Morrill

Executive Director/CEO

#### 2018-2019 Board of Directors

Marcia R. Phillips, County of Chesterfield

Chair

Scott A. Wyatt, County of Hanover Vice-Chair

Mark Kukoski, City of Richmond **Treasurer** 

Jenny Schontag, Town of Ashland Ricky Hicks, County of Charles City Scott Zaremba, County of Chesterfield Doug Smith, City of Colonial Heights Leigh Dunn, County of Goochland Stephen E. Chidsey, County of Hanover Marcia E. Kelley, County of Henrico Robert Whiteman, County of Henrico Patricia Paige, County of New Kent **Secretary** 

Robert L. Dunn, County of Chesterfield **Director** 

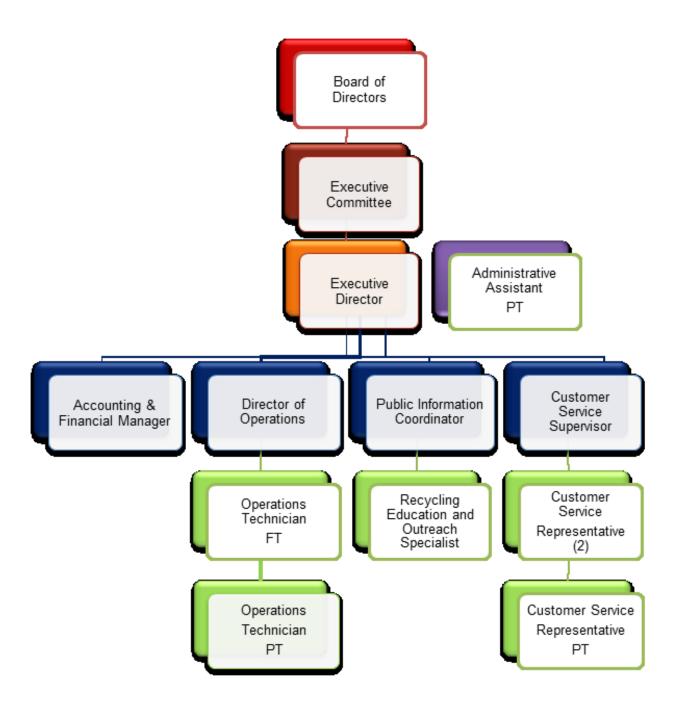
J. Allen Lane, County of Henrico
Monique Robertson, City of Hopewell
Tangela Innis, City of Petersburg
Vacant, County of Powhatan
Michael Purvis, County of Prince George
Darlene Jenkins, City of Richmond
Miles Jones, City of Richmond

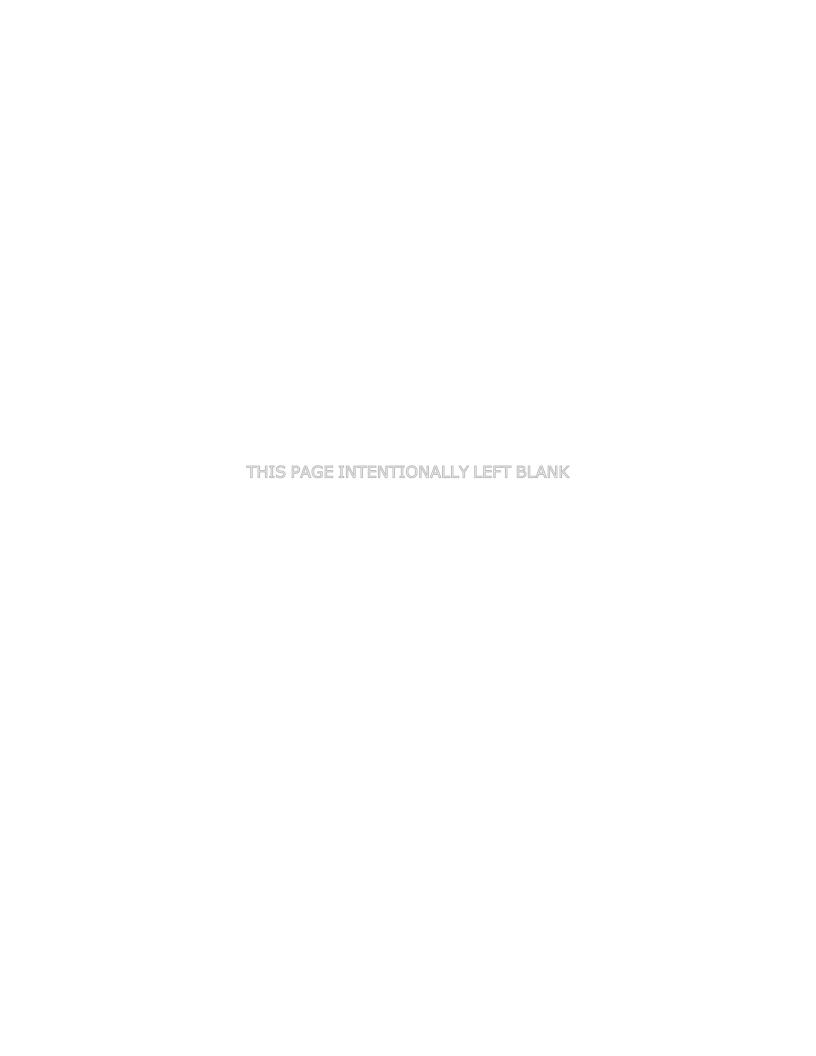
#### **Administrative Staff**

Kimberly A. Hynes CPA, Executive Director
Kenna Shea, Accounting and Financial Manager
Richard M. Nolan, Director of Operations
Nancy W. Drumheller, Public Information Coordinator
Reginald D. Thompson, Operations Technician
Kate Carney, Recycling Education and Outreach Specialist
Stephanie N. Breaker, Customer Service Supervisor
Angela Burley, Customer Service Representative
Myiesha Garner, Customer Service Representative
Mary Beth Mains, Administrative Assistant, part-time
Charles R. Howe, Operations Technician, part-time
Stephanie Anderson, Customer Service Representative, part-time

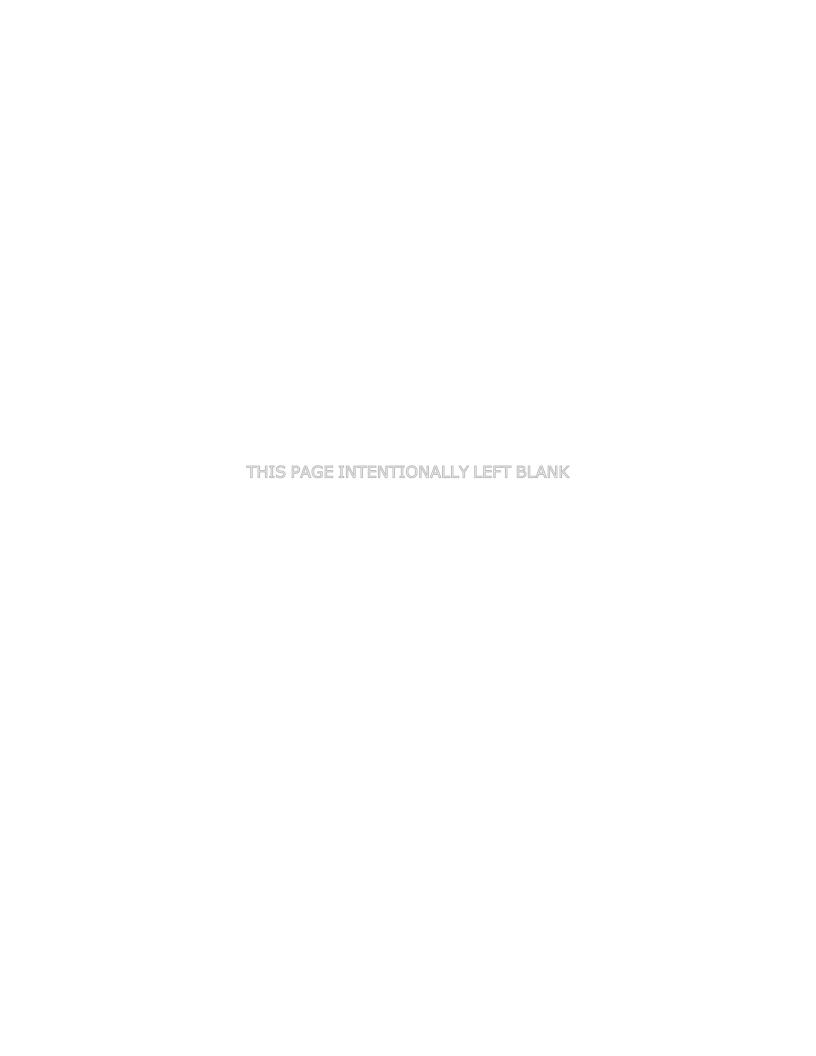
CVWMA General Counsel James Snyder McCandlish Holton PC







## Financial Section





#### INDEPENDENT AUDITOR'S REPORT

To the Audit Committee and Board of Directors Central Virginia Waste Management Authority Richmond, Virginia

#### Report on the Financial Statements

We have audited the accompanying financial statements of each major fund of the Central Virginia Waste Management Authority (the "Authority") as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

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

#### Auditor's Responsibility

Our responsibility is to express 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 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 each major fund of the Authority, as of June 30, 2019, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Other Matters**

#### Required Supplementary Information

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

#### Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The introductory section and statistical section, as described in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

#### Report on Summarized Comparative Information

We have previously audited the Authority's 2018 financial statements, and our report dated October 16, 2018, expressed an unmodified opinion on those financial statements. In our opinion, the summarized comparative information presented therein for the year ended June 30, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Other Reporting Required by Government Auditing Standards

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

CERTIFIED PUBLIC ACCOUNTANTS

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

Harrisonburg, Virginia September 17, 2019

# Management's Discussion And Analysis

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## CENTRAL VIRGINIA WASTE MANAGEMENT AUTHORITY Management's Discussion and Analysis

The following discussion provides an overview of the financial activities of the Central Virginia Waste Management Authority ("Authority" or "CVWMA") for the fiscal year ended June 30, 2019. This information should be read in conjunction with the letter of transmittal and the financial statements.

#### **Financial Highlights**

The assets and deferred outflows of resources of the Authority exceeded its liabilities and deferred inflows of resources by \$777,631 at the close of the 2019 fiscal year. Total net position decreased by \$3,136. Operating revenues increased by .4% or \$631,248 to \$16,474,821. Operating expenses increased 4.5% or \$717,780. Nonoperating revenues increased by 11% to \$70,067. Effective procurement and negotiation of contracts with the private sector, has resulted in more member jurisdictions taking advantage of Authority programs' significant savings. In addition, the costs of recycling have risen as a result of the lingering downturn in the recycling markets resulting in the majority increase in revenues and expenses in 2019.

#### **Overview of the Financial Statements**

The Statement of Net Position presents information on all the Authority's assets, deferred outflows of resources, liabilities and deferred inflows of resources, with the difference between the four reported as net position. Over time, increases or decreases in net position may serve as a useful measure of the Authority's financial health or position. The current fiscal year revenues and expenses of the Authority are accounted for in the Statements of Revenues, Expenses and Changes in Net Position. The Statements of Cash Flows provide information on the Authority's cash receipts, payments, and net changes in cash. They also provide insight on the source, use and change in cash for the reporting period. Notes to the financial statements provide additional information that is essential to understanding data in the financial statements.

The Authority reports its operations as enterprise funds and uses proprietary fund accounting. Accordingly, the operations of the Authority are recorded on the accrual basis of accounting. Under this method, revenues from member jurisdictions for services provided and revenues from other entities are recognized when earned, and expenses are recorded as liabilities when incurred, without regard to receipt or payment of cash.

#### Financial Analysis of CVWMA's Financial Position and Results of Operation

The tables presented herein provide a summary of the CVWMA's financial position and operations for FY2019 and FY2018.

#### **Condensed Statements of Net Position**

			Chan	ge
	2019	2018	<b>A</b> mount	%
Assets: Current	\$ 4,319,512	\$ 4,963,216	\$ (643,704)	
Capital assets, net	48,479	58,286	(9,807)	<u>-16.83%</u>
Long Term	-	7,564	(7,564)	0.00%
Total assets	4,367,991	5,029,066	(661,075)	-13.15%
Deferred Outflows of Resources	49,332	36,101	13,231	36.65%
Liabilities Current Long Term	3,544,933 72,532	4,170,420 69,136	(625,487) 3,396	-15.00% 4.91%
Total liabilities	3,617,465	4,239,556	(622,091)	-14.67%
Deferred Inflows of Resources	22,227	44,844	(22,617)	-50.43%
Net position: Net investment in capital assets Unrestricted	48,479 729,152	58,286 722,481	(9,807) 6,671	-16.83% 0.92%
Total net position	\$ 777,631	\$ 780,767	\$ (3,136)	-0.40%

## CENTRAL VIRGINIA WASTE MANAGEMENT AUTHORITY Management's Discussion and Analysis

## Condensed Statements of Revenues, Expenses and Changes in Net Position For The Years Ended June 30,

				Change			
		<u>2019</u>	<u>2018</u>		<u>Amount</u>	<u></u> %	
Operating revenues:							
Local government assessments	\$	561,661	\$ 558,825	\$	2,836	0.5%	
Recycling		9,624,916	8,294,822	,	1,330,094	16.0%	
Refuse and solid waste		4,612,401	4,614,706		(2,305)	0.0%	
Composting and yard waste		490,231	478,302		11,929	2.5%	
Other project revenue and fees		331,592	324,940		6,652	2.0%	
Material sales rebate		854,020	1,571,978		(717,958)	-45.7%	
Total operating revenues		16,474,821	15,843,573		631,248	4.0%	
Operating expenses:							
Administrative/operating		288,088	270,770		17,318	6.4%	
Salaries and benefits		755,092	728,456		26,636	3.7%	
Professional service fees		71,426	71,422		4	0.0%	
Depreciation		24,847	21,664		3,183	14.7%	
Program contractual services		14,562,931	13,201,409	,	1,361,522	10.3%	
Material sales rebate		845,640	1,536,523		(690,883)	-45.0%	
Total operating expenses		16,548,024	15,830,244		717,780	4.5%	
Operating income (loss)		(73,203)	13,329		(86,532)	-649.2%	
Non-operating revenues:							
Grants and sponsorships		10,000	15,000		(5,000)	-33.3%	
Miscellaneous Income		-	6		(6)	0.0%	
Interest income		60,067	47,995		12,072	25.2%	
Non-operating revenues		70,067	63,001		7,066	11.2%	
Change in net position		(3,136)	76,330		(79,466)	-104.1%	
Beginning net position *		780,767	704,437		76,330	10.8%	
Ending net position	\$	777,631	\$ 780,767	\$	(3,136)	-0.4%	

Net Position changed minimally in Fiscal Year 2019 (decreased by \$3,136). The most significant change resulted from the loss of revenue from the sale of recyclable material in 2019 and the increased costs experienced in the residential recycling program, the CVWMA's largest program. In the fall of 2017, the Chinese government placed such strict restrictions on imports of recyclable material and disrupted the entire industry globally for products such as mixed paper, cardboard and plastics. Material recovery facilities have not been able to sell mixed paper to Chinese mills since. Material has been diverted to other countries and is being sold domestically, but

## CENTRAL VIRGINIA WASTE MANAGEMENT AUTHORITY Management's Discussion and Analysis

oversaturation of recyclables has driven the market prices down to almost nothing, particularly for two-thirds of the volume collected in our residential and drop-off recycling programs. This sustained disruption has resulted in municipalities and recycling processors across the country having to make some tough decisions regarding recycling programs. The CVWMA and participating jurisdictions renegotiated the residential recycling contract in the summer of 2018, now paying a maximum \$30/ton processing fee on top of collection. This is costing the region over \$1.5 million more annually to continue collecting the over 35,000 tons recycled in the program.

The Authority also conducted a pay, classification and benefits study to benchmark similar positions, and the results were implemented in March 2019. Improvement in interest rates and prudent shot-term investments yielded \$12,000 more in interest income over the prior year. In addition, over \$21,000 in income was recorded based on the pension actuarial valuation and the return on assets. Approximately 95% of total revenues are passed through to member localities based on their participation in various programs. Net Position represents 4.4% of the total 2020 budget. The Authority continues to remain in a strong financial position.

#### **Economic Factors and the FY 2019 Budget**

The economy has continued to grow in recent years, resulting in the Authority and member localities requiring more resilience and strategizing in order to adjust as the economy expands and contracts. The climate in the recycling and solid waste industry is continually changing and we continue to examine programs and projects to ensure that they meet and respond to the current needs of our member localities. The CVWMA prides itself on being able to offer better and more cost-effective contracts to its members. The CVWMA continues to be highly regarded for providing cost effective recycling and solid waste initiatives to our member governments.

Regional contracting has proven valuable to localities and CVWMA continues to do what it does best in negotiating cost effective contracts that best fit the needs of the diverse communities we serve. The fiscal health of the Authority is strong as demonstrated in this report.

Recycling markets for commodities such as cardboard and mixed paper have not improved and have actually declined somewhat since this time last year. Over supply has lessened the demand for those commodities since China has scaled back importing of recyclables. Oil prices were steady in 2019 and Authority participating localities benefit from revenue from the sale of used oil. Scrap metal prices have remained strong, increasing significantly in the latter part of 2018. CVWMA and participating localities enjoyed over \$690,000 in revenue by recycling 4,300 tons in the scrap metal program. Overall, the Authority provided over \$845,000 back to localities from the sale of recyclable material in 2019. Early in fiscal year 2019, the Authority renegotiated the residential recycling collection and processing contract in order to continue the program to nearly 260,000 households. Previously, localities earned \$20 in a rebate from the sale of recyclables and now are paying a maximum \$30/ton. This accounted for the majority decrease in rebates back to localities. The CVWMA has provided over \$10.5 million back to participating localities since inception in 1990. The Authority retains 25% of the revenue received from the sale of recyclables in the Drop Off Recycling Fund to maintain its financial health.

The Authority's budget has grown over 30% to over \$17.5 million in 2020. This is a result of increased costs of recycling and inflation; however it also reflects an increase in the level of participation in Authority programs by member localities. CVWMA maintains a strong and healthy net position and thus has successfully avoided raising assessments to member localities.

#### **Contacting CVWMA's Financial Management**

This financial analysis is designed to provide a general overview of CVWMA's finances to all interested parties. If you have questions about this report, or need additional financial information, contact the CVWMA's Executive Director at Central Virginia Waste Management Authority, 2100 W. Laburnum Avenue; Suite 105, Richmond, Virginia 23227 or by telephone at 804-359-8413.

## STATEMENT OF NET POSITION JUNE 30, 2019 With Comparative Totals at June 30, 2018

	General Operating <u>Fund</u>	Residential <u>Recycling</u>	Drop-Off Recycling	Municipal Solid <u>Waste</u>	Waste Transfer & <u>Disposal</u>	Special <u>Wastes</u>	Total <u>2019</u>	<u>2018</u>
Assets:								
Cash and cash equivalents	\$ 450,860	\$ 296,824	\$168,717	\$ 172,493	\$ 181,975	\$ 99,443	\$ 1,370,312	\$ 2,498,722
Accounts receivable	461,083	1,396,140	170,268	658,638	161,586	77,844	2,925,559	2,449,973
Prepaid expenses	11,567	10,318	428	1,328			23,641	14,521
Total current assets	923,510	1,703,282	339,413	832,459	343,561	177,287	4,319,512	4,963,216
Capital Assets:								
Furniture, fixtures & equipment	41,082	21,377	_	10,307	_	_	72,766	57,726
Computer equipment	25,523	56,875	_	5,000	_	_	87,398	87,398
Vehicles	46,706	-	_	-	_	_	46,706	46,706
Leasehold improvements	9,061	_	_	-	-	_	9,061	9,061
	122,372	78,252	-	15,307	-	-	215,931	200,891
Accumulated depreciation	(87,619)	(67,299)		(12,534)			(167,452)	(142,605)
Capital assets, net	34,753	10,953		2,773			48,479	58,286
Net pension asset								7,564
Total assets	958,263	1,714,235	339,413	835,232	343,561	177,287	4,367,991	5,029,066
Deferred Outflows of Resources:								
Pension related deferred outflows	27,449	14,190	532	1,248	-	-	43,419	28,068
OPEB related deferred outflows	3,478	2,153	80	202			5,913	8,033
Total deferred outflows of resources	30,927	16,343	612	1,450			49,332	36,101
Liabilities:								
Accounts payable	114,927	749,916	115,828	527,226	255,029	127,629	1,890,555	2,502,865
Other accrued liabilities	19,640	28,782	11	46	-	31,614	80,093	93,052
Unearned revenues	567,956	633,245		263,121	109,963		1,574,285	1,574,503
Total current liabilities	702,523	1,411,943	115,839	790,393	364,992	159,243	3,544,933	4,170,420
Long-term Liabilities:								
Net OPEB liability	39,036	26,625	943	2,579	-	-	69,183	69,136
Net pension liability	2,117	1,095	41	96			3,349	
Total long-term liabilities	41,153	27,720	984	2,675			72,532	69,136
Deferred Inflows of Resources:								
Pension related deferred inflows	11,063	5,719	214	503	-	-	17,499	38,969
OPEB related deferred inflows	2,781	1,721	64	162			4,728	5,875
Total deferred inflows of resources	13,844	7,440	278	665			22,227	44,844
Net Position (Deficit)								
Net investment in capital assets	34,753	10,953	-	2,773	-	-	48,479	58,286
Unrestricted	196,917	272,522	222,924	40,176	(21,431)	18,044	729,152	722,481
Total net position (deficit)	\$ 231,670	\$ 283,475	\$222,924	\$ 42,949	\$ (21,431)	\$ 18,044	\$ 777,631	\$ 780,767

The notes are an integral part of the financial statements.

## STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION YEAR ENDED JUNE 30, 2019 With Comparative Totals for the Year Ended June 30, 2018

	General		Drop-	Municipal	Waste			
	Operating	Residential	Off	Solid	Transfer &	Special	Total	
	<u>Fund</u>	Recycling	Recycling	<u>Waste</u>	<u>Disposal</u>	<u>Wastes</u>	<u>2019</u>	<u>2018</u>
Operating revenues:								
Local government								
assessments	\$ 561,661	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 561,661	\$ 558,825
Recycling	-	8,942,563	682,353	-	-	-	9,624,916	8,294,822
Refuse and solid waste	-	-	-	3,210,397	1,402,004	-	4,612,401	4,614,706
Composting and yard waste	-	-	-	-	-	490,231	490,231	478,302
Other project revenues	-	-	-	-	-	331,592	331,592	324,940
Material sales rebates			88,176			765,844	854,020	1,571,978
Total operating revenues	561,661	8,942,563	770,529	3,210,397	1,402,004	1,587,667	16,474,821	15,843,573
Operating expenses:								
Administrative/operating	74,279	204,308	5,002	4,499	-	-	288,088	270,770
Salaries and benefits	472,867	253,141	7,304	21,780	-	-	755,092	728,456
Professional service fees	40,110	24,001	1,667	5,648	-	-	71,426	71,422
Depreciation	11,174	12,318	-	1,355	-	-	24,847	21,664
Project contractual services	-	8,490,429	675,222	3,173,286	1,402,169	821,825	14,562,931	13,201,409
Material sales rebate			79,796			765,844	845,640	1,536,523
Total operating expenses	598,430	8,984,197	768,991	3,206,568	1,402,169	1,587,669	16,548,024	15,830,244
Operating income (loss)	(36,769)	(41,634)	1,538	3,829	(165)	(2)	(73,203)	13,329
Non-operating revenues:								
Grants and sponsorships	-	10,000	-	-	-	-	10,000	15,000
Interest income	35,782	18,355	-	5,930	-	-	60,067	47,995
Miscellaneous								6
Total non-operating revenues	35,782	28,355		5,930			70,067	63,001
Change in Net Position	(987)	(13,279)	1,538	9,759	(165)	(2)	(3,136)	76,330
Net position (deficit) - beginning of year	232,657	296,754	221,386	33,190	(21,266)	18,046	780,767	704,437
Net position (deficit) - end of year	\$ 231,670	\$ 283,475	\$ 222,924	\$ 42,949	\$ (21,431)	\$ 18,044	\$ 777,631	\$ 780,767

## STATEMENT OF CASH FLOWS YEAR ENDED JUNE 30, 2019 With Comparative Totals for the Year Ended June 30, 2018

	General Operating <u>Fund</u>	Residential <u>Recycling</u>	Drop- Off <u>Recycling</u>	Municipal Solid <u>Waste</u>	Waste Transfer & <u>Disposal</u>	Special <u>Wastes</u>	<u>2019</u>	<u>2018</u>
Cash Flows From Operating Activities								
Receipts from local governments	\$633,056	\$8,691,172	\$637,014	\$2,942,948	\$1,367,049	\$875,412	\$15,146,651	\$15,305,715
Other miscellaneous receipts	-	-	-	-	-	-	-	6
Receipts from the sale of recyclables	_	_		_	_	_	_	35,452
Payments to contractors	-	(8,966,259)	(665,956)	(3,154,695)	(1,384,899)	(906,688)	(15,078,497)	(14,095,050)
Payments to suppliers	(206,358)	(234,995)	(6,895)	(10,403)	-	-	(458,651)	(330,052)
Payments to employees	(502,863)	(260,422)	(7,407)	(22,248)			(792,940)	(747,545)
Net cash provided by (used in) operating activities	(76,165)	(770,504)	(43,244)	(244,398)	(17,850)	(31,276)	(1,183,437)	168,526
Cash Flows From Noncapital Financing Activities:								
Grants, sponsorships, and miscellaneous		10,000					10,000	15,000
Net cash provided by noncapital financing activities	-	10,000	-	-	-	-	10,000	15,000
Cash Flows From Capital and Related Financing Activiti	ies:							
Acquisitions of capital assets	(5,908)	(6,088)		(3,044)			(15,040)	(10,292)
Net cash used in capital financing activities	(5,908)	(6,088)		(3,044)			(15,040)	(10,292)
Cash Flows From Investing Activities:								
Interest received	35,782	18,355	-	5,930	-	_	60,067	47,995
Net Increase (decrease) in cash and cash equivalents	(46,291)	(748,237)	(43,244)	(241,512)	(17,850)	(31,276)	(1,128,410)	221,229
Cash and cash equivalents at June 30, 2018	497,151	1,045,061	211,961	414,005	199,825	130,719	2,498,722	2,277,493
Cash and cash equivalents at June 30, 2019	\$450,860	\$ 296,824	\$168,717	\$ 172,493	\$ 181,975	\$ 99,443	\$ 1,370,312	\$ 2,498,722
	General Operating <u>Fund</u>	Residential Recycling	Drop- Off <u>Recycling</u>	Municipal Solid <u>Waste</u>	Waste Transfer & <u>Disposal</u>	Special <u>Wastes</u>	<u>2019</u>	<u>2018</u>
Net operating income (loss)	\$ (36,769)	\$ (41,634)	\$ 1,538	\$ 3,829	\$ (165)	\$ (2)	\$ (73,203)	\$ 13,329
Adjustments to reconcile operating income (loss) to cash provided by (used in) operating activities:	-							
Depreciation	11,174	12,318	-	1,355	-	-	24,847	21,664
Pension expense net of employer contributions	(16,358)	(8,497)	(309)	(744)	-	-	(25,908)	(19,412)
OPEB expense net of employer contributions	(2,045)	2,526	222	317	-	-	1,020	(4,381)
Other miscellaneous receipts	-	-	-	-	-	-	-	6
(Increase)/decrease in Assets:								,
Accounts receivable - local governments	65,100	(222,507)	(53,719)	(283,094)	(34,955)	53,589	(475,586)	(40,681)
Prepaid expenses Increase/(decrease) in Liabilities:	(1,951)	(6,686)	(227)	(256)	-	-	(9,120)	734
Accounts payable	(90,018)	(475,830)	9,266	18,591	10,544	(84,863)	(612,310)	123,430
Unearned revenue	6,295	(28,884)	9,200	15,645	6,726	(04,003)	(812,310)	69,328
Other accrued liabilities	(11,593)	(1,310)	(15)	(41)	-	_	(12,959)	4,509
	( , 555)	(1,5.5)	(.5)				(.2,000)	.,000
Net cash provided by (used in)								
operating activities	\$ (76,165)	\$ (770,504)	\$ (43,244)	\$ (244,398)	\$ (17,850)	\$ (31,276)	\$ (1,183,437)	\$ 168,526

The notes are an integral part of the financial statements.

#### NOTES TO FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2019

#### I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Central Virginia Waste Management Authority ("Authority") was created in December 1990 under the Virginia Water and Waste Authorities Act (Chapter 51, Title 15.2, Code of Virginia of 1950 as amended). The Authority's purpose is to plan, acquire, construct, reconstruct, improve, extend, operate, contract for and maintain any garbage and refuse collection, transfer and disposal program or system, including waste reduction, waste material recovery, recycling as mandated by law or otherwise, resource recovery, waste incineration, landfill operation, ash management, sludge disposal from water and wastewater treatment facilities, household hazardous waste management and disposal and similar programs or systems, within one or more of the political subdivisions which are members of the Authority.

- **A. Reporting Entity -** The Authority is a primary government with no component units. The members of the Authority are the Cities of Colonial Heights, Hopewell, Petersburg and Richmond; the Town of Ashland; and the Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Prince George. The Authority is governed by a Board of Directors consisting of one or more representatives appointed by each of the member cities, town and counties. The Authority is a jointly governed organization of the thirteen member jurisdictions listed herein, however it is not a component unit of any of the participating governments. The participating governments do have a financial interest in and responsibility to the Authority.
- **B.** Basis of Presentation The Authority administers six enterprise funds: the General Operating Fund, the Residential Recycling, the Drop-Off Recycling, the Municipal Solid Waste, the Waste Transfer and Disposal, and Special Wastes Funds are considered major funds.
- **C.** Basis of Accounting The accounting records for the Authority are maintained on the accrual basis with revenue recorded when earned and expenses recorded when incurred. The accounting policies of the Authority conform to accounting principles generally accepted in the United States of America as promulgated by the Government Accounting Standards Board (GASB) for enterprise funds of governmental units.
- **D. Estimates -** The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.
- **E. Cash and Cash Equivalents -** Cash and cash equivalents are defined as being cash and short-term interest-bearing investments consisting of certificates of deposit, repurchase agreements and other income producing securities. These investments are readily convertible to cash and are stated at cost, which approximates fair value.
- **F.** Receivables All revenue and receivables are recognized when earned. Receivables consist of amounts due from the participating governments for services performed for residents. Each government is liable for the actual cost of service based on operating assessments outlined in the Articles of Incorporation and contractual arrangements; therefore, there is no allowance for doubtful accounts.
- **G. Capital Assets -** Capital assets are stated at historical cost. The capitalization threshold for capital assets is \$2,000. Expenses for repairs and upgrading which materially add to the value or life of an asset are capitalized. Other maintenance and repair costs are charged to expense as incurred.

Depreciation is charged as an expense using the straight-line method over the assets' estimated useful lives as follows:

Furniture, fixtures and equipment 5-7 years
Computer equipment 2-3 years
Vehicles 7 years
Leasehold improvements 6 years

- **H. Compensated Absences -** Authority employees, in the event of termination, are reimbursed for accumulated annual leave in full, and for sick leave in the amount of one third (1/3) of sick leave accumulated up to \$3,500. Vested annual and sick leave balances are reflected in the accompanying financial statements as a current liability.
- I. Pensions and Other Postemployment Benefits (OPEB) For purposes of measuring all financial statement elements related to pension and OPEB plans, information about the fiduciary net position of the Authority's Plans and the additions to/deduction from the Authority's 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.
- **J. Deferred Inflows and Outflows of Resources -** In addition to liabilities, the statements that presents financial position reports a separate section for deferred inflows of resources. These items represent an acquisition of net position that applies to future periods and so will not be recognized as an inflow of resources (revenue) until that time The Authority has the following items that qualify for reporting in this category:
  - Differences between expected and actual experience and changes of assumptions for economic/demographic factors in the measurement of the total pension and OPEB liability. This difference will be recognized in expense over the expected average remaining service life of all employees provided with benefits in the plan and may be reported as a deferred inflow or outflow as appropriate.
  - Differences between projected and actual earnings on pension or OPEB plan investments. This
    difference will be recognized in pension expense or OPEB over a closed five-year period.

In addition to assets, the statement that presents net position reports a separate section for deferred outflows of resources. These items represent a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense) until then. The Authority has the following item that qualifies for reporting in this category:

- Contributions subsequent to the measurement date for pensions and OPEB; this will be applied to the net pension liability and the net OPEB liability in the next fiscal year.
- **K. Net Position -** Net position comprises the various net earnings from operating and non-operating revenues, expenses and contributions of capital. Net position is classified in the following three components: net investment in capital assets, restricted and unrestricted net position. Net investment in capital assets consists of all capital assets, net of accumulated depreciation, reduced by any outstanding debt that is attributable to the acquisition, construction and improvement of those assets. Restricted net position consists of net position for which constraints are placed thereon by external parties, such as lenders, grantors, contributors, laws, regulations and enabling legislation, including self-imposed legal mandates, less any related liabilities. Unrestricted consists of all other net position not included in the above categories. The Authority did not have any restricted net position at June 30, 2019 or 2018, nor is there any debt associated with capital assets.
- **L. Risk Management -** The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority maintains commercial insurance for all risks of loss including general liability, employee health and accident,

workers' compensation, automobile and public officials' liability insurance. Any settled claims resulting from these risks have not exceeded commercial insurance coverage in the past three fiscal years.

- **M. Revenue Classification -** Revenues from recycling and solid waste collection, local government assessments and other program revenues are reported as operating revenues. All other revenues including certain grants, contributions and interest income are reported as non-operating revenues.
- **N. Unearned Revenues -** In connection with certain contracts, the Authority bills for services and receives cash in advance. These amounts are recorded as unearned revenue until earned by the Authority.
- **O. Summarized Comparative Information for 2018 -** The financial information for the year ended June 30, 2018, presented for comparative purposes, is not intended to be a complete financial statement presentation because only the total of all funds has been reflected.

#### **II. DEPOSITS AND INVESTMENTS**

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

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

At year end, the Authority's deposits and investments were as follows:

	2019	2018		
Cash and Cash Equivalents	Fair Value	Fair Value		
Local Government Investment Pool	\$ 2,346	\$ 967,227		
Commercial Paper	738,715	996,528		
Cash in Bank	629,151	534,867		
Cash on Hand	100	100		
Total Cash and Cash Equivalents	<u>\$ 1,370,312</u>	\$ 2,498,722		

Interest Rate Risk. Investment maturity is managed to precede or coincide with expected need of funds to help limit exposure to fair value losses arising from rising interest rates. As of June 30, 2019, the Authority's investments were in the Local Government Investment Pool (LGIP), and one single Commercial Paper instrument issued by MUFG Bank NY, maturing February 2020.

The Commercial Paper Instrument is reported at cost.

The LGIP is a short-term investment pool offered through the State Treasurer to public entities in the Commonwealth. The Authority has \$2,346 in the LGIP portfolio which provides daily liquidity and is reported at amortized cost. The carrying value of this portion of the Authority's investment in this pool is determined by the pool's share price in accordance with GASB Statement No. 79.

<u>Credit Risk.</u> Policy, consistent with state statute, requires commercial paper, including banker's acceptances, to have a short-term debt rating of no less than "P-1" from Moody's Investors Service, and "A-1" from Standard & Poor's (S&P). Corporate notes and bonds must have a rating of at least "AA" by S&P or "Aa" by Moody's. The Authority's commercial paper instrument, issued by MUFG Bank NY, is rated "A-1" by S&P and "P-1" by Moody's. This rating meets the minimum financial ratings required by state statute. The investments in the LGIP are rated AAA by Standard & Poor's.

<u>Concentration of Credit Risk.</u> The Code of Virginia and the Authority's investment policy places no limit on the amount the Authority may invest in any one issuer. However, the policy establishes limitations on portfolio composition, both by investment type and by issuer, in order to control concentration of credit risk. At June 30, 2019, the Authority's investment portfolio consisted of the following:

<u>Issuer</u>	<u>A</u>	<u>mount</u>	<u>% of</u> Portfolio
Local Government Investment Pool (LGIP)	\$	2,346	00.32%
MUFG Bank NY		738,715	99.68%
	<u>\$</u>	741,061	

#### **III. CAPITAL ASSETS**

A summary of changes in capital assets follows:

	Balance June 30, <u>2017</u>	<u>Additions</u>	<u>Disposals</u>	Balance June 30, <u>2018</u>	<u>Additions</u>	<u>Disposals</u>	Balance June 30, <u>2019</u>
Furniture, fixtures & equipment	\$ 57,726	\$ -	\$ -	\$ 57,726	\$ 15,040	\$ -	\$ 72,766
Computer equipment	84,163	10,292	(7,057)	87,398	-	-	87,398
Vehicles	46,706	-	-	46,706	-	-	46,706
Leasehold improvements	9,061			9,061			9,061
Total capital assets	197,656	10,292	(7,057)	200,891	15,040	-	215,931
Accumulated deprecia	tion:						
Furniture, fixtures & equipment	57,725	-	-	57,725	1,755	-	59,480
Computer equipment	55,627	14,705	(7,057)	63,275	16,135	-	79,410
Vehicles	5,585	6,959	-	12,544	6,957	-	19,501
Leasehold improvements	9,061		<del>-</del>	9,061			9,061
Total accumulated Depreciation Capital assets, net	127,998 \$ 69,658	21,664 \$ 11,372	<u>(7,057)</u> \$ -	142,605 \$ 58,286	24,847 \$ (9,807)	<u>-</u> \$ -	167,452 \$ 48,479

#### IV. LEASES

The Authority has noncancelable operating leases for the rental of a vehicle, office space and equipment. Rental expense for operating leases during 2019 and 2018 was \$81,576 and \$80,170, respectively, and is included in administrative/operating expenses in the Statement of Revenues, Expenses and Changes in Net Position. The Authority signed a new lease for office space effective May 2, 2019 which contains an escalation clause of 3% annually in the rate per square foot.

Future minimum lease payments under noncancelable operating leases at June 30, 2019 are:

2020	\$ 88,125
2021	85,368
2022	87,943
2023	90,573
2024 and beyond	 213,548
	\$ 565,557

#### V. DEFINED BENEFIT PENSION PLAN

#### **Plan Description**

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

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

- https://www.varetire.org/members/benefits/defined-benefit/plan1.asp.
- https://www.varetire.org/members/benefits/defined-benefit/plan2.asp,
- https://www.varetire.org/hybrid.html.

#### **Employees Covered by Benefit Terms**

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

Number
7
3
0
6
9
9
25

Mirrock

#### V. DEFINED BENEFIT PENSION PLAN (Continued)

#### **Contributions**

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

The political subdivision's contractually required contribution rate for the year ended June 30, 2019 was 5.70% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the political subdivision were \$31,743 and \$25,176 for the years ended June 30, 2019 and June 30, 2018, respectively.

#### **Net Pension Liability**

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

#### **Actuarial Assumptions**

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

Inflation 2.5%

General Employees – Salary Increases, including inflation: 3.50%-5.35%

Investment rate of return 7.00%, net pension plan investment expense, including inflation

\* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment 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: General employees - 15%-20% of deaths are assumed to be service related. Public Safety Employees - 70% of deaths are assumed to be service related. Mortality is projected using the applicable RP-2014 Mortality Table Projected to 2020 with various set-backs or set forwards for both males and females.

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

General Employees - Largest 10 - Non-Hazardous Duty and All Others (Non 10 Largest): Update mortality table; lowered retirement rates at older ages, changed final retirement from 70 to 75; lowered disability rates, no change to salary scale, increased rate of line of duty from 14% to 20%.

#### V. DEFINED BENEFIT PENSION PLAN (Continued)

#### **Long-Term Expected Rate of Return**

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

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

<sup>\*</sup> The above allocation provides for a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected rate of return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.5%.

#### **Discount Rate**

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2018, the alternate rate was the employer contribution rate used in the FY2012 or 90% of the actuarially determined employer contribution rate from the June 30, 2015, actuarial valuations, whichever is greater. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

#### V. DEFINED BENEFIT PENSION PLAN (Continued)

#### **Changes in Net Pension Liability (Asset)**

anges in Net I cholon Elability (Asset)	Increase (Decrease)						
				Plan Fiduciary Net Position (b)		Net Pension Liability (a) – (b)	
Balances at June 30, 2017	\$	1,650,263	\$	1,657,827	\$	(7,564)	
Changes for the year:							
Service cost		52,754		-		52,754	
Interest		113,607		-		113,607	
Differences between expected							
and actual experience		15,776				15,776	
Contributions – employer		-		23,938		(23,938)	
Contributions – employee		-		25,564		(25,564)	
Net investment income		-		122,988		122,988	
Benefit payments, including refunds of employee contributions		(54,604)		(54,604)		-	
Administrative expenses		-		(1,046)		1,046	
Other changes				(220)		220	
Net changes		127,533		116,620		10,913	
Balances at June 30, 2018	\$	1,777,796	\$	1,774,447	\$	3,349	

#### 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%	Current	1.00%	
	Decrease	Discount	Increase	
	(6.00%)	Rate (7.00%)	(8.00%)	
Authority's net pension liability	\$ 274,2 <u>38</u>	\$ 3,34 <u>9</u>	\$ (218,386)	

## <u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions</u>

For the year ended June 30, 2019, the political subdivision recognized pension expense of \$4,597.

#### V. DEFINED BENEFIT PENSION PLAN (Continued

## <u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (Continued)</u>

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	\$	11,676	\$	1,554
Changes of assumptions		-		600
Net difference between projected and actual earnings on pension plan investments		-		15,345
Employer contributions subsequent to the measurement date		31,743		
Total	\$	43,419	\$	17,499

The \$31,743 reported as deferred outflows of resources related to pensions resulting from the Political Subdivision's contributions subsequent to the measurement date and 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 in future reporting periods as follows:

Year Ending June 30	Increase (Reduction) in <u>Pension Expense</u>		
2020	\$ 9,	398	
2021	3,	189	
2022	(16,9	79)	
2023		l31)	
2024	•	0	
Thereafter		0	

#### **Pension Plan Data**

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

#### Payables to the Pension Plan

At June 30, 2019, approximately \$4,995 was payable to the Virginia Retirement System for the legally required contributions related to June 2019 payroll.

#### VI. OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Local Plan

#### **Healthcare Benefits**

#### A. Plan description

The Authority administers a single-employer defined benefit healthcare plan ("the Retiree Health Plan"). The plan provides postemployment healthcare benefits to retirees of the Authority, under the health plan administered by the Local Choice Health Benefits Program of the Virginia Department of Human Resource Management. Retirees must pay the full cost of health coverage for these benefits. A separate report was not issued for the plan.

#### **B.** Funding Policy

By Authority resolution, the Authority allows qualified employees to participate in healthcare benefits at the retiree's expense. Local choice charges a blended rate which is 102% of the rate for participants that elect only to cover active employees. The only cost to the Authority is this implicit rate subsidy.

#### C. Funded Status and Funding Progress

The projection of future benefit payments for an ongoing plan involves estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and healthcare trends. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

#### **Total OPEB Liability**

The Authority's total OPEB Liability of \$22,429 was measured as of June 30, 2017, and was determined by an actuarial valuation as of that date.

The Authority has implemented GASB Statement No. 75 – Accounting and Financial Reporting for Postemployment Benefits Other than Pensions, effective for the year ending June 30, 2018.

The total OPEB liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Discount Rate 3.5%

Inflation 2.5%

General Employees – Salary Increases, including inflation: 3.50%, average, including inflation with

variable merit

Healthcare cost trend rates 7.2% for 2017, decreasing to an ultimate

rate of 4.2%

The discount rate was based on the Bond Buyer 20 year Bond GO Index as of June 30, 2017.

Mortality rates were based on the RP-2000 Mortality Tables for Males or Females, as appropriate, with adjustments for mortality improvements based on Scale AA.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period July 1, 2016-June 30, 2017.

#### VI. OTHER POST-EMPLOYMENT BENEFITS (OPEB) – Local Plan (Continued)

#### **Changes in the Total OPEB Liability**

	al OPEB
Balance at 6/30/18	\$ 22,429
Changes for the year: Service cost Interest Changes of benefit terms Differences between expected and actual experience Changes in assumptions or other inputs Benefit payments	 1,382 758 - - (2,140)
Net Changes	 <u>-</u>
Balance 6/30/19	\$ 22,429

#### **Sensitivity Analysis**

The following represents the Authority's total OPEB liability, calculated using a discount rate that is 3.50%. It also presents what the Authority's Total OPEB Liability would be if were calculated using a discount rate one percentage point lower (2.50%) and one percentage point higher (4.50%) than the current rate.

	 ecrease 50%)	Current Discount Rate (3.50%)		1.00% 1.0% Increase (4.50%)	
Total OPEB Liability	\$ 24,338	\$	22,429	\$	20,590

The following presents the Authority's Total OPEB Liability, calculated using the current healthcare trend rates. It also presents what the Authority's Total OPEB Liability would be if it were calculated using healthcare trend rates that are one percentage point lower or one percentage point higher than the current rates.

	1.	00%	Current		1.00%	
		Decrease 50%)	e Trend Rate (3.50%)		Increase (4.50%)	
Total OPEB Liability	\$	<u> 19,673</u>	\$ 22,	<u>249</u>	25,589	

#### VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans

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

#### **Plan Descriptions**

#### Group Life Insurance Program

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

In addition to the Basic Group Life Insurance Benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program. For members who elect the optional group life insurance coverage, the insurer bills

#### VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued)

employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured program, it is not included as part of the GLI Program OPEB.

Specific information for the GLI is available at <a href="https://www.varetire.org/members/benefits/life-insurance/basic-group-life-insurance.asp">https://www.varetire.org/members/benefits/life-insurance.asp</a>

#### General Employee Health Insurance Credit Program

The General Employee Health Insurance Credit Program (HIC) is available for all full time, salaried employees of local government entities other than Teachers. The General Employee HIC provides all the same benefits as the Teacher HIC, except that this plan is considered a multi-employer agent plan.

As of June 30, 2018 actuarial valuation, the following employees were covered by the benefit terms of the General Employee Health Insurance Credit Program:

	Number
Inactive employees or their beneficiaries currently receiving benefits	1
Inactive members:	
Vested	-
Non-vested	-
Active Elsewhere in VRS	
Total inactive members	1
Active members	9
Total	10

#### **Contributions**

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

#### Group Life Insurance Program

Governed by:	Code of Virginia 51.1-506 and 51.1-508 and may be impacted as a result of funding provided to school divisions and governmental agencies by the Virginia General Assembly.
Total rate:	1.31% of covered employee compensation. Rate allocated 60/40; 0.79% employee and 0.52% employer. Employers may elect to pay all or part of the employee contribution.
June 30, 2019 Contribution	\$2,870
June 30, 2018 Contribution	\$7,063

#### VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued)

#### General Employee Health Insurance Credit Program

Governed by:	Code of Virginia 51.1-1402(E) and may be impacted as a result of funding provided to governmental agencies by the Virginia General Assembly.
Total rate:	.19% of covered employee compensation.
June 30, 2019 Contribution	\$1,043
June 30, 2018 Contribution	\$970

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

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

#### Group Life Insurance Program

June 30, 2019 proportionate share of liability	\$43,000
June 30, 2018 proportion	.00283%
June 30, 2017 proportion	.00285%
June 30, 2019 expense	\$2,000

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

#### General Employee Health Insurance Credit Program

	 Total OPEB Liability (a)	N	Plan Fiduciary let Position (b)	 Net OPEB Liability (a) – (b)
Balances at June 30, 2017	\$ 12,017	\$	8,310	\$ 3,707
Changes for the year:				
Service cost	736		-	736
Interest	818		-	818
Benefit changes	-		-	-
Changes of assumptions	-		-	-
Difference between expected and				
actual experience	(8)		-	(8)
Contributions – employer	-		952	(952)
Contributions – employee	-		-	-
Net investment income Benefit payments, including			650	(650)
refunds of employee contributions	(656)		(656)	-
Administrative expenses	-		(15)	15
Other changes	 		(88)	 88
Net changes	 890		843	 47
Balances at June 30, 2018	\$ 12,907	\$	9,153	\$ 3,754

#### VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued)

At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

#### **Group Life Insurance Program**

<del></del>	Ou	eferred tflows of sources	In	eferred flows of sources
Differences between expected and actual experience Change in assumptions Net difference between projected and actual earnings	\$	2,000	\$	1,000 1,000
on OPEB plan investments		-		2,000
Changes in proportion		-		-
Employer contributions subsequent to the measurement date		2,870		
Total	Φ	4,870	<u>¢</u>	4,000
i otai	Ψ	7,070	Ψ	+,000

#### General Employee Health Insurance Credit Program

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual experience	\$	-	\$	-
Change in assumptions		-		728
Net difference between projected and actual earnings on OPEB plan investments		_		-
Changes in proportion Employer contributions subsequent to the		-		-
measurement date		1,043		
Total	\$	1,043	\$	728

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

#### Group Life Insurance Program

Year Ending June 30,	(F	Increase Reduction) to OPEB Expense
2020 2021	\$	(1,000) (1,000)
2022 2023 2024		- - -

#### VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued)

General Employee Health Insurance Credit Program

Year Ending June 30,	(Red to	crease duction) OPEB pense
2020	\$	(176)
2021		(176)
2022		(174)
2023		(109)
2024		(93)
Thereafter		` _

#### **Actuarial Assumptions and Other Inputs**

The total OPEB liability was determined using the following assumptions based on an actuarial valuation date of June 30, 2017, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018:

Inflation	2.5%
<ul> <li>Salary increases, including inflation:</li> <li>Locality- general employees</li> <li>Locality – hazardous duty</li> </ul>	3.5 – 5.35%
employees  Teachers	3.5 - 4.75% 3.5 - 5.95%
<ul><li>Healthcare cost trend rates:</li><li>Under age 65</li><li>Ages 65 and older</li></ul>	7.75 – 5.00% 5.75 – 5.00%
Investment rate of return, net of expenses, including inflation*	GLI & HIC: 7.0%

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

Mortality rates used for the various VRS OPEB plans are the same as those used for the actuarial valuations of the VRS pension plans. The mortality rates are discussed in detail in Note VI of the Notes to the Financial Statements.

## VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued) Net OPEB Liabilities

The net OPEB liabilities represent each program's total OPEB liability determined in accordance with GASB Statement No. 75, less the associated fiduciary net position. As of June 30, 2018, net OPEB liability amounts for the various VRS OPEB programs are as follows (amounts expressed in thousands):

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

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

#### **Long-Term Expected Rate of Return**

#### Group Life Insurance and Health Insurance Credit Programs

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

Target	Arithmetic Long-Term Expected Rate of	Weighted Average Long-Term Expected Rate of Return
Allocation	Neturn	Neturn
40.00 %	4.54 %	1.82 %
15.00	0.69	0.10
15.00	3.96	0.59
15.00	5.76	0.86
15.00	9.53	1.43
100.00 %		4.80 %
Inflation		2.50 %
netic nominal return		7.30 %
	40.00 % 15.00 15.00 15.00 15.00 100.00 %	Target Expected Rate of Return  40.00 % 4.54 % 0.69 15.00 3.96 15.00 5.76 15.00 9.53 100.00 % Inflation

<sup>\*</sup> The above allocation provides for a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected rate of return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.5%.

#### VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued)

#### **Discount Rate**

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

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

The following presents the net OPEB liabilities of \$46,754 as well as what the Authority's net OPEB liabilities would be if it were calculated using a discount rate that is one percentage point lower (6.00% HIC; GLI/2.89%) or one percentage point higher (8.00% HIC; GLI/4.89%) than the current discount rate:

	Current							
	1.00%	Decrease	Discount Rate	1.00% Increase				
GLI Net OPEB Liability	\$	56,000	\$ 43,000	\$	32,000			
General Employee HIC Net OPEB Liability		5,065	3,754		2,555			

#### **OPEB Plan Fiduciary Net Position**

Information about the various VRS OPEB plan fiduciary net position is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at <a href="http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf">http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf</a>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

#### Payables to the OPEB Plan

At June 30, 2019, the following amounts were payable to the Virginia Retirement System for the legally required contributions related to June 2019 payroll.

Group Life Insurance	<u>\$</u>	608
General Employee Health Insurance Credit		88

#### **VIII.RELATED PARTIES**

Each member jurisdiction has a financial responsibility to the Authority for assessments and fees for services. The Authority remits rebates from the sale of recycled materials to the participating governments.

#### **VII. RELATED PARTIES (Continued)**

Total amounts due from and payable to the related jurisdictions at June 30, 2019 and 2018 are as follows:

	<u>2019</u>					<u>2018</u>				
		Due From		Due To		<b>Due From</b>		Due To		
Town of Ashland	\$	47,550	\$	-	\$	19,960	\$	-		
County of Charles City		3,432		-		3,481		-		
County of Chesterfield		754,620		24,349		758,103		24,225		
City of Colonial Heights		239,787		344		97,688		-		
County of Goochland		23,026		4,320		49,247		3,516		
County of Hanover		137,370		27,835		41,381		25,469		
County of Henrico		691,598		23,366		453,144		23,970		
City of Hopewell		342,202		247		119,064		688		
County of New Kent		39,600		4,127		48,532		5,195		
City of Petersburg		378,990		=		259,730		-		
County of Powhatan		51,361		5,748		33,555		4,506		
County of Prince George		17,772		-		17,595		-		
City of Richmond	_	171,649		<u>153</u>		523,116		=		
Total	\$_	2,898,957	\$	90,489	\$	2,424,596	\$	87,569		

Total revenues from and expenses to related jurisdictions in the years ended June 30, 2019 and 2018 are follows:

	<u>20</u>	<u>19</u>	<u>20</u>	<u>2018</u>			
	Revenues	<b>Expenses</b>	Revenues		<b>Expenses</b>		
Town of Ashland	\$ 258,367	\$ -	\$ 195,702	\$	5,370		
County of Charles City	3,481	-	3,519		-		
County of Chesterfield	3,841,971	191,992	3,697,426		323,095		
City of Colonial Heights	916,598	970	851,673		20,945		
County of Goochland	504,518	61,364	532,659		79,377		
County of Hanover	490,547	264,377	658,752		357,347		
County of Henrico	3,184,953	227,035	2,940,158		480,359		
City of Hopewell	1,106,921	2,085	1,093,532		6,143		
County of New Kent	380,490	39,452	391,626		53,203		
City of Petersburg	1,473,500	351	1,466,611		3,421		
County of Powhatan	341,744	53,395	368,387		66,178		
County of Prince George	27,689	-	28,465		-		
City of Richmond	2,868,486	2,876	2,477,675		195,823		
Total	\$ <u>15,399,265</u>	<u>\$ 1,591,261</u>	\$ <u>14,706,185</u>	\$	1,591,261		

#### **VIII. NET POSITION AND INTERFUND TRANSFERS**

The following funds have deficit net position balances as of June 30, 2019 and 2018:

**2019 2018** \$ 21,371

Waste Transfer & Disposal \$21,431 \$2

These deficits are expected to be eliminated through future revenues.

Interfund transfers are the flow of cash from one fund to another without the requirement of repayment. Interfund balances are the result of loans between funds.

#### IX.NEW ACCOUNTING STANDARDS

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

The GASB issued Statement No. 84, Fiduciary Activities in January 2017. This Statement establishes standards of accounting and financial reporting for fiduciary activities. The requirements of this Statement are effective for periods beginning after December 15, 2018.

The GASB issued Statement No. 87, Leases in June 2017. This Statement establishes standards of accounting and financial reporting for leases by lessees and lessors. The requirements of this Statement are effective for periods beginning after December 15, 2019.

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS FOR THE YEAR ENDED JUNE 30, 2019

	Plan Year						
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>			
Total Pension Liability							
Service Cost	\$ 52,754	\$ 55,609	\$ 48,783	\$ 44,781			
Interest on total pension liability	113,607	106,240	101,997	97,556			
Difference between expected and actual experience	15,776	4,481	(30,702)	(24,167)			
Changes of assumptions Benefit payments, including refunds of member contributions	- (54,604)	(2,066) (63,421)	- (55,516)	- (53,934)			
Net change in total pension liability	127,533	100,843	64,562	64,236			
Total pension liability - beginning	1,650,263	1,549,420	1,484,858	1,420,622			
Total pension liability - ending	\$ 1,777,796	\$ 1,650,263	\$1,549,420	\$ 1,484,858			
Plan Fiduciary Net Position							
Contributions - employer	\$ 23,938	\$ 23,346	\$ 41,760	\$ 40,747			
Contributions - employee	25,564	25,301	25,934	23,299			
Net investment income	122,988	181,635	26,226	63,905			
Benefit payments, including refunds of member contributions	(54,604)	(63,421)	(55,516)	(53,934)			
Administrative expenses	(1,046)	(1,042)	(889)	(851)			
Other changes	(220)	(285)	(11)	(14)			
Net change in plan fiduciary net position	116,620	165,534	37,504	73,152			
Plan fiduciary net position - beginning	1,657,827	1,492,293	1,454,789	1,381,637			
Plan fiduciary net position - ending	\$ 1,774,447	\$ 1,657,827	\$1,492,293	\$ 1,454,789			
Net pension liability (asset) - ending	\$ 3,349	\$ (7,564)	\$ 57,127	\$ 30,069			
Plan fiduciary net position as a percentage of total pension liability	100%	100%	96%	98%			
Covered payroll	\$ 539,218	\$ 526,157	\$ 512,903	\$ 468,572			
Net pension liability (asset) as a percentage of covered payroll	1%	-1%	11%	6%			

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

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

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF PENSION CONTRUBITIONS FOR THE YEAR ENDED JUNE 30, 2019

Contributions in Relation to

Entity Fiscal Year Ended June 30	R	tractually equired ntribution	Con Re	tractually equired ntribution	Defi	ribution ciency cess)	nployer's ered Payroll	Contributions as a Percentage of Covered Payroll
2019	\$	31,743	\$	31,743	\$	-	\$ 556,895	5.70%
2018		25,176		25,176		-	539,218	4.96%
2017		26,141		26,141		-	526,157	4.96%
2016		44,571		44,571		-	512,903	8.69%
2015		40,719		40,719		-	468,572	8.69%

Schedule is intended to show information for 10 years. Since 2015 was the first year for this presentation, only five years of date is available. Additional years will be included as they become available.

# REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS FOR THE YEAR ENDED JUNE 30, 2019

				Plan \	∕ear				
		2019		2018 2018			2	2017	
			VR	S Health			VRS	Health	
	Insurance					Ins	urance		
				Credit			Credit		
			G	eneral			General		
	Lo	cal Plan	<u>En</u>	ployees	Local Plan		<b>Employees</b>		
Total OPEB Liability									
Service Cost	\$	1,382	\$	736	\$	1,382	\$	817	
Interest on total OPEB liability		758		818		758		790	
Changes in benefit terms		-		-		-		-	
Difference between expected and actual experience		-		(8)		-		-	
Changes of assumptions and other inputs		(2,140)		-		(2,140)		(704)	
Benefit payments				(656)				(339)	
Net change in total OPEB liability		-		890		-		564	
Total OPEB liability - beginning		22,429		12,017		22,429		11,453	
Total OPEB liability - ending	\$	22,429	\$	12,907	\$	22,429	\$	12,017	
Plan Fiduciary Net Position									
Contributions - employer	\$	-	\$	952	\$	-	\$	946	
Contributions - employee		-		-		-		-	
Net investment income		-		650		-		834	
Benefit payments		-		(656)		-		(339)	
Administrative expenses		-		(15)		-		(14)	
Other				(88)				40	
Net change in plan fiduciary net position		-		843		-		1,467	
Plan fiduciary net position - beginning		-		8,310				6,843	
Plan fiduciary net position - ending	\$	-	\$	9,153	\$		\$	8,310	
Net OPEB Liability - ending	\$	22,429	\$	3,754	\$	22,429	\$	3,707	
Plan fiduciary net position as a percentage of total OPEB liability		0%		71%		0%		69%	
Covered payroll	\$	553,515	\$	529,094	\$	529,094	\$	525,698	
Net OPEB liability as a percentage of covered payroll		4%		1%		4%		1%	

The plan years above are reported in the entity's financial statements in the fiscal year following the plan year - i.e., plan year 2017 information was presented in the entity's fiscal year 2018 financial report. This schedule is intended to show information for 10 years. Since fiscal year 2018 (plan year 2017) was the first year for this presentation, no earlier data is available. Additional years will be included as they become available.

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF OPEB CONTRUBITIONS - GROUP LIFE **JUNE 30, 2019**

1.30%

1.34%

553.515

529.094

		Contributions in Relation to			
Entity Fiscal Year Ended June 30	Contractually Required Contribution	Contractually Required Contribution	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a Percentage of Covered Payroll
Virginia Retirement	System - Group Life	Insurance - General	Employees		

2.870

7.063

2.870

7.063

2019

2018

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

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

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF OPEB CONTRUBITIONS - HIC **JUNE 30, 2019**

Entity Fiscal Year Ended June 30	De to Em	tuarially ermined nployer tribution	Em	actual ployer tribution	Def	ribution iciency ccess)	C	nployer's Covered Payroll	Contributions as a Percentage of Covered Payroll
VRS Health Insurance	ce Credi	t General Em 1.043	oloyees \$	1.043	\$	_	\$	553.515	0.19%
2018	Ψ	970	Ψ	970	Ψ	-	Ψ	529,094	0.18%

Schedule is intended to show information for 10 years. Since 2018 was the first year for this presentation, only two years of data is available. Additional years will be included as they become available.

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

#### REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF EMPLOYER'S SHARE OF NET OPEB LIABILITY **JUNE 30. 2019**

Plan Year Ended June 30	Employer's Proportion of the Net OPEB Liability (Asset)	Share of the Net O	Employer's Proportionate Share of the Net OPEB Employer's Liability (Asset) Covered Payroll		Employer's Proportionate Share of the Net OPEB Liability (Asset) as a Percentage of its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability					
Virginia Retiremen	Virginia Retirement System - Group Life Insurance - General Employees										
2018	0.0028%	\$ 43	3,000	\$	529,094	8.13%	51.22%				
2017	0.0029%	43	3,000		525,698	8.17%	48.86%				

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

### NOTES TO REQUIRED SUPPLEMENTARY INFORMATION JUNE 30, 2019

#### Note 1. Changes of Benefit Terms

<u>Pension</u>: There have been no actuarially material changes to the Virginia Retirement System (System) benefit provisions since the prior actuarial valuation.

Other Postemployment Benefits (OPEB): There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

#### Note 2. Changes of Assumptions

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

Largest 10 – Non-Hazardous Duty:

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

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

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

# Statistical Section

The Statistical Section supports and provides additional historical perspective, context and detail to the Financial Section.

#### **Financial Trends**

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time.

Net Position by Component Changes in Net Position Operating Revenues by Source Operating Expenses Nonoperating Revenues

#### **Revenue Capacity**

This schedule contains information to help the reader assess the Authority's significant revenue sources.

Curbside Recycling and Municipal Solid Waste Rates

#### **Debt Capacity**

The Authority does not issue debt and as a result no disclosure is required.

#### **Economic and Demographic Information**

These schedules offer economic and demographic indicators to help the reader understand the environment within which the Authority's financial activities take place.

Revenue by Locality Demographic and Economic Statistics Principal Employers

#### **Operating Information**

These schedules contain service and operational data to help the reader understand how the information in the Authority's financial report relates to the services the Authority provides and the activities it performs.

Materials Collected Number of Customers by Type Number of Employees by Function

**Net Position by Component – Last Nine Fiscal Years** 

	Capital		Total		
Fiscal	Assets		Net		
Year	Net	Unrestricted	Position		
2019	\$ 48,479	\$ 729,152	\$ 777,631		
2018	58,286	722,481	780,767		
2017	69,658	683,708	753,367		
2016	49,470	639,449	688,919		
2015	41,786	588,655	630,441		
2014	6,087	652,971	659,058		
2013	11,375	629,728	641,103		
2012	11,981	615,825	627,806		
2011	31,268	609,446	640,714		

<sup>\*</sup>GASB Statement No. 68 was adopted in fiscal year 2015.

#### **Changes in Net Position – Last Ten Fiscal Years**

Fiscal Year	Operating Revenues	Operating Expenses	Operating Income (Loss)	Non-o Rev	otal perating enues enses)	Change in Net Position		
2019 2018 2017 2016 2015 2014 2013 2012 2011 2010	\$ 16,474,821 15,843,573 15,809,592 14,668,426 13,451,160 13,444,295 14,288,408 14,858,298 14,044,355 13,818,000	\$ 16,548,024 15,830,244 15,792,426 14,655,568 13,402,929 13,441,342 14,291,731 14,913,076 14,116,751 13,924,345	\$ (73,203)) 13,329 17,166 12,858 48,231 2,953 (3,323) (54,778) (72,396) (106,345)	\$	70,067 63,001 47,282 45,620 31,812 15,002 16,620 41,870 49,715 34,025	\$	(3,136) 76,330 64,448 58,478 80,043 17,955 13,297 (12,908) (22,681) 222,320)	

#### Notes:

The significant change in Net Position for fiscal year 2010 was due mostly to a rebate of \$150,000 of accumulated funds given back to the member jurisdictions. This rebate was based on each member's prorated earnings in the recycling markets. CVWMA's Net Position Policy allows the Authority to consider a rebate of unrestricted net position in excess of 5% of total operating budget. Although approximately 95% of the budget is pass through to localities depending on participation, the Authority feels it is prudent to continue to build reserves in the event significant resources are needed in the future.

#### **Operating Revenues by Source – Last Ten Fiscal Years**

	Local Gov't Assmts	Recycling(1)	Refuse and Solid Waste(2)	Composting and Yard Waste(3)	Other Projects(4)	Material Sales(5)	Total
2019	\$561,661	\$ 9,624,916	\$ 4,612,401	\$ 490,231	\$ 331,592	\$ 854,020	\$16,474,821
2018	558,825	8,294,822	4,614,706	478,302	324,940	1,571,978	15,843,573
2017	552,522	8,140,823	4,583,544	545,261	260,544	1,726,898	15,809,592
2016	548,282	7,976,957	4,245,042	306,797	247,500	1,343,848	14,668,426
2015	533,205	7,221,900	3,871,868	326,904	174,062	1,323,221	13,451,160
2014	533,205	7,250,055	4,502,336	478,503	204,355	475,841	13,444,295
2013	533,205	7,048,641	5,633,416	474,475	202,976	395,695	14,288,408
2012	515,894	6,766,758	6,144,498	675,122	221,092	534,934	14,858,298
2011	508,688	6,405,782	6,009,299	429,922	210,715	479,949	14,044,355
2010	503,312	6,270,895	6,053,238	445,477	209,243	335,835	13,818,000

#### Notes:

Member jurisdictions have the option to choose from a menu of services that best meet their individual needs.

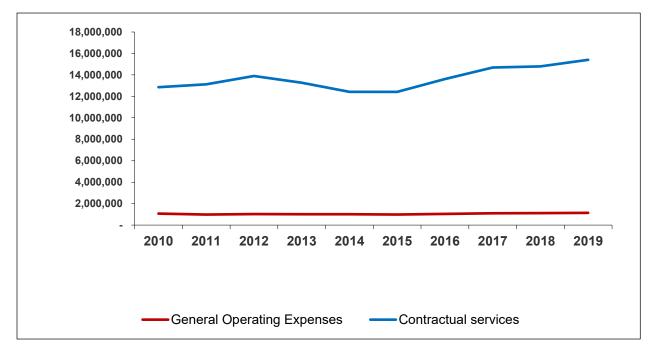
- (1) Recycling programs include residential and drop off recycling services, which include the recycling of traditional materials such as paper, cardboard and aluminum, plastic and glass bottles, and containers and cartons. The City of Richmond rolled out large recycling carts to about 61,500 equivalent residential units in July 2015. In addition, the City of Hopewell joined the curbside recycling program in July 2014. The CVWMA implemented curbside recycling in the City of Petersburg in March 2013. The CVWMA negotiated an early renewal of the contract for residential collection and processing of recyclable material, which became effective May 1, 2014, resulting in savings to participating localities. In fiscal year 2012 the CVWMA implemented a program which allows citizens to purchase 95-gallon recycling carts online. Currently, nine localities participate in residential recycling and ten participate in drop off recycling. In fiscal year 2019, the Authority renegotiated the contract for residential recycling collection with the vendor servicing 7 of the 9 jurisdictions participating in curbside recycling. This was due to the significant disruption in the global recycling markets for 2/3 of the volume of material. CVWMA now pays a maximum \$30/ton for each ton of material collected on the curb, in comparison to year's past where nothing was paid for processing and the Authority enjoyed rebates from the sale of recyclables.
- (2) The refuse and solid waste programs include municipal solid waste collection and disposal in Ashland, Colonial Heights, Hopewell, Petersburg and certain residential units in Chesterfield; and transfer and disposal from the convenience centers in Chesterfield, Goochland, New Kent and Powhatan. As of 2011, Prince George no longer participates in the convenience center program. Since July 1, 2012, CVWMA has procured and negotiated new contracts for trash collection in Ashland, Colonial Heights, Hopewell, and Petersburg, resulting in a significant reduction in costs. Additionally, a new procurement in 2012 resulted in significantly reduced rates for hauling and disposal of waste from 9 area convenience centers. In 2016, Chesterfield began providing trash collection to nearly 2,500 tax-relief customers through the Authority.
- (3) The yard waste grinding and leaf composting contracts are on an as needed basis with no minimum volume guaranteed. The increase in activity in 2012 was due to Hurricane Irene.
- (4) Other projects include other waste disposal and recycling programs such as waste tire recycling, appliance and scrap metal recycling and household hazardous waste disposal are provided on an "as needed" basis.
- (5) The revenue generated from the sale of recyclables is dependent upon the market at the time of the sale. Markets have fluctuated in the last ten years typically related to the fluctuation in the economy. In FY 2014, the Authority negotiated a renewal of the curbside recycling contract to include a rebate effective May 1, 2014, however due to significant downturns in the market, the rebate was suspended effective April 1, 2018. As a result the CVWMA renegotiated its contract with its largest residential recycling vendor, paying a maximum of \$30/ton in FY 2019.

#### **Operating Expenses – Last Ten Fiscal Years**

	 nistrative erating	Salaries And Benefits	 fessional Service Fees	Dep	reciation	_	Project Contractual Services	Material Sales Rebates*	Total Operating Expenses
2019	\$ 288,088	\$ 755,092	\$ 71,426	\$	24,847	\$	14,562,931	\$ 845,640	\$ 16,548,024
2018	270,770	728,456	71,422		21,664		13,201,409	1,598,671	15,830,244
2017	300,345	720,328	61,356		15,961		13,041,006	1,653,430	15,792,426
2016	258,964	688,984	80,241		12,186		12,307,502	1,307,691	14,655,568
2015	241,959	667,420	61,985		12,301		11,130,568	1,288,696	13,402,929
2014	234,949	707,418	65,959		5,288		11,985,140	442,588	13,441,342
2013	225,782	714,568	67,346		10,606		12,923,072	350,357	14,291,731
2012	257,528	679,827	63,857		19,288		13,391,649	500,927	14,913,076
2011	214,794	679,960	70,356		23,453		12,658,523	469,665	14,116,751
2010	270,952	690,548	75,274		27,485		12,533,001	327,085	13,924,345

#### Notes:

The Authority, in partnership with the Curbside Value Partnership (a national non-profit firm dedicated to increasing recycling rates at the curb through promotion and outreach), implemented and executed a campaign in FY 2012 in an effort to increase recycling participation rates and volumes in the curbside recycling program. In FY 2013 the Authority completed the phase-in of the VRS employee contribution of 5%, which resulted in pay increases of 5%. Three full-time employees retired from the Authority in calendar year 2013. General operating expenses, including salaries, benefits and professional fees have remained relatively constant in relation to program costs over the last ten years. A rebate of \$669,367 was received in FY 2015 as a result of an early renewal of the residential recycling contract provided to 255,000 households and that rebate was suspended in April 1, 2018 due to significant downturns in the recycling markets and was not reinstated in fiscal year 2019. In FY 2016, the Authority hired Zellos to consult and assist with the implementation of the Authority's Strategic Plan. In late 2015, the Authority increased the Recycling Education and Outreach Specialist from part-time to a full-time position under the Public Affairs program. In FY2019, the Authority hired a consultant to provide a pay, classification and benefits study for full-time staff positions and the results were fully implemented in March 2019.



#### Nonoperating Revenues – Last Ten Fiscal Years

[incol.	Cranta and	Interest		Total
Fiscal	Grants and	Interest		Nonoperating
Year	Sponsorships	Income	Miscellaneous	Revenues
2019	\$ 10,000	\$ 60,067	\$ -	\$ 70,067
2018	15,000	47,995	6	63,001
2017	10,000	29,453	7,829	47,282
2016	24,500	21,120	-	45,620
2015	10,000	21,812	-	31,812
2014	10,000	4,702	300	15,002
2013	10,000	6,075	545	16,620
2012	27,500	14,370	-	41,870
2011	10,000	28,415	11,300	49,715
2010	13,800	20,225	-	34,025

#### Notes:

The Authority has negotiated with TFC Recycling to contribute \$10,000 annually to promote residential recycling through sponsorship of the annual collection schedule. In 2018, CVWMA received monies from the National Carton Council in the amount of \$5,000 to promote the recycling of cartons. Seven sponsors contributed \$14,500 toward the CVWMA's 25<sup>th</sup> Anniversary events in 2015. The Authority sold two vehicles in FY2017, netting \$7,829 in revenue.

In 2015, the Authority implemented another payment option for vendors, which has resulted in earning a rebate on the payment to vendors via a purchasing card. Previously, the Authority was selected for a partnership with Curbside Value Partnership (CVP) to promote curbside recycling. This campaign was launched in the fall of 2011 and Tidewater Fiber Corporation contributed \$20,000 toward the campaign. The Authority also received a sponsorship from Sonoco Recycling for the 2012 Curbside Recycling Calendar in the amount of \$7,500. The Authority received a sponsorship from Dominion Resources for the 2011 Curbside Recycling Calendar. The Authority also received funds from fourteen sponsors for the CVWMA's 20<sup>th</sup> Anniversary event in FY 2011.

## Residential Recycling and Municipal Solid Waste Rates Last Ten Fiscal Years

#### Residential Recycling - Rates per household per month

			Bi-Weekly			
	Bi-V	Veekly	Collection	Weekly	Public	Customer
	<u>Coll</u>	<u>lection</u>	<u>w/ cart</u>	Collection	<u>Information</u>	<u>Service</u>
2019	\$	1.910	\$ 1.650-3.000		\$ .066	\$ .070
2018		1.860	1.600-2.930	-	.065	.069
2017		1.840	1.540-2.930	-	.064	.068
2016		1.800	1.490-2.860	-	.063	.067
2015		1.800	1.470-2.420	-	.063	.067
2014		1.800	2.420	-	.063	.066
2013		1.815	2.872	2.872	.062	.065
2012		1.767	-	2.797	.060	.063
2011		1.721	-	2.723	.060	.061
2010		1.682	-	2.662	.080	.060
2010		1.682	-	2.662	.080	.0

#### Notes:

The curbside recycling program collection rates vary based on the participating jurisdictions level of service desired. In 2015, the City of Hopewell added residential recycling to its menu of services. In Fiscal Year 2013, both Ashland and Colonial Heights converted from a weekly collection program to bi-weekly with 95-gallon carts and the City of Richmond converted from bins to carts in 62,000 homes in 2016. Therefore, no jurisdiction is providing weekly collection anymore. The current contract became effective July 1, 2009 and an early renewal was negotiated effective May 1, 2014 resulting in reduced per household fees and rebate on each ton collected at the curb from one vendor. A fee is charged participating localities for public education and the CVWMA uses those funds to promote the program regionally. The public relations rate was reduced in FY 2011 to .06 cents/household per month during the budget process. A separate fee is charged for customer service provided by the Authority.

	Municipal Solid Waste Collection per household <u>Per month</u>	Tipping Fees Range Dollars <u>Per Ton</u>
2019	\$7.00 - \$10.35	\$17,85 - \$20.07
2018	\$7.00 - \$10.35	\$17.24 - \$19.39
2017	\$7.00 - \$10.35	\$17.29 - \$19.01
2016	\$5.02 - \$10.35	\$16.90 - \$22.50
2015	\$5.02 - \$10.35	\$16.00 - \$22.50
2014	\$5.02 - \$15.40	\$16.00 - \$22.50
2013	\$5.02 - \$15.19	\$28.05 - \$38.30
2012	\$9.51 - \$14.93	\$29.34 - \$37.66
2011	\$9.18 - \$14.41	\$29.25 - \$36.30
2010	\$9.00 - \$14.13	\$27.76 - \$35.59

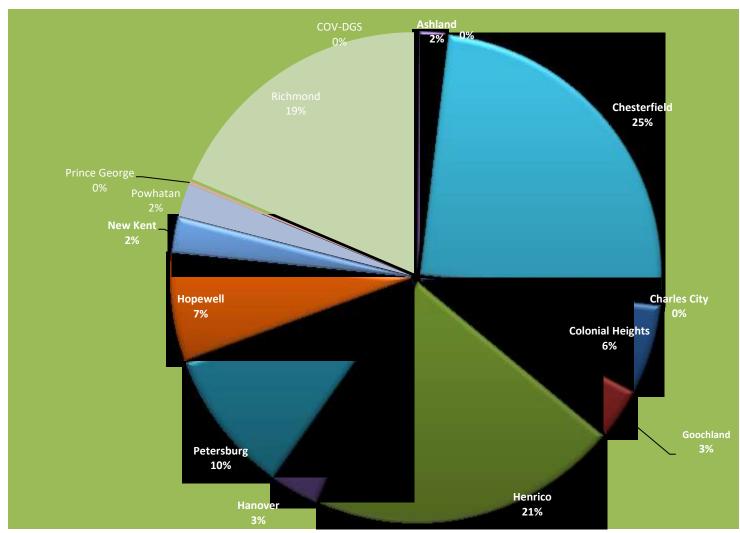
The current municipal solid waste contracts include the Cities of

Colonial Heights, Hopewell and Petersburg, the Town of Ashland and the County of Chesterfield. The rates include collection and disposal except in the City of Petersburg where disposal is free based on a host agreement between the City and the privately-owned landfill

The Authority also has contracts for waste disposal from area convenience centers. The tipping fees (per ton disposal fees) were reduced in fiscal year 2014 with the procurement of new contracts for Chesterfield, Goochland, New Kent and Powhatan.

#### Revenue by Locality – Current Year and Nine Years Ago

Locality	2019 Operating Revenues	2019 Percent of Revenue	Locality	2010 Operating Revenues	2010 Percent of Revenue
County of Chesterfield	\$ 3,841,971	24.9%	County of Chesterfield	\$ 3,318,104	24.6%
County of Henrico	3,184,953	20.6%	County of Henrico	2,525,292	18.7%
City of Richmond	2,868,486	18.6%	City of Richmond	1,604,945	11.9%
City of Petersburg	1,473,500	9.6%	City of Petersburg	1,418,338	10.5%
City of Hopewell	1,106,921	7.2%	City of Hopewell	1,395,594	10.4%
City of Colonial Heights	916,598	5.9%	City of Colonial Heights	1,033,505	7.7%
County of Goochland	504,518	3.3%	County of Goochland	583,347	4.3%
County of Hanover	490,547	3.2%	County of Powhatan	501,490	3.7%
County of New Kent	380,490	2.4%	County of New Kent	411,763	3.1%
County of Powhatan	341,744	2.2%	Town of Ashland	309,394	2.3%
Town of Ashland	253,367	1.7%	County of Hanover	225,008	1.7%
County of Prince George	27,689	0.2%	County of Prince George	149,543	1.1%
Commonwealth VA-DGS	27,362	0.2%	County of Charles City	3,382	0.0%
County of Charles City	3,481	0.0%	Commonwealth VA-DGS	0	<u>0.0%</u>
Totals	\$15,426,628	<u>100.0%</u>		\$ 9,615,311	100.0%



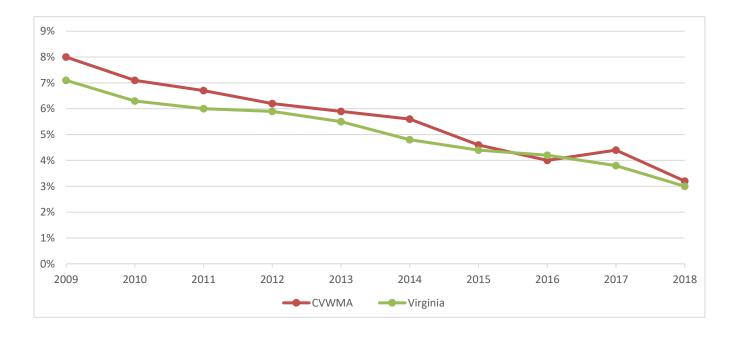
#### **Demographic and Economic Statistics – Last Ten Calendar Years**

Calendar	<u>Population</u>	Average		<u>Unemployme</u>	ent Rate
<u>Year</u>		<u>Income</u>		<u>CVWMA</u>	Virginia
2018	1,199,092	\$	59,010	3.2%	3.0%
2017	1,183,241		57,772	4.4%	3.8%
2016	1,170,128		53,723	4.0%	4.2%
2015	1,164,023		52,136	4.6%	4.4%
2014	1,151,077		50,405	5.6%	4.8%
2013	1,142,254		46,730	5.9%	5.5%
2012	1,132,928		45,339	6.2%	5.9%
2011	1,112,543		43,468	6.7%	6.0%
2010	1,110,843		41,370	7.1%	6.3%
2009	1,085,076		40,927	8.0%	7.1%

Source of Data: Weldon Cooper Center for Public Service, University of Virginia, Bureau of Economic Analysis, and Virginia Employment Commission.

The data above represents the Central Virginia Waste Management Authority Service Area which includes the Cities of Colonial Heights, Hopewell, Petersburg and Richmond; the Town of Ashland; and the Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Prince George.

#### **Unemployment Rate Comparison**



#### **Central Virginia Principal Employers**

#### **Current Year and Nine Years Ago**

Employer **	Calendar Year 2018*	Calendar Year 2009*
Virginia Commonwealth University Capital One Bank MCV Hospitals/VCU Health Systems Henrico County School Board Chesterfield County School Board Bon Secours Richmond Health Systems HCA Virginia Health Systems County of Henrico Wal Mart Richmond City Public Schools State Government	2018*  Rank 1 2 3 4 5 6 7 8 9 10 n/a	
Federal Government Chesterfield County	n/a n/a	3
Richmond City Dominion Resources	n/a n/a	5 9

<sup>\*</sup> Virginia Employment Commission - Economic Information & Analytics

Source of Data: Greater Richmond Partnership

<sup>\*\*</sup> The Virginia Employment Commission does not disclose the actual number of employees, due to the Confidential Information Protection and Statistical Efficiency Act - Title V of Public Law 107-347. All employers have over 1,000 individuals employed.

#### **Material Collected – Last Ten Fiscal Years**

Fiscal Year	Tons Recycled*	Tons of Municipal Solid Waste	Cubic Yards of Yard Waste	Gallons of Paint Collected	Gallons of Used Oil Collected	Tons of Batteries Recycled	Propane Tanks Recycled	Tons of Tires Recycled	Tons of Electronics Recycled	Tons of Textiles
2019	48,059	79,887	105,184	15,985	172,825	75.3	2,296	893	169	774
2018	48,238	76,512	86,796	14,355	166,390	67.6	2,342	939	154	786
2017	49,138	71,899	115,284	12,540	179,319	60.3	1,994	702	229	946
2016	46,347	68,097	167,360	11,440	176,887	55.0	1,411	707	274	1,012
2015	45,049	65,059	180,092	10,560	112,143	35.2	1,408	724	185	1,033
2014	40,007	65,095	269,604	9,075	105,713	29.5	1,082	766	405	814
2013	42,943	61,923	234,460	8,745	114,804	30.4	1,105	787	410	548
2012	41,936	72,272	363,219	12,045	112,230	42.2	1,141	736	406	423
2011	41,886	72,434	255,388	12,155	116,805	19.1	1,597	778	365	333
2010	42,824	74,646	257,925	12,485	131,025	33.5	974	882	320	290

<sup>\*</sup> Includes paper, metals, plastic and glass.

Source of Data: CVWMA Operations Department

## Number of Customers by Type – Last Ten Fiscal Years Residential Recycling

Fiscal			Colonial							
Year	Ashland	Chesterfield	Heights	Goochland	Hanover	Henrico	Hopewell	Petersburg	Richmond	Total
2019	1,465	94,930	6,701	1,637	3,705	85,007	8,644	11,064	61,588	274,741
2018	1,465	94,930	6,701	1,495	3,705	84,909	8,644	11,021	61,521	274,434
2017	1,465	95,007	6,701	1,336	3,553	84,909	8,644	11,064	61,487	274,166
2016	1,465	95,693	6,701	1,242	3,257	84,909	8,644	11,064	61,487	274,462
2015	1,465	97,600	6,635	1,238	2,837	84,909	8,649	11,199	61,487	276,019
2014	1,465	97,585	6,701	1,238	2,837	84,909	-	11,203	61,487	267,425
2013	1,465	97,585	6,701	1,238	2,837	84,528	-	10,998	61,428	266,780
2012	1,465	97,566	6,360	1,146	2,837	84,361	-	-	61,159	254,894
2011	1,465	95,744	6,335	957	2,760	83,760	_	-	60,826	251,847
2010	1,465	94,347	6,308	1,232	2,728	82,720	-	-	60,508	249,308

#### **Municipal Solid Waste Collection**

Fiscal			Colonial			
Year	Ashland	Chesterfield	Heights	Hopewell	Petersburg	Total
2019	1,706	1,819	6,815	8,678	11,025	28,337
2018	1,465	1,999	6,751	8,644	11,021	29,908
2017	1,465	2,115	6,701	8,644	11,064	29,954
2016	1,465	2,301	6,632	8,648	11,064	30,110
2015	1,465	-	6,635	8,647	11,199	27,946
2014	1,465	=	6,701	8,644	11,203	28,013
2013	1,465	-	6,701	8,644	10,998	27,808
2012	1,465	=	6,250	8,644	11,810	28,169
2011	1,465	-	6,337	8,644	11,810	28,256
2010	1,465	-	6,488	8,768	11,811	28,532

#### Notes:

Each member locality has the option to choose from a menu of programs that best meet their needs. The above represents the jurisdictions that participate or have participated in the residential recycling and municipal solid waste programs. The other Authority programs are available to all residents of the jurisdiction(s) that participate in those programs.

The City of Petersburg joined the municipal solid waste collection program July 1, 2002 and the residential recycling program in March 2013.

The City of Hopewell implemented residential recycling in July 2014.

The County of Chesterfield implemented the municipal solid waste collection for their tax-relief citizens in August 2015.

Source of Data: CVWMA Operations Department

#### Number of Employees by Function – Last Ten Fiscal Years

Full-time Equivalent Employees as of June 30, <u>2019</u> <u>2018</u> <u>2017</u> <u>2016</u> <u>2015</u> <u>2014</u> <u>2013</u> 2012 <u>2011</u> <u>2010</u> **Program Management and Operations** 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 **Public Information and Education** 2.0 2.0 2.0 2.0 2.0 1.5 1.5 1.5 1.5 1.5 Finance and Administration 3.0 3.0 3.0 3.0 2.5 3.0 3.5 3.5 3.5 3.5 Call Center Operations <u>3.5</u> <u>3.5</u> <u>3.5</u> <u>3.5</u> <u>3.5</u> 3.0 <u>3.5</u> <u>3.5</u> <u>3.5</u> 4.0 **Total Employees** <u>11.0</u> <u>11.0</u> <u>11.0</u> <u>11.0</u> 10.5 10.0 <u>11.0</u> 11.0 11.0 <u>11.5</u>

CVWMA provides recycling and solid waste management programs to its member localities through the use of contracts with the private sector.

Source of Data: CVWMA Administrative Office

# Compliance Section



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

To the Audit Committee and Board of Directors Central Virginia Waste Management Authority Richmond, Virginia

We have audited, in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of each major fund of the Central Virginia Waste Management Authority (the "Authority"), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated September 17, 2019.

#### **Internal Control over Financial Reporting**

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

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or 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 Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance 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 Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

CERTIFIED PUBLIC ACCOUNTANTS

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

Harrisonburg, Virginia September 17, 2019

#### CENTRAL VIRGINIA WASTE MANAGEMENT AUTHORITY SUMMARY OF COMPLIANCE MATTERS June 30, 2019

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

#### **STATE COMPLIANCE MATTERS**

*Code of Virginia*:

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