### **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

Fiscal Year Ended June 30, 2020



Central Virginia Waste Management Authority



### Comprehensive Annual Financial Report

July 1, 2019 Through June 30, 2020

Prepared By:

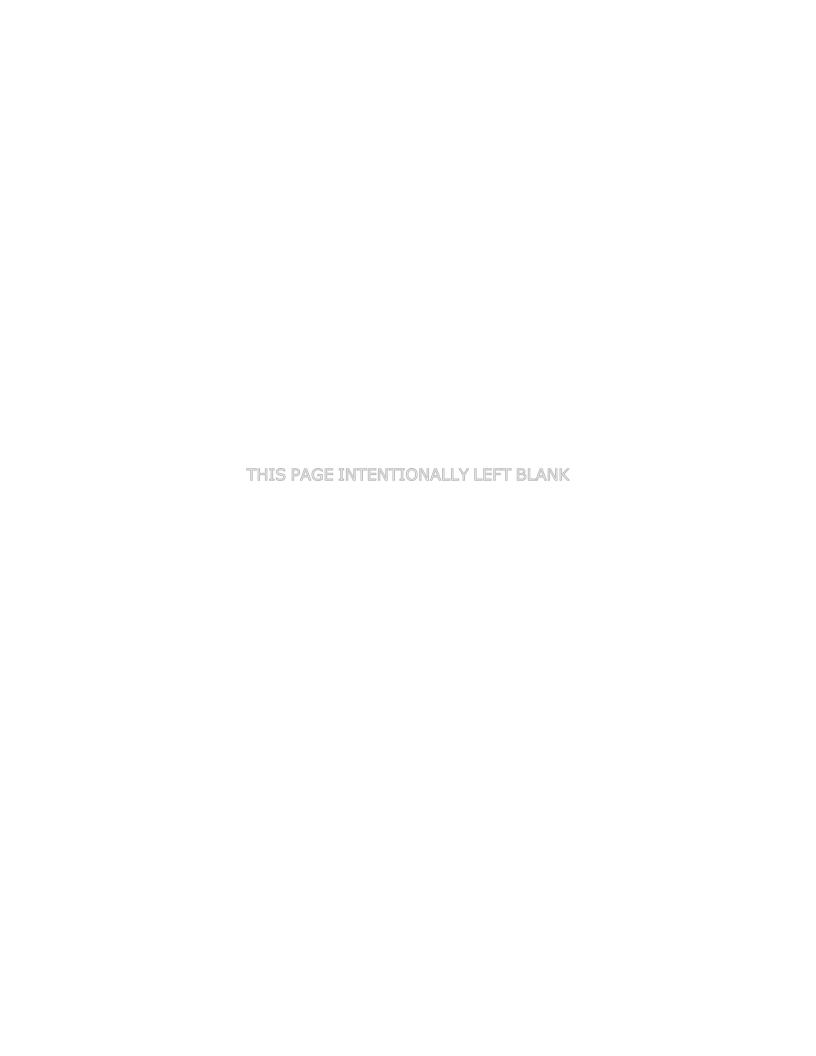
Kenna Shea Accounting and Financial Manager

> Kimberly A. Hynes Executive Director

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## Introductory Section





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www.cvwma.com

September 1, 2020

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, 2020 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**

There is no question, the COVID-19 pandemic shuddered the global economy. This time last year, the national economy was healthy and growing and although economic growth was expected to slow into 2020 and 2021, the pandemic dealt an unprecedented and unexpected blow to consumer spending and gross domestic product (GDP). Annual GDP decreased 5% and 31.7% in the first and second quarters 2020, respectively. This decline was reflective of the response to COVID-19, as "stay at home" orders were put in place and government assistance was issued. Businesses and schools closed and non-essential workers continued remotely working or became unemployed. As a result, consumers and businesses were forced to restrict and even cancel spending.

National unemployment reached a record high in April of 14.7% and has declined to 10.2% in July 2020. Virginia's unemployment rate of 8.0%, up from 3% last year, remains below the national average and unemployment in central Virginia as of June 2020 was 9.3%. Over 30 million workers applied for unemployment benefits since March 15, the hardest hit industries being arts, entertainment, accommodation and travel.

The economic outlook is uncertain. Residential construction is expected to slow as many consumers may find themselves unable to afford new homes and exports are expected to drop as economic activity slows abroad. The rebound of the economy will depend on the development of a vaccine for COVID-19, the recovery of other countries, the job market and how quickly consumers regain confidence that they are safe, medically and financially.

Trash and recycling services don't always make the list of "essential" services; however the volume of trash and recycling has significantly increased as a result of COVID-19. We have seen a shift in volumes from commercial to residential with more people working and taking classes from home. In addition to being at home, residents have taken the opportunity to tackle home improvement projects and large clean outs and are ordering more than ever from retailers for delivery. Waste and recycling are good indicators of economic health. The amount of waste discarded has been steadily increasing over the last several years as population and consumer spending and thus the economy has grown. Trash and recycling volumes increased 13.5% in the last quarter of the fiscal year from the same period in 2019 in residential programs. Some of this volume replaced commercial volume.

The Authority strives to manage our waste balancing environmental and economic impacts. The continued success of recycling programs locally and globally is dependent on viable end markets and demand for the material. Interestingly in the last several months, market demand and prices for mixed paper and cardboard improved for the first time since the spring of 2018, to a level where in May and June our cost for residential recycling per ton decreased. The demand for recycled cardboard and mixed paper increased as shortages of items such as toilet paper and paper towels mounted and as delivery services ramped up during the pandemic.

More than 2 years ago, China disrupted the marketplace, resulting in an oversaturation in the market of paper and cardboard, thus market prices for those commodities have remained suppressed and we are still working to adjust. Innovation and expansion of recycling markets are emerging right here in the US, which will lessen our reliance on China and other foreign governments. In Virginia, the Governor announced recently a new paper mill slated to open in 2021 that will have the capacity to pulp 300,000 tons of recycled fiber and will create 68 new jobs. Expansion and reconfiguration of a former newsprint mill in this region will recycle other types of fiber. It is taking some time for markets to bounce back, but recycling is very much alive and a significant contributor to the local and global economy.

#### **MAJOR INITIATIVES**

The Authority implemented the goals and objectives of the 2016 to 2020 strategic plan. Although, the plan had a finite term, CVWMA continues to foster the mission established in the planning processes of "fostering 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 look for ways to affect change that is productive and that will have lasting impacts on the environment locally and globally. In fiscal year 2020, the Authority hired two solid waste and recycling consulting firms to assist in assessing the recycling and solid waste landscape in central Virginia and develop long-term strategic goals and objectives that will provide for more efficient and effective programs for the region while balancing local challenges and the diversity in our localities. Evaluating our existing residential recycling program and determining best practices for recycling and waste management for the next procurement was our first project. In addition to CVWMA utilizing consultants for the expertise in the waste and recycling field, our localities benefit from being able to use our contracts for their own projects.

Although fiber recycling markets have remained suppressed over the last couple of years, it became evident during the pandemic, the demand and need for recycled products remains strong and markets can adjust. CVWMA strives to negotiate contracts with private entities that provide the best value to member jurisdictions. Through successful negotiation of the recycling contracts, when demand and thus recycling market prices increase for recycled good, costs are reduced to localities. Several contracts generate revenue and CVWMA provides the majority of revenue generated from the sale of recyclable material back to participating localities. CVWMA's largest and most visible contract for Residential Recycling Services accounts for over half of the Authority's revenue. That contract ends in 2023 and CVWMA, in collaboration with member localities, is already working on procurement of those services with the goal of improving and enhancing recycling while balancing the needs and wants of individual localities.

The Authority was invited to join the newly formed US Plastics Pact, a collaborative, solutions-driven initiative to drive significant systems change to create a path forward toward a circular economy for plastics in the US. The Pact has developed four lofty goals that include:

- 1. Defining a list of packaging designated as problematic or unnecessary by 2021 and take measures to eliminate by 2025;
- 2. By 2025, all plastics packaging is 100% reusable, recyclable or compostable.
- 3. By 2025, undertake ambitious actions to effectively recycle or compost 50% of plastic packaging; and
- 4. By 2025, the average recycled content or responsibly sourced bio-based content in plastic packaging will be 30%.

The CVWMA is excited to be a part of the launch of the US Plastics Pact, furthering our mission to affect change that is productive and will have lasting positive impacts on the environment globally and locally.

The Authority, through strong public-private partnerships, created and built robust recycling programs, promotes waste reduction and reuse, resulting in millions of tons diverted from landfills over our first 30 years. We continue to increase awareness, knowledge and access to information and service that result in a positive environmental impact.

As the landscape of solid waste management and recycling is ever-changing in central Virginia and around the world, CVWMA is committed to providing regional planning, initiatives and programs to member localities to balance the economics of an evolving industry. In December 2020, the Authority will celebrate 30 years and as we recognize the strides and significant contributions the Authority has made in the region since 1990, we look forward to continuing to follow our vision of being the recognized leader in regionally sustainable waste management practices that protect the environment.

#### **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, 2020. 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, 2019. This was the twenty third 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 Executive Director

Kimberlyathynes

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, 2019

Christopher P. Movill

Executive Director/CEO

#### 2019-2020 Board of Directors

Marcia R. Phillips, County of Chesterfield

Chair

Patricia Paige, County of New Kent **Vice-Chair** 

Michael Purvis, County of Prince George **Treasurer** 

Jenny Schontag, Town of Ashland Ricky Hicks, County of Charles City Scott Zaremba, County of Chesterfield Doug Smith, City of Colonial Heights Wendy Grady, County of Goochland Stephen E. Chidsey, County of Hanover Sue Dibble, County of Hanover Miles Jones, City of Richmond **Secretary** 

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

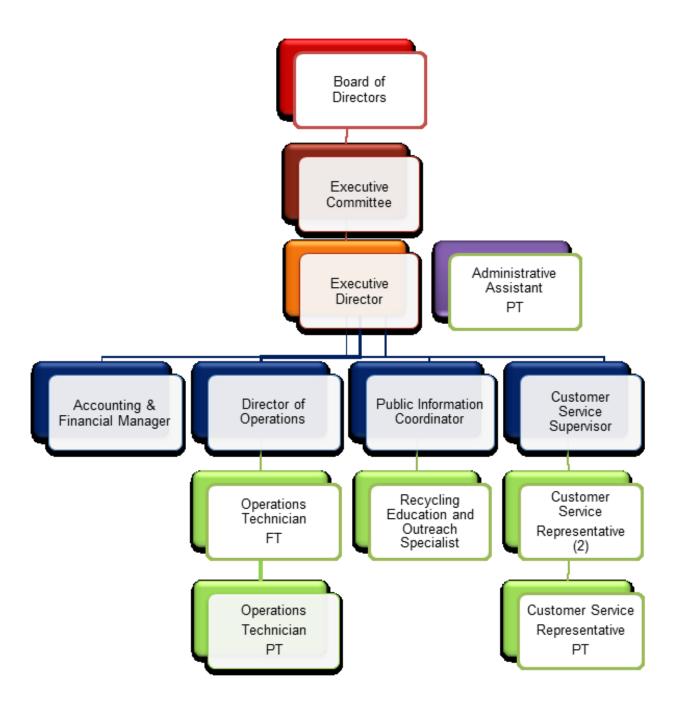
Marcia E. Kelley, County of Henrico Robert Whiteman, County of Henrico J. Allen Lane, County of Henrico Monique Robertson, City of Hopewell Tangela Innis, City of Petersburg Karin Carmack, County of Powhatan

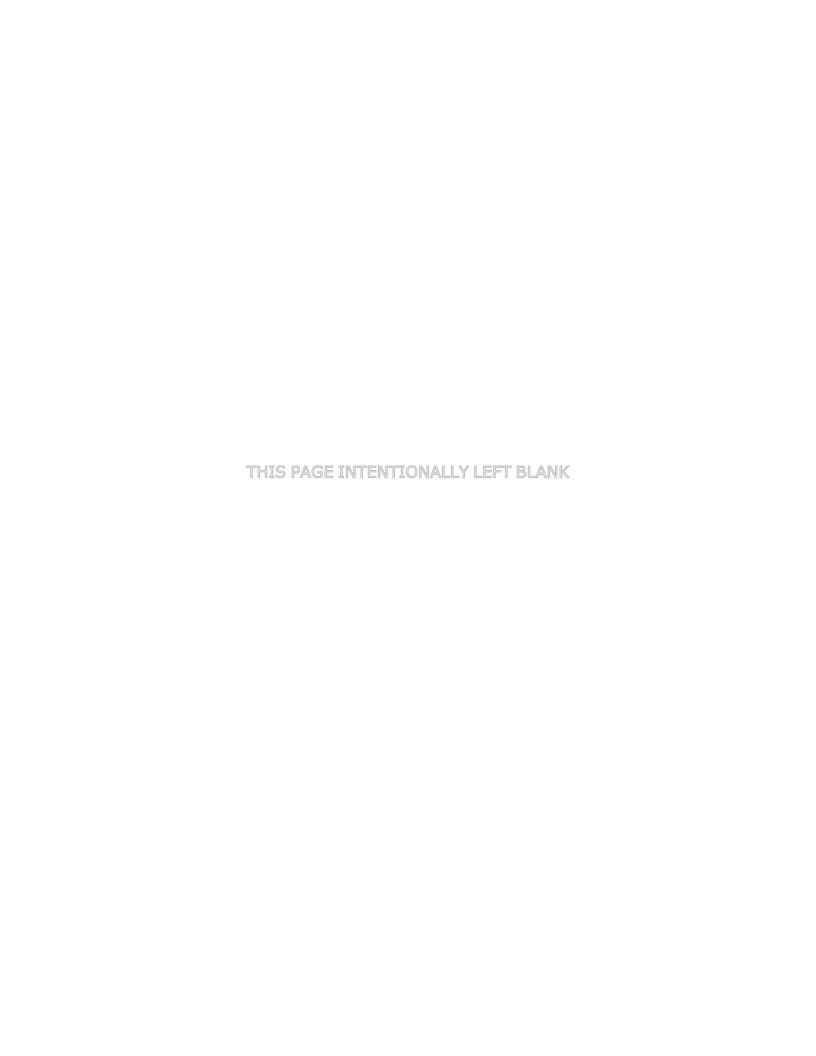
#### **Administrative Staff**

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
Stephanie N. Breaker, Customer Service Supervisor
Angela Burley, Customer Service Representative
Mary Beth Mains, Administrative Assistant, part-time
Charles R. Howe, Operations Technician, part-time
Stephanie Anderson, Customer Service Representative, part-time
Barbara Trimmer, Accounting Technician, part-time

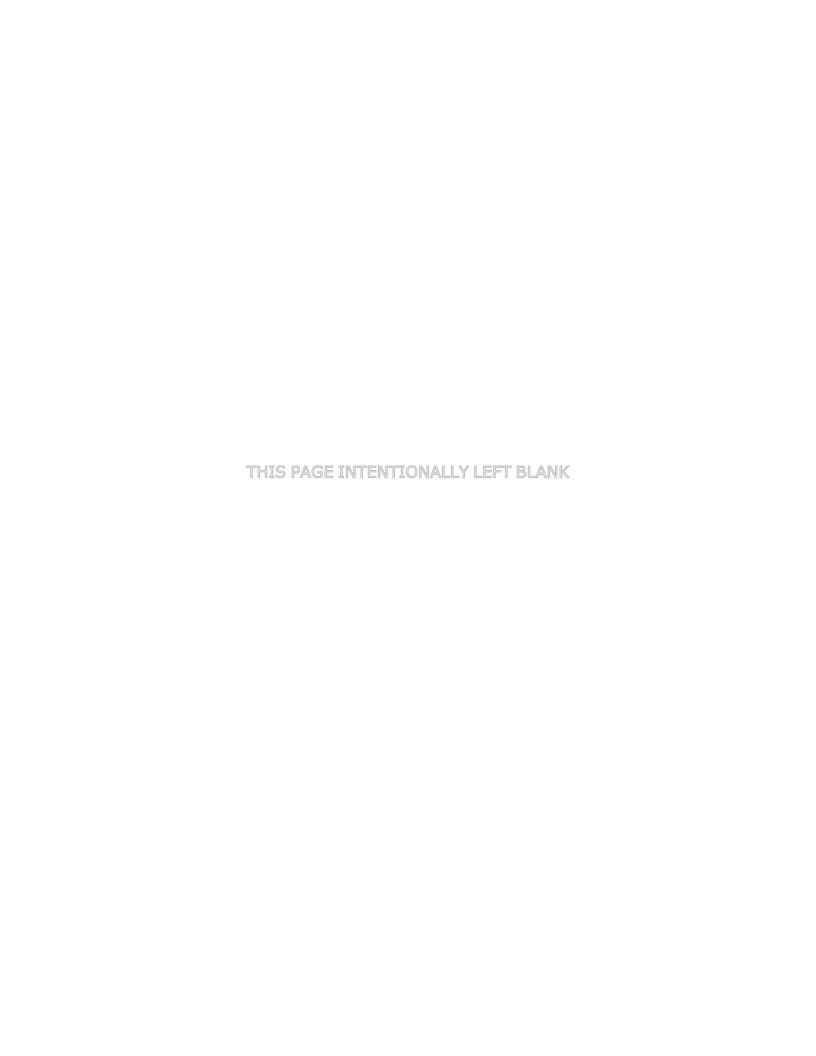
CVWMA General Counsel James Snyder McCandlish Holton PC







## 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, 2020, 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 the Central Virginia Waste Management Authority, as of June 30, 2020, and the respective changes in financial position and, where applicable, 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 require 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, 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 2019 financial statements, and our report dated September 17, 2019 expressed an unmodified opinion on those financial statements. In our opinion, the summarized comparative information presented therein for the year ending June 30, 2019 is consistent, in all material respects, with the audited financial statements from which it has been derived.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 1, 2020 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

CERTIFIED PUBLIC ACCOUNTANTS

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

Harrisonburg, Virginia September 1, 2020

# 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, 2020. 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 \$690,971 at the close of the 2020 fiscal year. Total net position decreased by \$86,660. Operating revenues increased by 8.7% or \$1,440,726 to \$17,915,547. Operating expenses increased 9.0% or \$1,493,956. Non-operating revenues decreased by 43% to \$39,773. The costs of recycling have risen as a result of the lingering downturn in the recycling markets coupled with the pandemic, volumes and participation in recycling sharply increased in the last quarter of the fiscal year.

The Authority's capital assets consist of computer equipment, office furniture, vehicles and leasehold improvements. Net capital assets decreased \$11,674. CVWMA renegotiated the office lease and upgraded the space to include some additional leasehold improvements purchased of \$5,900. No assets were retired this year.

#### **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 FY2020 and FY2019.

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

			Chan	ge
	2020	2019	Amount	%
Assets: Current Capital assets, net	\$ 5,224,691 36,805	\$ 4,319,512 48,479	\$ 905,179 (11,674)	20.96% -24.08%
Long Term	-	-	-	0.00%
Total assets	 5,261,496	4,367,991	893,505	20.46%
Deferred Outflows of Resources	91,715	49,332	42,383	85.91%
Liabilities Current Long Term	4,493,982 140,327	3,544,933 72,532	949,049 67,795	26.77% 93.47%
Total liabilities	4,634,309	3,617,465	1,016,844	28.11%
Deferred Inflows of Resources	27,931	22,227	5,704	25.66%
Net position: Net investment in capital assets Unrestricted	36,805 654,166	48,479 729,152	(11,674) (74,986)	-24.08% -10.28%
Total net position	\$ 690,971	\$ 777,631	\$ (86,660)	-11.14%

## 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,

				Cha	nge
	<u>2020</u>	<u>2019</u>	_	Amount	<u></u> %
Operating revenues:					
Local government assessments	\$ 567,956	\$ 561,661	\$	6,295	1.1%
Recycling	10,675,991	9,624,916		1,051,075	10.9%
Refuse and solid waste	5,116,607	4,612,401		504,206	10.9%
Composting and yard waste	649,687	490,231		159,456	32.5%
Other project revenue and fees	276,468	331,592		(55,124)	-16.6%
Material sales rebate	628,838	854,020		(225,182)	-26.4%
Total operating revenues	17,915,547	16,474,821		1,440,726	8.7%
Operating expenses:					
Administrative/operating	259,382	288,088		(28,706)	-10.0%
Salaries and benefits	855,018	755,092		99,926	13.2%
Professional service fees	113,395	71,426		41,969	58.8%
Depreciation	17,614	24,847		(7,233)	-29.1%
Program contractual services	16,173,543	14,562,931		1,610,612	11.1%
Material sales rebate	623,028	845,640		(222,612)	-26.3%
Total operating expenses	18,041,980	16,548,024		1,493,956	9.0%
Operating income (loss)	(126,433)	(73,203)		(53,230)	72.7%
Non-operating revenues:					
Grants and sponsorships	10,000	10,000		-	0.0%
Miscellaneous Income	-	-		-	0.0%
Interest income	29,773	60,067		(30,294)	-50.4%
Non-operating revenues	39,773	70,067		(30,294)	-43.2%
Change in net position	(86,660)	(3,136)		(83,524)	2663.4%
Beginning net position *	777,631	780,767		(3,136)	-0.4%
Ending net position	\$ 690,971	\$ 777,631	\$	(86,660)	-11.1%

Net Position decreased by \$86,660 in Fiscal Year 2020. During the year, the Authority appropriated an additional \$45,000 for a consultant evaluation of and recommendations for the residential recycling program. Over \$32,000 additional expense was realized based on the pension and OPEB actuarial valuations. The remaining loss is due to continued reduced revenue from the sale of recyclable material in the Drop-Off Recycling Program in which CVWMA retains a portion. Interest rates have also declined in recent months.

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

Recycling revenues have increased nearly 11% in 2020. The result of a procurement for collection of recycling containers and delivery to a material recovery facility resulted in over 30% increase in costs to localities. In FY2019, CVWMA renegotiated its contract for residential recycling to include a \$30/ton processing fee on top of collection. The pandemic has created more of an interest and participation in recycling with schools and some businesses closed and many now working from home. Residents are generating more recycling at home. In addition to the increased volume, CVWMA has sold nearly 3,600 large recycling carts in 2020 vs. 2,700 in 2019, a 34% increase! Revenues from refuse and solid waste and yard waste programs has also increased. Increased volumes received at area convenience centers of trash and yard debris, also a factor of the pandemic, coupled with inflation has resulted in increased revenue from participating localities and accordingly expense to the contractors for these programs.

The Authority conducted a pay, classification and benefits study to benchmark similar positions, and the results were implemented in March 2019. In addition, over 32,000 in additional expense 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% of the total 2021 budget. The Authority continues to remain in a strong financial position.

#### **Economic Factors and the FY 2020 Budget**

As the economy expands and contracts, it has become increasingly important for the Authority as well as local governments to be strategic in planning in order to be resilient and flexible to adjust to economic, industry and other events, such as a pandemic. Since the Authority is funded by local government, the financial stability of our member jurisdictions is vital to CVWMA's financial health. About 95% of our revenues are passed through from localities based on participation in CVWMA programs.

Locality and state revenues have come up significantly short as a result of COVID-19. This could have resulted in significant cuts including Authority programs. However, our members have been resourceful and planned well to ensure the sustainability of programs. The CVWMA continues to be highly regarded for providing cost effective recycling and solid waste initiatives to our member governments and this benefit is proven even during times of a weakened economy.

Recycling markets for commodities such as cardboard and mixed paper have remained suppressed since China's imposed quality restrictions on recycled fiber two years ago. In the last quarter of fiscal year 2020, the demand for mixed paper and cardboard improved as toilet paper and paper towels were in short supply and food and retail deliveries increased. This increase in recycling markets resulted in reduced costs to localities in the latter part of the fiscal year and into 2021. Great strides are being made in domestic markets for recycled goods, placing less reliance on China and other foreign governments and opening up capacity to recycling more in the US and in Virginia.

The Authority's budget has grown to nearly \$18 million in 2021, an increase of over 32% over 5 years ago. This is a result of increased costs of recycling, inflation and also reflects an increase in the level of participation in Authority programs by member localities demonstrating the continued and significant value the Authority provides its members. 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, 2020 With Comparative Totals at June 30, 2019

	General Operating Fund	Residential Recycling	Drop-Off Recycling	Municipal Solid Waste	Waste Transfer & Disposal	Special <u>Wastes</u>	Total 2020	2019
Assets:	<u>r unu</u>	recycling	recycling	waste	<u> </u>	<u>vvastes</u>	<u>2020</u>	<u>2019</u>
Cash and cash equivalents	\$ 363,348	\$ 849,658	\$218,859	\$ 332,069	\$ 184,749	\$ 21,051	\$ 1,969,734	\$ 1,370,312
Accounts receivable	516,519	1,586,848	215,264	566,370	248,072	96,425	3,229,498	2,925,559
Prepaid expenses	12,664	11,016	436	1,343			25,459	23,641
Total current assets	892,531	2,447,522	434,559	899,782	432,821	117,476	5,224,691	4,319,512
Capital Assets:								
Furniture, fixtures & equipment	41,082	21,377	-	10,307	-	_	72,766	72,766
Computer equipment	25,523	56,875	-	5,000	-	-	87,398	87,398
Vehicles	46,706	-	-	-	-	-	46,706	46,706
Leasehold improvements	12,250	2,751					15,001	9,061
	125,561	81,003	-	15,307	-	-	221,871	215,931
Accumulated depreciation	(98,040)	(73,799)		(13,227)			(185,066)	(167,452)
Capital assets, net	27,521	7,204		2,080			36,805	48,479
Total assets	920,052	2,454,726	434,559	901,862	432,821	117,476	5,261,496	4,367,991
Deferred Outflows of Resources:								
Pension related deferred outflows	50,820	26,271	983	2,309	-	-	80,383	43,419
OPEB related deferred outflows	7,165	3,704	138	325			11,332	5,913
Total deferred outflows of resources	57,985	29,975	1,121	2,634			91,715	49,332
Liabilities:								
Accounts payable Other accrued liabilities	95,368 27,560	1,445,099 31,403	214,327 53	573,416 175	313,470 -	67,124 32,364	2,708,804 91,555	1,890,555 80,093
Unearned revenues	575,228	713,085	-	264,552	140,758	-	1,693,623	1,574,285
Total current liabilities	698,156	2,189,587	214,380	838,143	454,228	99,488	4,493,982	3,544,933
Long-term Liabilities:								
Net OPEB liability	45,501	23,519	879	2,067	-	-	71,966	69,183
Net pension liability	43,220	22,342	836	1,963			68,361	3,349
Total long-term liabilities	88,721	45,861	1,715	4,030			140,327	72,532
Deferred Inflows of Resources:								
Pension related deferred inflows	11,541	5,967	223	524	-	-	18,255	17,499
OPEB related deferred inflows	6,118	3,162	118	278			9,676	4,728
Total deferred inflows of resources	17,659	9,129	341	802			27,931	22,227
Net Position (Deficit)								
Net investment in capital assets	27,521	7,204	-	2,080	-	-	36,805	48,479
Unrestricted	145,980	232,920	219,244	59,441	(21,407)	17,988	654,166	729,152
Total net position (deficit)	\$ 173,501	\$ 240,124	\$219,244	\$ 61,521	\$ (21,407)	\$ 17,988	\$ 690,971	\$ 777,631

The notes are an integral part of the financial statements.

## STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION YEAR ENDED JUNE 30, 2020 With Comparative Totals for the Year Ended June 30, 2019

	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>	Total <u>2020</u>	<u>2019</u>
Operating revenues:								
Local government								
assessments	\$ 567,956	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 567,956	\$ 561,661
Recycling	-	9,421,708	1,254,283	-	-	-	10,675,991	9,624,916
Refuse and solid waste	-	-	-	3,512,911	1,603,696	-	5,116,607	4,612,401
Composting and yard waste	-	-	-	-	-	649,687	649,687	490,231
Other project revenues	-	-	=	=	=	276,468	276,468	331,592
Material sales rebates			96,129			532,709	628,838	854,020
Total operating revenues	567,956	9,421,708	1,350,412	3,512,911	1,603,696	1,458,864	17,915,547	16,474,821
Operating expenses:								
Administrative/operating	66,988	184,618	1,750	6,026	-	-	259,382	288,088
Salaries and benefits	533,816	284,159	8,725	28,318	-	-	855,018	755,092
Professional service fees	30,824	74,299	1,418	6,854	-	-	113,395	71,426
Depreciation	10,421	6,500	-	693	-	-	17,614	24,847
Project contractual services	-	8,934,543	1,254,281	3,454,894	1,603,672	926,153	16,173,543	14,562,931
Material sales rebate			90,261			532,767	623,028	845,640
Total operating expenses	642,049	9,484,119	1,356,435	3,496,785	1,603,672	1,458,920	18,041,980	16,548,024
Operating income (loss)	(74,093)	(62,411)	(6,023)	16,126	24	(56)	(126,433)	(73,203)
Non-operating revenues:								
Grants and sponsorships	_	10,000	_	_	_	_	10,000	10,000
Interest income	15,924	9,060	2,343	2,446	=		29,773	60,067
Total non-operating revenues	15,924	19,060	2,343	2,446	_		39,773	70,067
Total non-operating revenues	10,024	13,000	2,040	2,440			33,113	70,007
Change in Net Position	(58,169)	(43,351)	(3,680)	18,572	24	(56)	(86,660)	(3,136)
Net position (deficit) - beginning of year	231,670	283,475	222,924	42,949	(21,431)	18,044	777,631	780,767
Net position (deficit) - end of year	\$ 173,501	\$ 240,124	\$ 219,244	\$ 61,521	\$ (21,407)	\$ 17,988	\$ 690,971	\$ 777,631

The notes are an integral part of the financial statements.

## STATEMENT OF CASH FLOWS YEAR ENDED JUNE 30, 2020 With Comparative Totals for the Year Ended June 30, 2019

	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>2020</u>	<u>2019</u>
Cash Flows From Operating Activities Receipts from local governments Payments to contractors Payments to suppliers Payments to employees	\$ 519,792 - (118,468) (501,571)	\$9,310,840 (8,239,360) (259,615) (275,340)	\$ 1,209,287 (1,149,914) (3,176) (8,398)	\$3,606,610 (3,408,704) (12,895) (27,881)	\$1,517,210 (1,514,436) -	\$907,574 (985,966) -	\$ 17,071,313 (15,298,380) (394,154) (813,190)	\$15,146,651 (15,078,497) (458,651) (792,940)
Net cash provided by (used in) operating activities	(100,247)	536,525	47,799	157,130	2,774	(78,392)	565,589	(1,183,437)
Cash Flows From Noncapital Financing Activities: Grants, sponsorships, and miscellaneous		10,000					10,000	10,000
Net cash provided by noncapital financing activities	-	10,000	-	-	-	-	10,000	10,000
Cash Flows From Capital and Related Financing Activities Acquisitions of capital assets	es: (3,189)	(2,751)					(5,940)	(15,040)
Net cash used in capital financing activities	(3,189)	(2,751)					(5,940)	(15,040)
Cash Flows From Investing Activities: Interest received	15,924	9,060	2,343	2,446			29,773	60,067
Net Increase (decrease) in cash and cash equivalents	(87,512)	552,834	50,142	159,576	2,774	(78,392)	599,422	(1,128,410)
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
Cash and cash equivalents at June 30, 2020	\$ 363,348	\$ 849,658	\$ 218,859	\$ 332,069	\$ 184,749	\$ 21,051	\$ 1,969,734	\$ 1,370,312
	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>2020</u>	<u>2019</u>
Net operating income (loss)	\$ (74,093)	\$ (62,411)	\$ (6,023)	\$ 16,126	\$ 24	\$ (56)	\$ (126,433)	\$ (73,203)
Adjustments to reconcile operating income (loss) to cash provided by (used in) operating activities:								
Depreciation	10,421	6,500	-	693	-	-	17,614	24,847
Pension expense net of employer contributions	18,210	9,414	353	827	-	-	28,804	(25,908)
OPEB expense net of employer contributions (Increase)/decrease in Assets:	6,115	(3,216)	(68)	(519)	-	-	2,312	1,020
Accounts receivable - local governments	(55,436)	(190,708)	(44,996)	92,268	(86,486)	(18,581)	(303,939)	(475,586)
Prepaid expenses	(1,097)	(698)	(8)	(15)	-	-	(1,818)	(9,120)
Increase/(decrease) in Liabilities:								
Accounts payable	(19,559)	695,183	98,499	46,190	58,441	(60,505)	818,249	(612,310)
Unearned revenue	7,272	79,840	-	1,431	30,795		119,338	(218)
Other accrued liabilities	7,920	2,621	42	129		750	11,462	(12,959)
Net cash provided by (used in)								
operating activities	\$ (100,247)	\$ 536,525	\$ 47,799	\$ 157,130	\$ 2,774	\$ (78,392)	\$ 565,589	\$ (1,183,437)

The notes are an integral part of the financial statements.

#### NOTES TO FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2020

#### 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.

#### G. Capital Assets (Continued)

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.

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 items that qualifies for reporting as deferred inflows or outflows:

- Differences between expected and actual experience, changes in proportion, 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, and may be reported as a deferred inflow or outflow as appropriate.
- 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, 2020 or 2019, 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 2019 -** The financial information for the year ended June 30, 2019, 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:

Cash and Cash Equivalents	<u>2020</u>			<u> 2019</u>		
Local Government Investment Pool	\$	3,518	\$	2,346		
Commercial Paper		749,081		738,715		
Cash in Bank		1,217,035		629,151		
Cash on Hand		100		100		
Total Cash and Cash Equivalents	\$	1,969,734	\$	1,370,312		

<u>Interest Rate Risk.</u> 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, 2020, the Authority's investments were in the Local Government Investment Pool (LGIP), and one single Commercial Paper instrument issued by MUFG Bank NY, maturing November 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 \$3,518 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, 2020, 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)	\$	3,518	00.47%
MUFG Bank NY		749,081	99.53%
	<u>\$</u>	752,599	

#### III. CAPITAL ASSETS

A summary of changes in capital assets follows:

	Balance June 30, <u>2018</u>	<u>Additions</u>	<u>Disposals</u>	Balance June 30, <u>2019</u>	<u>Additions</u>	<u>Disposals</u>	Balance June 30, <u>2020</u>
Furniture, fixtures & equipment	\$ 57,726	\$ 15,040	\$ -	\$ 72,766	\$ -	\$ -	\$72,766
Computer equipment	87,398	-	-	87,398	-	-	87,398
Vehicles	46,706	-	-	46,706	-	-	46,706
Leasehold improvements	9,061	<del>_</del>	<u>-</u>	9,061	5,940	<u>-</u>	<u> 15,001</u>
Total capital assets	200,891	15,040	-	215,931	5,940	-	221,871
Accumulated depreciat	ion:						
& equipment	57,725	1,755	-	59,480	3,008	-	62,488
Computer equipment	63,275	16,135	-	79,410	6,559	-	85,969
Vehicles	12,544	6,957	-	19,501	6,958	-	26,459
Leasehold improvements	9,061	<del>-</del>		9,061	1,089		10,150
Total accumulated Depreciation Capital assets, net	142,605 \$ 58,286	24,847 \$ (9,807)	<u> </u>	167,452 \$ 48,479	17,614 \$ (11,674)	<u>-</u> \$ -	185,066 \$ 36,805

#### IV. LEASES

The Authority has noncancelable operating leases for the rental of a vehicle, office space and equipment. Rental expense for operating leases during 2020 and 2019 was \$79,178 and \$81,576, 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, 2020 are:

2021	\$ 90,168
2022	87,412
2023	89,986
2024	92,616
2025	94,471
Thereafter	 96,074
	\$ 550.727

#### 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, 2018 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	6
Inactive members:	
Vested	4
Non-vested	1
Active Elsewhere in VRS	6
Total inactive members	11
Active members	9
Total covered employees	26

#### 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, 2020 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 \$32,266 and \$31,743 for the years ended June 30, 2020 and June 30, 2019, 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 net pension liability was measured as of June 30, 2019. The total pension liability used to calculated the net pension liability was determined by an actuarial valuation performed as of June 30, 2018 rolled forward to the measurement date of June 30, 2019.

#### **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, 2018, 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, 2019.

Inflation 2.5%

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

Investment rate of return 6.75%, 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 6.75%. However, since the difference was minimal, and a more conservative 6.75% 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 6.75% 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, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. 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; adjusted withdrawal rates to better fit experience at each year age and service through 9 years of service; 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 Multi-Asset Public Strategies Private Investment Partnership	34.00 % 15.00 14.00 14.00 14.00 6.00 3.00	5.61 % 0.88 5.13 5.27 8.77 3.52 6.29	1.91 % 0.13 0.72 0.74 1.23 .21
Total	100.00 % Inflation		5.13 % 2.50 %
*Expected arithme	7.63 %		

<sup>\*</sup> The above allocation provides for a one-year return of 7.63%. 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 7.11%, including expected inflation of 2.5%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40<sup>th</sup> percentile of expected long-term results of the VRS fund allocation.

#### **Discount Rate**

The discount rate used to measure the total pension liability was 6.75%. 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, 2019, the alternate rate was the employer contribution rate used in the FY2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017, actuarial valuations, whichever is greater. From July 1, 2019 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)**

	Increase (Decrease)					
		Total Pension Liability (a)	Plan Fiduciary Net Position (b)			Net Pension Liability (a) – (b)
Balances at June 30, 2018	\$	1,777,796	\$	1,774,447	\$	3,349
Changes for the year:						
Service cost		53,506		-		53,506
Interest		122,504		_		122,504
Changes in benefit terms		-				-
Changes of assumptions		65,856				65,856
Differences between expected		(0.000)				(0.000)
and actual experience		(2,962)		29,346		(2,962)
Contributions – employer Contributions – employee		<u>-</u>		29,340		(29,346) (26,440)
Net investment income		_		119,333		(119,333)
Benefit payments, including				·		(113,000)
refunds of employee contributions		(55,474)		(55,474)		-
Administrative expenses		-		(1,151)		1,151
Other changes				(76)		76
Net changes		183,430		118,418		65,012
Balances at June 30, 2019	\$	1,961,226	\$	1,892,865	\$	68,361

#### 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 6.75%, 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 (5.75%) or one percentage point higher (7.75%) than the current rate:

	1.00%	Current	1.00%	
	Decrease	Discount	Increase	
	(5.75%)	Rate (6.75%)	(7.75%)	
Authority's net pension liability(asset)	<u>\$ 369,389</u>	<u>\$ 68,361</u>	<u>\$ (170,254)</u>	

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

For the year ended June 30, 2020, the political subdivision recognized pension expense of \$58,673.

#### 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, 2020, the political subdivision reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual experience	\$	4,970	\$	1,941
Changes of assumptions		43,147		-
Net difference between projected and actual earnings on pension plan investments		-		16,314
Employer contributions subsequent to the measurement date		32,266		
Total	\$	80,383	\$	18,255

The \$32,266 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, 2021. 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>
2021	\$ 25,846
2022	3,508
2023	(462)
2024	970
2025	0
Thereafter	0

#### **Pension Plan Data**

Information about the VRS Political Subdivision Retirement Plans is also available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at <a href="http://www.varetire.org/Pdf/Publications/2019-annual-report.pdf">http://www.varetire.org/Pdf/Publications/2019-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, 2020, approximately \$5,044 was payable to the Virginia Retirement System for the legally required contributions related to June 2020 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.

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

As of July 1, 2019 actuarial valuation, the following employees were covered by the benefit terms of the plan:

	Number
Inactive employees or beneficiaries:	
Currently receiving benefits	0
Entitled to but not yet receiving benefits	0
Total inactive employees	0
Active plan members	8
	8

#### **Total OPEB Liability**

The Authority's total OPEB Liability of \$22,328 was measured as of June 30, 2020, and was determined based on an actuarial valuation performed as of July 1, 2019.

The total OPEB liability in the June 30, 2019 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 2.21% Inflation 2.5%

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

variable merit

Healthcare cost trend rates 5.8% for 2019, decreasing to an ultimate

rate of 4.0%

The discount rate was based on the Bond Buyer 20 year Bond GO Index as of June 30, 2019.

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

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 July 1, 2019 valuation were based on the results of an actuarial experience study for the Virginia Retirement System covering the period July 1, 2012-June 30, 2016. The demographic assumptions recommended as a result of this study were adopted by the VRS Board of Trustees on April 26, 2017.

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

•	ol OPEB ability
Balance at 6/30/19	\$ 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	 1,154 986 - (4,405) 2,187 (23)
Net Changes	 (101))
Balance 6/30/2020	\$ 22,328

#### **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.

	1.0% Decrease (1.21%)		Current Discount Rate (2.21%)		1.00% 1.0% Increase (3.21%)	
Total OPEB Liability	\$	23,639	\$	22,328		20,983

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	1.00% 1.00% Decrease (4.8%)		Current Trend Rate (5.8%)		1.00% crease (6.8%)
Total OPEB Liability	\$	19,803	\$	22,328	\$	25,204

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

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

For the year ended June 30, 2020, the Authority recognized OPEB expense of \$1,056. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

	Defe Outflo Resou	ws of	Inflo	erred ows of ources
Differences between expected and actual experience	\$	-	\$	3,706
Change in assumptions		-		2,039
Employer contributions subsequent to the measurement				
date		-		
Total	\$	-	\$	5,745

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

	Increase		
	(Reduction)		
Year Ending	`To OPEB´		
June 30,	Expense		
2021	\$ (1,084)		
2022	(1,084)		
2023	(1,084)		
2024	(1,084)		
2025	(1,084)		
Thereafter	(325)		

#### 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 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>

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

#### 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, 2020 Contribution	\$2,942
June 30, 2019 Contribution	\$2,870

#### 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, 2020 Contribution	\$1,076
June 30, 2019 Contribution	\$1,043

## VII. OTHER POST EMPLOYMENT BENEFITS LIABILITY – Virginia Retirement System Plans (Continued) OPEB Liabilities, OPEB Expense and Deferred Inflows and Outflows of Resources Related to OPEB

The net OPEB liabilities were measured as of June 30, 2019 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, 2019 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	\$46,002
June 30, 2019 proportion	.00282%
June 30, 2018 proportion	.00283%
June 30, 2020 expense	\$1,000

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)	1	Plan Fiduciary Net Position (b)	 Net OPEB Liability (a) – (b)
Balances at June 30, 2018	\$ 12,907	\$	9,154	\$ 3,753
Changes for the year: Service cost Interest Benefit changes Changes of assumptions Difference between expected and actual experience Contributions – employer Contributions – employee Net investment income	755 885 - 362 (469) - -		- - - - 1,052 - 613	755 885 - - (469) (1,052) - (613)
Benefit payments, including refunds of employee contributions Administrative expenses Other changes	 (533) - -		(533) (14) (1)	 - 14 1
Net changes	 1,000		1,117	 (117)
Balances at June 30, 2019	\$ 13,907	\$	10,271	\$ 3,636

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

At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

#### Group Life Insurance Program

	Ou	eferred tflows of sources	ln <sup>-</sup>	eferred flows of sources
Differences between expected and actual experience	\$	3,000	\$	1,000
Change in assumptions  Net difference between projected and actual earnings		3,000		1,000
on OPEB plan investments		_		1,000
Changes in proportion		1,000		-
Employer contributions subsequent to the				
measurement date		2,942		
Total	\$	9,942	\$	3,000

#### General Employee Health Insurance Credit Program

	Out	eferred flows of sources	Infl	ferred lows of sources
Differences between expected and actual				
experience	\$	-	\$	413
Change in assumptions		314		416
Net difference between projected and actual				
earnings on OPEB plan investments		-		102
Changes in proportion		-		_
Employer contributions subsequent to the				
measurement date		1,076		-
Total	\$	1,390	\$	931

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, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

#### Group Life Insurance Program

Year Ending June 30,	 Increase (Reduction) to OPEB Expense
2021 2022 2023 2024	\$ 300 300 1,000 1,000
2025 Thereafter	1,000 400

#### 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
2021	\$	(172)
2022		(170)
2023		(103)
2024		(101)
2025		(47)
Thereafter		(24)

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

The total OPEB liability was determined using the following assumptions based on an actuarial valuation date of June 30, 2018, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019:

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%
Healthcare cost trend rates:	
<ul><li>Under age 65</li><li>Ages 65 and older</li></ul>	7.25 – 4.75% 5.50 – 4.75%
Investment rate of return, net of expenses, including inflation*	GLI & HIC: 6.75%

\* 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, 2019, net OPEB liability amounts for the various VRS OPEB programs are as follows (amounts expressed in thousands):

	Group Life Insurance Program
Total OPEB Liability	\$ 3,390,238
Plan fiduciary net position	1,762,972
Employers' net OPEB liability	
(asset)	\$ 1,627,266
Plan fiduciary net position as a	
percentage of total OPEB liability	52.00%

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:

	l m I
Public Equity 34.00 % 5.61 % 1.91 %	
Fixed Income 15.00 0.88 0.13	
Credit Strategies 14.00 5.13 0.72	
Real Assets 14.00 5.27 0.74	
Private Equity 14.00 8.77 1.23	
MAPS-Multi-Asset Public Strategies 6.00 3.52 .21	
PIP-Private Investment Partnership 3.00 6.29 .19	
Total 100.00 % <u>5.13 %</u>	
Inflation 2.50 %	
*Expected arithmetic nominal return 7.63 %	

<sup>\*</sup> The above allocation provides for a one-year return of 7.63%. 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

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

provide a median return of 7.11%, including expected inflation of 2.5%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40<sup>th</sup> percentile of expected long-term results of the VRS fund asset allocation.

#### **Discount Rate**

The discount rate used to measure the GLI and HIC OPEB liabilities was 6.75%. 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, 2019, 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, 2019 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 \$49,638 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 (5.75% HIC; GLI/2.50%) or one percentage point higher (7.75% HIC; GLI/4.50%) than the current discount rate:

			Current		
	1.00%	Decrease	Discount Rate	1.00	)% Increase
GLI Net OPEB Liability	\$	60,000	\$ 46,002	\$	34,000
General Employee HIC Net OPEB Liability		5,251	3,636		2,267

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

Information about the various VRS OPEB plan fiduciary net position is available in the separately issued VRS 2019 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/2019-annual-report.pdf">http://www.varetire.org/Pdf/Publications/2019-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, 2020, the following amounts were payable to the Virginia Retirement System for the legally required contributions related to June 2020 payroll.

Group Life Insurance	\$ 585
General Employee Health Insurance Credit	85

#### **VIII. SUMMARY OF OTHER POSTEMPLOYMENT BENEFITS ELEMENTS**

A summary of Other Postemployment Benefits (OPEB) financial statement elements are as follows:

	Ou	ferred tflows sources	Inf	erred lows sources
Local Plan	\$	-	\$	5,745
Group Life Insurance		9,942		3,000
Health Insurance Credit		1,390		931
Total deferred outflows of resources	\$	11,332	\$	9,676
		OPEB ability	_	PEB ense
Local Plan	\$	22,328	\$	1,056
Group Life Insurance		46,002		1,000
Health Insurance Credit		3,636		824
Total net OPEB Liability		71,966	Φ.	2,880

#### **IX.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.

Total amounts due from and payable to the related jurisdictions at June 30, 2020 and 2019 are as follows:

		<u>20</u>	<u> 20</u>			<u>20</u>	<u>2019</u>				
	<u>D</u>	<u>Due From</u> <u>Due</u>				Due From		Due To			
Town of Ashland	\$	25,462	\$	-	\$	47,550	\$	-			
County of Charles City		3,368		-		3,432		-			
County of Chesterfield		590,625		1,088		754,620		24,349			
City of Colonial Heights		161,617		-		239,787		344			
County of Goochland		67,604		507		23,026		4,320			
County of Hanover		86,621		3,764		137,370		27,835			
County of Henrico		705,769		4,919		691,598		23,366			
City of Hopewell		240,575		-		342,202		247			
County of New Kent		62,807		-		39,600		4,127			
City of Petersburg		275,701		-		378,990		-			
County of Powhatan		91,824		390		51,361		5,748			
County of Prince George		17,862		-		17,772		-			
City of Richmond		876,959				171,64 <u>9</u>		<u>153</u>			
Total	\$	<u>3,206,794</u>	\$	10,668	\$_	2,898,957	\$	90,489			

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

Total revenues from and expenses to related jurisdictions in the years ended June 30, 2020 and 2019 are follows:

	<u>20</u>	<u>2020</u> <u>2019</u>				<u>2019</u>				
	<u>Revenues</u>	<u>E</u>	<u>xpenses</u>	<u>Revenues</u>			<b>Expenses</b>			
Town of Ashland	\$ 252,189	\$	-	\$	258,367	\$	-			
County of Charles City	3,433		-		3,481		-			
County of Chesterfield	4,041,564		119,994		3,841,971		191,992			
City of Colonial Heights	929,860		355		916,598		970			
County of Goochland	577,338		44,697		504,518		61,364			
County of Hanover	547,158		219,646	219,646 490,547			264,377			
County of Henrico	3,554,735		184,575		3,184,953		227,035			
City of Hopewell	1,549,093		2,387		1,106,921		2,085			
County of New Kent	434,691		20,927		380,490		39,452			
City of Petersburg	1,549,471		614		1,473,500		351			
County of Powhatan	504,184		24,102		341,744		53,395			
County of Prince George	17,772		-		27,689		-			
City of Richmond	 3,013,187		4,590	_	2,868,4		2,876			
Total	\$ <u> 16,974,675</u>	\$	621,887	\$	<u>15,399,265</u>	\$	845,640			

#### X. NET POSITION AND INTERFUND TRANSFERS

The following funds have deficit net position balances as of June 30, 2020 and 2019:

	<u>2020</u>	<u>2019</u>
Waste Transfer & Disposal	\$ 21,407	\$ 21,431

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.

#### XI.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 fiscal year ending June 30, 2021.

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 the fiscal year that ends June 30, 2022.

#### XII.NEW ACCOUNTING STANDARDS

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus (the "COVID-19 outbreak") and the risks to the international community as the virus spreads globally beyond the point of origin. In March 2020, the WHO classified the COVID-19 outbreak as pandemic, based on the rapid increase in exposure globally.

The Authority's operations are heavily dependent on local government and their financial health ability to continue participation in the Authority. The outbreak will have a continued adverse impact on economic and market conditions, triggering a period of global economic slowdown. This situation has depressed the tax bases and other areas in which local governments receive revenue during fiscal year 2020.

The full impact of the COVID-19 outbreak continues to evolve as of the date of this report. As such, it is uncertain as to the full magnitude the pandemic will have on the Authority and its member government's financial condition, liquidity and future results of operations. Management is actively monitoring the impact of the global situation on its financial condition, liquidity, operations, suppliers, industry and workforce. Given the daily evolution of the COVID-19 outbreak and the global responses to curb its spread, the Authority is not able to estimate the effects of the COVID-19 outbreak on its results of operations, financial condition, or liquidity.

## REQUIRED SUPPLEMENTARY INFORMATION SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS FOR THE YEAR ENDED JUNE 30, 2020

				Pla	n Year				
	<u>2019</u>		<u>2018</u>		<u>2017</u>		<u>2016</u>		<u>2015</u>
Total Pension Liability									
Service Cost	\$ 53,506	\$	52,754	\$	55,609	\$	48,783	\$	44,781
Interest on total pension liability	122,504		113,607		106,240		101,997		97,556
Difference between expected and actual experience	(2,962)		15,776		4,481		(30,702)		(24,167)
Changes of assumptions	65,856		=		(2,066)		-		-
Benefit payments, including refunds of member contributions	 (55,474)		(54,604)	_	(63,421)		(55,516)	_	(53,934)
Net change in total pension liability	183,430		127,533		100,843		64,562		64,236
Total pension liability - beginning	 1,777,796	1	1,650,263	1	1,549,420	1	,484,858	1	,420,622
Total pension liability - ending	1,961,226	1	1,777,796	1	1,650,263	1,54	,549,420	1	,484,858
Plan Fiduciary Net Position									
Contributions - employer	29,346		23,938		23,346		41,760		40,747
Contributions - employee	26,440		25,564		25,301		25,934		23,299
Net investment income	119,333		122,988		181,635		26,226		63,905
Benefit payments, including refunds of member contributions	(55,474)		(54,604)		(63,421)		(55,516)		(53,934)
Administrative expenses	(1,151)		(1,046)		(1,042)		(889)		(851)
Other changes	(76)		(220)		(285)		(11)		(14)
Net change in plan fiduciary net position	118,418		116,620		165,534		37,504		73,152
Plan fiduciary net position - beginning	1,774,447	1	1,657,827	1	1,492,293	1	,454,789	1	,381,637
Plan fiduciary net position - ending	1,892,865	1	1,774,447		1,657,827	1	,492,293	1	,454,789
Net pension liability (asset) - ending	\$ 68,361	\$	3,349	\$	(7,564)	\$	57,127	\$	30,069
Plan fiduciary net position as a percentage of total pension liability	97%		100%		100%		96%		98%
Covered payroll	\$ 568,845	\$	539,218	\$	526,157	\$	512,903	\$	468,572
Net pension liability (asset) as a percentage of covered payroll	 12%		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, 2020

Contributions in Relation to

Entity Fiscal Year Ended June 30	R	tractually equired ntribution	Con Re	tractually equired ntribution	Contribution Deficiency (Excess)		mployer's ered Payroll	Contributions as a Percentage of Covered Payroll
2020	\$	32,266	\$	32,266	\$	-	\$ 566,070	5.70%
2019		31,743		31,743		-	568,845	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, 2020

						Plar	Year					
		2020		2019		2019		2018	2018			2017
			VR	3 Health			VR	RS Health			VR	S Health
			Ins	urance			In	surance			Ins	surance
			(	Credit				Credit			(	Credit
			G	eneral			G	General				eneral
	Lo	cal Plan	<u>Em</u>	ployees	Lo	cal Plan	<u>En</u>	nployees	Lo	cal Plan	<u>Em</u>	ployees
Total OPEB Liability												
Service Cost	\$	1,154	\$	755		1,382		736		1,382		817
Interest on total OPEB liability		986		885		758		818		758		790
Changes in benefit terms		-		-		-		-		-		-
Difference between expected and actual experience		(4,405)		(469)		-		(8)		-		-
Changes of assumptions and other inputs		2,187		362		(2,140)		-		(2,140)		(704)
Benefit payments		(23)		(533)		-		(656)		-		(339)
Net change in total OPEB liability		(101)		1,000		-		890		-		564
Total OPEB liability - beginning		22,429		12,907		22,429		12,017		22,429		11,453
Total OPEB liability - ending	\$	22,328	\$	13,907	\$	22,429	\$	12,907	\$	22,429	\$	12,017
Plan Fiduciary Net Position												
Contributions - employer	\$	-	\$	1,052	\$	-	\$	952	\$	-	\$	946
Contributions - employee		-		-		-		-		-		-
Net investment income		-		613		-		650		-		834
Benefit payments		-		(533)		-		(656)		-		(339)
Administrative expenses		-		(14)		-		(15)		-		(14)
Other				(1)		<u> </u>		(88)				40
Net change in plan fiduciary net position		-		1,117		-		843		-		1,467
Plan fiduciary net position - beginning				9,154	_		_	8,310			_	6,843
Plan fiduciary net position - ending				10,271	\$		\$	9,153	\$		\$	8,310
Net OPEB Liability - ending	\$	22,328	\$	3,636	\$	22,429	\$	3,754	\$	22,429	\$	3,707
Plan fiduciary net position as a percentage of total OPEB liability		0%		74%		0%		71%		0%	_	69%
Covered payroll	\$	568,848	\$	553,515	\$	553,515	\$	529,094	\$	529,094	\$	525,698
Net OPEB liability as a percentage of covered payroll		4%		1%	_	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, 2020

Contributions i	n
Relation to	

Entity Fiscal Year Ended June 30	Re	tractually equired tribution	Cont Re	ation to ractually quired tribution	Contrik Defici (Exce	ency	mployer's ered Payroll	Contributions as a Percentage of Covered Payroll
Virginia Retirement	System	- Group Life	Insuran	ce - General	Employees	S		
2020	\$	2,942	\$	2,942	\$	-	\$ 553,515	1.30%
2019		2,870		2,870		-	553,515	1.30%
2018		7,063		7,063		-	529,094	1.34%

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, 2020

Entity Fiscal Year Ended June 30	De to Em	tuarially ermined iployer tribution	Em	Actual oployer tribution	Defic	ibution ciency cess)	C	ployer's Covered Payroll	Contributions as a Percentage of Covered Payroll
VRS Health Insuran	ce Credi	t General Em	ployees	;					
2020	\$	1,076	\$	1,076	\$	-	\$	568,848	0.19%
2019		1,043		1,043		-		553,515	0.19%
2018		970		970		-		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 – GROUP LIFE JUNE 30, 2020

Plan Year Ended June 30	Employer's Proportion of the Net OPEB Liability (Asset)	Employer's Pro Share of the I Liability (A	Net OPEB		nployer's red 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	t System - Group Life	Insurance - Ger	neral Employ	ees			
2019	0.0028%	\$	46,002	\$	553,515	8.31%	52.00%
2018	0.0028%		43,000		529,094	8.13%	51.22%
2017	0.0029%		43,000		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, 2020

#### 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 actuarial assumptions used in the June 30, 2018, valuation were based on the results of an actuarial experience study for the period from July 1, 2012, through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

#### Largest 10 – Non-Hazardous Duty:

- Update mortality table to RP-2014 projected to 2020
- Lowered rates at older ages and extended final retirement age from 70 to 75
- Update withdrawal rates to better fit experience at each age and service year
- Lowered rates of disability retirement
- No changes to salary rates
- Increase Line of Duty Disability rates from 14% to 20%
- Decrease discount rate from 7.00% to 6.75%
- Applicable to: Pension, GLI OPEB, and HIC OPEB

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

- Update mortality table to RP-2014 projected to 2020
- Lowered rates of retirement at older ages and changed final retirement from 70 to 75
- Update withdrawal rates to better fit experience at each age and service year
- Lowered disability rates
- No changes to salary rates
- Increased Line of Duty disability rate from 14% to 15%
- Decreased discount rate from 7.00% to 6.75%
- 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** 

Fiscal	Capital Assets		Total Net
Year	Net	Unrestricted	Position
2020	\$ 36,805	\$ 654,166	\$ 690,971
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

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

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

			Total					
Fiscal Year	Operating Revenues	Operating Expenses		Operating Income (Loss)		perating enues enses)	Change in Net Position	
2020 2019 2018 2017 2016 2015 2014 2013 2012	\$ 17,915,547 16,474,821 15,843,573 15,809,592 14,668,426 13,451,160 13,444,295 14,288,408 14,858,298	\$ 18,041,980 16,548,024 15,830,244 15,792,426 14,655,568 13,402,929 13,441,342 14,291,731 14,913,076	\$	(126,433) (73,203) 13,329 17,166 12,858 48,231 2,953 (3,323) (54,778)	\$	39,773 70,067 63,001 47,282 45,620 31,812 15,002 16,620 41,870	\$	(86,660) (3,136) 76,330 64,448 58,478 80,043 17,955 13,297 (12,908)
2011	14,044,355	14,116,751		(72,396)		49,715		(22,681)

#### Notes:

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
2020	\$ 567,956	\$ 10,675,991	\$ 5,116,607	\$ 649,687	\$ 276,468	\$ 628,838	\$ 17,915,547
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

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

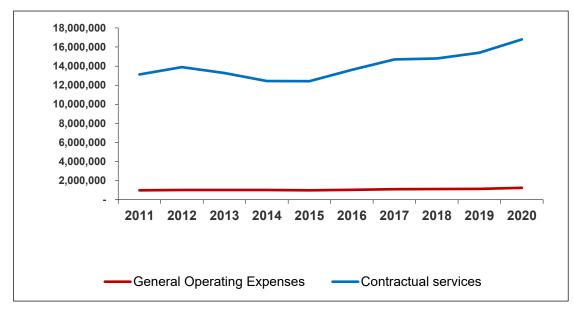
- (1) Recycling programs include residential and drop off recycling services, which include the recycling of traditional materials such as paper, cardboard and aluminum, plastic and glass bottles, and containers and cartons. The City of Richmond rolled out large recycling carts to about 61,500 equivalent 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 now servicing 8 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. Hopewell joined this contract effective July 1, 2019 resulting in higher per household costs in addition to processing fees.
- (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. 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 and COVID-19 in fiscal year 2020 resulted an increase in volume of yard debris.
- (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. In FY2020, a further reduction in revenue received from the sale of used oil and scrap metal due to COVID-19.

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

	 nistrative erating	Salaries And Benefits	S	fessional Service Fees	Depr	eciation	_	Project ontractual Services	Material Sales Rebates*	Total Operating Expenses
2020	\$ 259,382	\$ 855,018	\$	113,395	\$	17,614	\$	16,173,543	\$ 623,028	\$ 18,041,980
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

#### 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 has not been reinstated. 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. In FY2020, the CVWMA hired a recycling and solid waste management consultant to evaluate the regional residential recycling program.



#### **Nonoperating Revenues – Last Ten Fiscal Years**

							Total
Fiscal	Gı	rants and	Interest			Nono	perating
Year	Spon	sorships	Income	Misce	llaneous	R	evenues
2020	\$	10,000	\$ 29,773	\$	-	\$	39,773
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
		•	•		•		•

#### 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	Pul	blic	Cust	omer
	Coll	<u>lection</u>	<u>w/ cart</u>	Collection	<b>Information</b>		<u>Service</u>	
2020	\$	1.950	\$ 1.950-3.060	-	\$	.067	\$	.071
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

#### 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. A separate fee is charged for customer service provided by the Authority.

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

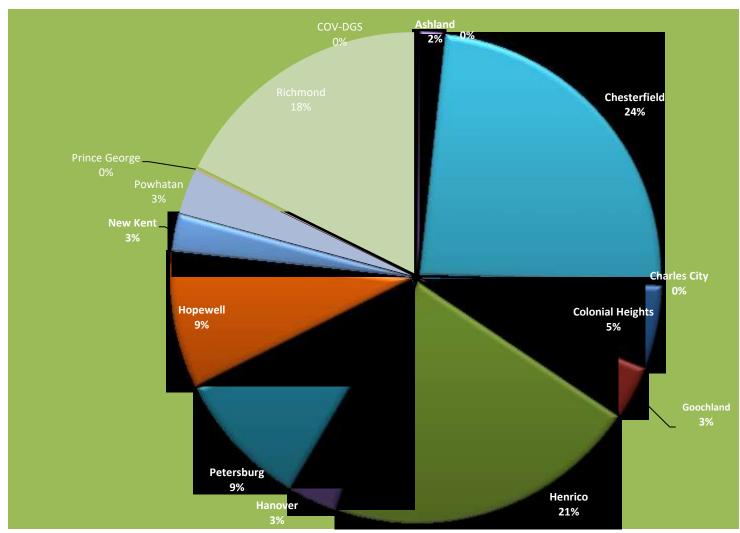
	Municipal Solid Waste Collection per household Per month	Tipping Fees Range Dollars <u>Per Ton</u>
2020	\$7.46 - \$10.87	\$18.55 - \$20.45
2019	\$7.00 - \$10.35	\$17,85 - \$20.07
2018	\$7.00 - \$10.35	\$17.24 - \$19.39
2017	\$7.00 - \$10.35	\$17.29 - \$19.01
2016	\$5.02 - \$10.35	\$16.90 - \$22.50
2015	\$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

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	2020 Operating Revenues	2020 Percent of Revenue	Locality	2011 Operating Revenues	2011 Percent of Revenue
County of Chesterfield	\$ 4,041,564	23.8%	County of Chesterfield	\$ 3,264,935	24.1%
County of Henrico	3,554,735	20.9%	County of Henrico	2,586,656	19.1%
City of Richmond	3,013,187	17.7%	City of Richmond	1,564,934	11.5%
City of Petersburg	1,549,471	9.1%	City of Petersburg	1,484,211	10.9%
City of Hopewell	1,549,093	9.1%	City of Hopewell	1,416,650	10.5%
City of Colonial Heights	929,860	5.5%	City of Colonial Heights	1,051,398	7.8%
County of Goochland	577,338	3.4%	County of Goochland	549,543	4.1%
County of Hanover	547,158	3.2%	County of Powhatan	508,216	3.8%
County of Powhatan	504,184	3.0%	County of New Kent	396,351	2.9%
County of New Kent	434,691	2.5%	Town of Ashland	316,056	2.3%
Town of Ashland	252,189	1.5%	County of Hanover	264,056	1.9%
Commonwealth VA-DGS	27,525	0.2%	County of Prince George	151,560	1.1%
County of Prince George	17,772	0.1%	County of Charles City	3,325	0.0%
County of Charles City	3,433	0.0%	Commonwealth VA-DGS	0	0.0%
Totals	\$17,002,200	<u>100.0%</u>		\$ 13,557,891	<u>100.0%</u>



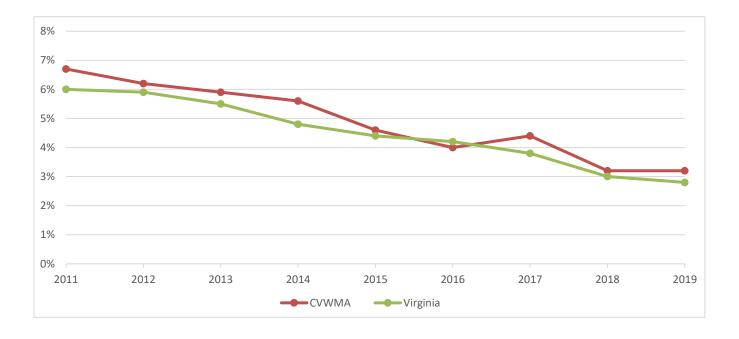
#### **Demographic and Economic Statistics – Last Ten Calendar Years**

Calendar		Average	<u>Unemploym</u>	ent Rate
<u>Year</u>	<b>Population</b>	<u>Income</u>	<u>CVWMA</u>	<u>Virginia</u>
2019	1,206,641	\$57,018	2.9%	2.8%
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%

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 2019*	Calendar Year 2010*	
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 Amazon Fulfillment Services Inc. State Government Federal Government			
Chesterfield County Richmond City	n/a n/a	3 5	
Dominion Resources	n/a	9	

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

<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
2020	49,174	84,970	222,580	18,370	160,482	85.9	2,650	354	155	1,011
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

<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
2020	1,706	94,930	6,701	1,592	3,723	85,007	8,644	11,025	61,558	274,886
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

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

Fiscal			Colonial			
Year	Ashland	Chesterfield	Heights	Hopewell	Petersburg	Total
2020	1,706	1,698	6,882	8,545	11,033	29,864
2019	1,706	1,819	6,815	8,678	11,025	30,043
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

#### 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, 2020 <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> **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 1.0 2.0 2.0 2.0 2.0 2.0 1.5 1.5 1.5 1.5 Finance and Administration 3.0 3.0 3.0 3.0 3.0 2.5 3.0 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> <u>3.5</u> 3.0 <u>3.5</u> <u>3.5</u> 3.5 **Total Employees** 10.0 <u>11.0</u> <u>11.0</u> <u>11.0</u> 11.0 10.5 10.0 11.0 11.0 <u>11.0</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, 2020, 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 1, 2020.

#### **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 1, 2020

#### CENTRAL VIRGINIA WASTE MANAGEMENT AUTHORITY SUMMARY OF COMPLIANCE MATTERS June 30, 2020

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