VRA Virginia Resources Authority

Stephanie L. Hamlett
Executive Director

July 27, 2021

The Honorable Ralph S. Northam
Governor of Virginia
Patrick Henry Building, 3rd Floor
Richmond, Virginia 23219

The General Assembly of Virginia
Commonwealth of Virginia
Pocahontas Building
Richmond, Virginia 23219

Dear Governor Northam and Members of the General Assembly:

Herein I present the annual report of the Virginia Resources Authority ("VRA", "Authority"). This report and its accompanying Comprehensive Annual Financial Report ("Annual Report") for the year ending June 30, 2020, is submitted pursuant to the requirements set forth in §62.1-222 of the Code of Virginia, as amended.

VRA's attached 2020 Annual Report sets forth the complete operating and financial statements for the Authority during the fiscal year. As required, an independent certified public accountant has performed an audit of the books and accounts of the Authority and has issued an unqualified opinion with no audit findings or management letter. The Annual Report also includes supplemental information relating to the Water Facilities (§62.1-227), Water Supply (§62:1-236), Dam Safety (§ 10.1-603.23), and the Airports (§ 5.1-30.9) revolving loan funds. In addition, the attached Annual Report includes complete financial statements for VRA's signature Virginia Pooled Financing Program.

The Authority was established in 1984 as an independent political subdivision of the Commonwealth to offer an additional source of funding for local infrastructure projects, particularly to provide for safe drinking water, wastewater treatment and solid waste management. Since that time, additional areas of infrastructure investment have been made eligible for financing, reflecting the evolving capital improvement priorities of local governments and the Commonwealth, though the concentration continues to be water, wastewater, transportation, public safety and other core government infrastructure. With a focus on innovative financial solutions, the Authority is able to significantly reduce the cost of financing projects for local government borrowers. Through low-cost, custom tailored financing through the pooled bond program, and through the joint administration of revolving loan programs with state agencies partners, borrowers benefit from shared expenses and a straightforward and customer-friendly loan process. This allows local governments to provide the best services while demonstrating responsible stewardship of public dollars.

1111 E. Main Street
Suite 1920
Richmond, VA 23219
804.644.3100 Phone
804.644.3109 FAX
www.VirginiaResources.org

During FY 20, the VRA Board and staff continued working to enhance the long-term financial health and stability of localities and the Commonwealth. VRA has been able to provide financing alternatives for infrastructure projects in fiscally distressed communities while maintaining its own credit standing and the Commonwealth's moral obligation pledge. At the same time, VRA increased the Authority's Portfolio Risk Management Reserve to provide greater credit enhancement and further protect the state's moral obligation pledge.

In FY 20 VRA provided 130 loans and grants totaling over $739 million for capital improvement investment in Virginia communities. VRA also facilitated refunding opportunities providing $36.7 million in net present value debt service savings for 24 localities through the VRA Virginia Pooled Financing Program. VRA delivers value to local governments while maintaining a strong financial position to ensure that the Authority can continue to provide financial solutions for infrastructure projects to improve the health, safety and general welfare of communities in the Commonwealth.

The VRA Board and staff are pleased with the achievements of the Authority and look forward to continuing to work with the Administration and the Legislature in addressing the infrastructure financing needs of Virginia localities.

Sincerely,

Stephanie Hamlett

Stephanie L. Hamlett
Executive Director

Richmond, Virginia

Comprehensive Annual Financial Report of the Virginia Resources Authority

A Component Unit of the Commonwealth of Virginia

Year Ended June 30, 2020

Virginia Resources Authority

Richmond, Virginia

Comprehensive Annual Financial Report of the Virginia Resources Authority

A Component Unit of the Commonwealth of Virginia

Year Ended June 30, 2020

Prepared by the Finance and Administration Division:

Curtis Doughtie, Director of Finance and Administration
Catherine O'Brien, Accounting Manager
George Panos, Loan Servicing Manager
Crystal McKinney, Staff Accountant

Virginia Resources Authority
Table of Contents
June 30, 2020

INTRODUCTORY SECTION

FINANCIAL SECTION

Virginia Resources Authority
Table of Contents
June 30, 2020

STATISTICAL SECTION

COMPLIANCE SECTION

INTRODUCTORY SECTION

VRA VIRGINIA RESOURCES AUTHORITY

Stephanie L. Hamlett
Executive Director

September 15, 2020

Board of Directors
Virginia Resources Authority
1111 East Main Street, Suite 1920
Richmond, VA 23219

Dear Board Members:

In accordance with the requirements set forth in Section 62.1-222 of the Code of Virginia, as amended, I am pleased to present the fiscal year 2020 financial statements of the Virginia Resources Authority ("VRA", "Authority"). As you know, the statute requires the Authority to publish, at the close of each fiscal year, a complete set of financial statements presented in conformance with accounting principles generally accepted in the United States of America (GAAP) and audited in accordance with Government Auditing Standards generally accepted in the United States of America.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, which is based upon a comprehensive framework of internal control that has been established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of material misstatements.

The fiscal year ended June 30, 2020 was audited by CliftonLarsonAllen LLP, a licensed certified public accounting firm. I am pleased to report that as a result of an audit of the Authority's financial records and transactions of all funds, CliftonLarsonAllen has issued an unmodified opinion on the Authority's financial statements for the year ended June 30, 2020.

GAAP requires management to provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of a Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it.

VRA Profile

VRA was established in 1984 as a public body corporate and as a political subdivision of the Commonwealth of Virginia pursuant to the Virginia Resources Authority Act (Chapter 21 of Title 62.1 of the Code of Virginia, as amended). VRA is governed by an eleven-member Board of Directors, appointed by the Governor. Members include four state agency representatives, including the State Treasurer, whose agencies, along with VRA, co-manage specific loan funds. VRA's Executive Director, also appointed by the Governor, administers, manages, and directs the affairs of the Authority, subject to the policies, control, and direction of its Board of Directors.

VRA was established to provide an additional source of funding for local infrastructure projects. Initially providing financing for local water and wastewater projects, projects eligible for VRA financing have increased over the years to 18 distinct project types. These project areas reflect the capital improvement priorities of local governments and priority areas identified by Virginia's Governors and Legislature to improve the health, safety, and general welfare of Virginia's counties, cities and towns.

VRA Financing Programs

VRA's Virginia Pooled Financing Program (VPFP) is available to Virginia counties, cities, towns, and other political subdivisions requiring financing for any one of the designated project areas eligible for VRA financing. Authorized project areas include water, sewer, transportation, public safety, energy, local government buildings, parks and recreational facilities, administrative and operations systems, and a variety of other capital improvement projects. VPFP borrowers realize savings from VRA's unique state credit enhancements based in part on the Commonwealth's moral obligation, shared expenses, and a straightforward and customer-friendly loan process. VRA's high credit rating, a natural "AAA" for the senior bonds and "AA" for the subordinate bonds, results in favorable access to the capital markets for Virginia localities without the need for additional credit enhancements.

In addition to the VPFP, the Authority currently serves as co-manager of five state capitalized loan/grant funds: Virginia Water Facilities Revolving Fund (VWFRF), Virginia Water Supply Revolving Fund (VWSRF), the Virginia Airports Revolving Fund (VARF), Virginia Dam Safety and Flood Prevention and Protection Fund (VDSFPPF), and Virginia Brownfields Restoration and Economic Redevelopment Assistance Fund (VBAF).

Two funds, the VWFRF and the VWSRF, receive capitalization grants each year from the U.S. Environmental Protection Agency, which includes a state match requirement from the Commonwealth. The VARF, VDSFPPF, and VBAF are solely capitalized by appropriations from the Commonwealth. The VWFRF, VWSRF, VARF, and VDSFP operate as revolving loan funds with the initial capitalization monies invested and, along with the investment earnings and loan repayments, are then loaned to qualified borrowers for eligible projects. The VBAF solely issues grants for eligible projects.

The Virginia Transportation Infrastructure Bank (VTIB) was created in 2011 to finance the design and construction of roads and highways, including toll facilities, mass transit, freight, passenger and commuter rail, including rolling stock, port, airport and other transportation facilities. VRA is the manager of VTIB and performs certain duties under an agreement with the Commonwealth Transportation Board and the Secretary of Finance.

Additionally, legislation was approved in the 2015 Session of the General Assembly establishing the Virginia Tobacco Region Revolving Fund, administered by VRA. The assets of the Fund are to be used to make loans to local governments for the financing of any project authorized by the Virginia Tobacco Region Revitalization Commission.

Economic Information

The Commonwealth of Virginia closed fiscal year 2020, which ended on June 30, with positive general fund revenue growth over the last year. Preliminary figures indicate that the Commonwealth concluded fiscal year 2020 with 2.0% growth in general fund revenue collections, approximately $236.5 million below the official forecast. While the shortfall was expected due to the impacts of COVID-19 on the state's economy and budget, it is smaller than anticipated. The main drivers of the revenue shortfall were payroll withholding and sales taxes. Non-withholding income tax payments, mainly from 2019 tax returns, were on target and income tax refunds contributed positively to the bottom line revenues.

FY2020 Accomplishments

Staff efforts along with those of state agency and private sector partners resulted in many successes and opportunities during FY2020. The Authority took full advantage of market conditions to deliver cost-effective financing to all regions of the Commonwealth.

With the support and guidance of the Board of Directors and Executive Director, the Authority delivered value to local government borrowers through its Virginia Pooled Financing Program (VPFP) and through other loan programs it administers for state agencies. Not only were staff efforts directed at the VPFP and the revolving loan funds co-managed with state agencies, efforts were also directed at the Virginia Tourism Corporation's gap financing program that relies on VRA assistance in managing technical aspects of the program.

Major accomplishments for the Authority during FY2020 include:

- Receiving a ratings upgrade from Moody's for VRA's VPFP State Moral Obligation Revenue bonds from 'Aa2' to 'Aa1'
- Maintaining outstanding credit ratings – VRA has consistently maintained high investment grade credit ratings for each of its rated financial programs
- Sustaining a record of no payment defaults in bond programs
- Monitoring borrowers exhibiting financial stress and concerns
- Financing investments of 130 new loans and grants totaling $739.1 million for 107 different entities through VRA programs
- Facilitating refunding opportunities for net present value debt service savings of $36.7 million through the Virginia Pooled Financing Program for 24 localities
- Transferring approximately $2.2 million to the Portfolio Risk Management Reserve to further enhance the pooled bond program credit

Additional FY2020 accomplishments for the Authority include:

- Assisting state agency partners in successfully managing their loan and grant programs
    - Department of Environmental Quality – $204.3 million for 26 loans
    - Department of Health – $12.1 million for 20 loans
    - Department of Aviation – $3.2 million for 2 loans
    - Department of Conservation & Recreation – $0.4 million for 21 grants
    - Virginia Economic Development Partnership – $0.8 million for 18 grants
    - Tobacco Region Revitalization Commission – $1,400,000 for 2 loans
    - Commonwealth Transportation Board – 6 disbursements totaling $45.0 million
- Maintaining qualified staff through professional and career development training initiatives
- Achieving the Government Finance Officers Association's Certificate of Achievement for Excellence in Financial Reporting for the FY2019 Comprehensive Annual Financial Report (CAFR)

FY2020 Financial Results

VRA ended the fiscal year with assets and deferred outflows of $5.3 billion, a 0.2% increase over the prior year. With assets and deferred outflows exceeding liabilities and deferred inflows by $1.8 billion, VRA's net position increased 4.8%. Approximately 98.6% of total net position is restricted for making loans and grants through the various loan programs administered by VRA. Operating revenues ($150.1 million) and expenses ($175.2 million) both increased during the fiscal year, primarily because of loan disbursement and repayment activity. Overall, VRA's financial position remains strong at the conclusion of fiscal year 2020.

Long-term Financial Planning

VRA works with its agency partners to project program demand. For the Virginia Water Facilities Revolving Fund, VRA utilizes a long-term financial model to determine lending capacity under various scenarios. The model is updated at least annually. Ongoing communications with agency partners helps ensure effective planning.

VRA continues its practice of completing a five-year budget projection using certain assumptions for growth and project volume. Each year the assumptions are updated and the projection is revised accordingly.

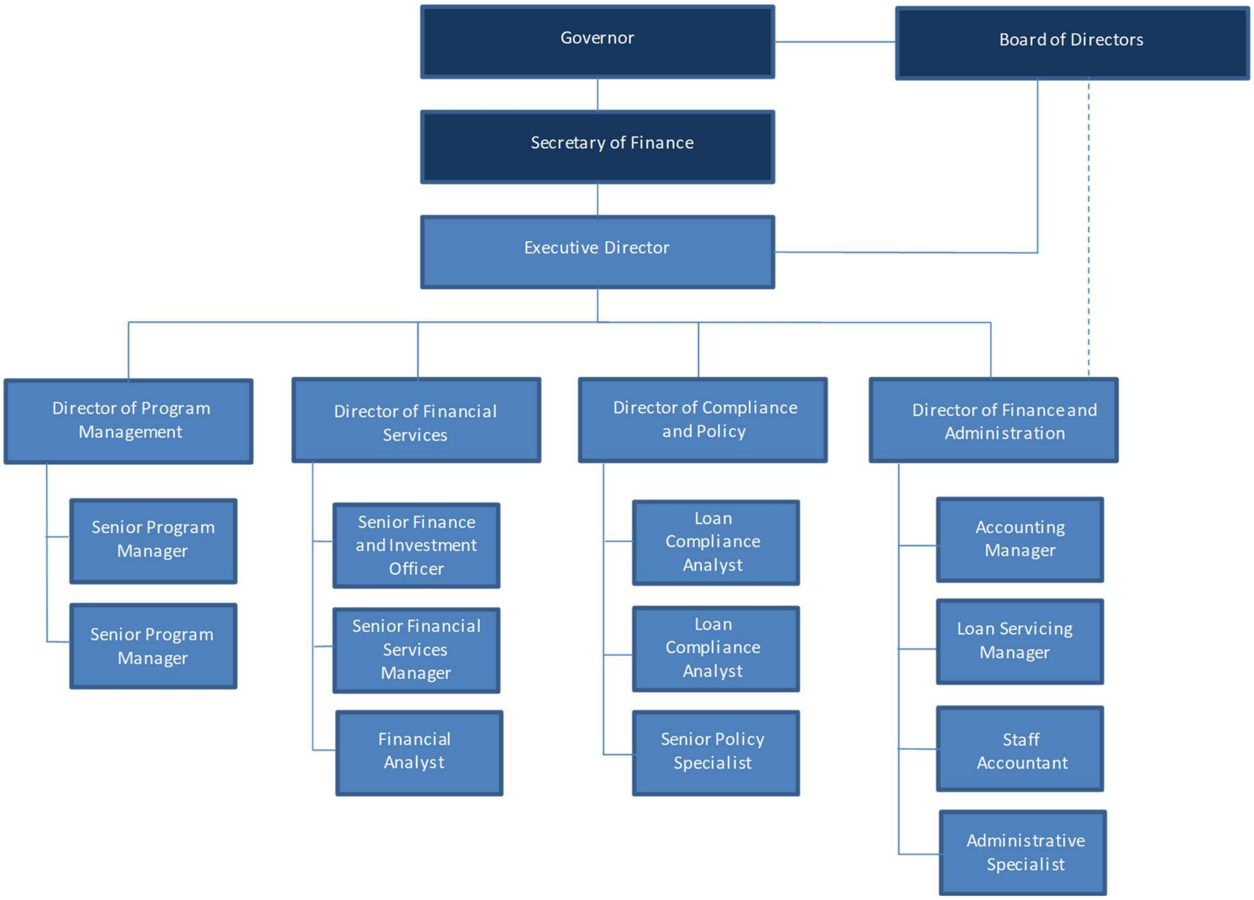
Acknowledgments

Finally, completion of the Authority’s fiscal year 2020 CAFR would not have been possible without the Authority’s knowledgeable and dedicated team of professionals. A special note of gratitude goes to the Authority’s personnel who assisted in this effort. I would also like to extend our thanks to the Authority’s Board of Directors for their continuing support in planning and conducting the financial operations of the Virginia Resources Authority in a responsible manner.

Sincerely,

Stephanie Hamlett
Executive Director

Virginia Resources Authority
Organizational Structure
June 30, 2020



Virginia Resources Authority
Directory of Principal Officials
June 30, 2020

Board of Directors

Thomas L. Hasty, III, Chairman

Cecil “Rhu” Harris, Jr., Vice-Chairman

Cynthia V. Bailey

Jennifer M. Bowles

Mary B. Bunting

Barbara McCarthy Donnellan

Reginald E. Gordon

Ex-Officio Board Members

Mark K. Flynn
Director of the Department of Aviation

David K. Paylor
Director of the Department of Environmental Quality

Manju Ganeriwala
Treasurer of Virginia

Dr. M. Norman Oliver
State Health Commissioner

Administrative Officials

Stephanie Hamlett, Executive Director

Shawn Crumlish, Director of Financial Services

Peter D’Alema, Director of Program Management

Curtis Doughtie, Director of Finance and Administration

Stephanie Jones, Director of Compliance and Policy

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Virginia Resources Authority

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2019

Christopher P. Morrill

Executive Director/CEO

FINANCIAL SECTION

INDEPENDENT AUDITORS' REPORT

The Honorable Members of the Board of Directors
Virginia Resources Authority
Richmond, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the Virginia Resources Authority (the "Authority"), a component unit of the Commonwealth of Virginia, 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.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, and the Specifications for Audits of Authorities, Boards, and Commissions, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority'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 Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

The Honorable Members
of the Board of Directors
Virginia Resources Authority

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2020, and the respective changes in financial position and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis of other required supplementary information, as identified in the accompanying table of contents, be presented to supplement the basic financial statements. Such information, although not a required 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. This required supplementary information is the responsibility of management. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The introductory section, combining schedules, and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedule of expenditures of federal awards is presented for purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), and is also not a required part of the basic financial statements.

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

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.

The Honorable Members
of the Board of Directors
Virginia Resources Authority

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated August 31, 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 result of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Arlington, Virginia
August 31, 2020

This section presents management's discussion and analysis of the financial performance of the Virginia Resources Authority ("Authority") during the fiscal year ended June 30, 2020. This section should be read in conjunction with the transmittal letter in the introductory section of this report and the Authority's basic financial statements, which immediately follow this section.

Financial Highlights

Assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources at the close of the fiscal year by $1.8 billion (net position), an increase of $81.8 million or 4.8%. The increase in net position is primarily due to lending and repayment activity during the fiscal year.

Operating revenues of $150.1 million increased 0.9% primarily due to additional loan origination and investment income, offset by a decrease to loan interest. Operating expenses of $175.2 million increased 12.6% primarily due to increasing grant and principal forgiveness financing.

Overview of the Financial Statements

The financial section of this report consists of management's discussion and analysis (this section), the basic financial statements, the notes to the financial statements, required supplementary information and supplementary information.

The discussion and analysis provided here are intended to serve as an introduction to the Authority's basic financial statements. The financial statements provide both long-term and short-term information about the Authority's overall financial status. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The statements are followed by a section of required supplementary information and a section of other statistical information that further explains and supports the information in the financial statements.

The Authority's financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to government units on an accrual basis. Under this basis of accounting, revenues are recognized in the period in which they are earned, expenses are recognized in the period in which they are incurred, and depreciation of assets is recognized in the Statement of Revenues, Expenses, and Changes in Net Position. All assets, liabilities, and net position associated with the operation of the Authority are included in the Statement of Net Position. Net position – the difference between assets plus deferred outflows minus deferred inflows plus liabilities – is one way to measure the Authority's financial health or position.

The current fiscal year revenues and expenses of the Authority are accounted for in the Statement of Revenues, Expenses and Changes in Net Position which measures whether the Authority successfully recovered its costs through interest on loans, investment earnings, fees, and contributions from other governments. The Statement of Cash Flows provides information on the Authority's cash receipts, payments, and net changes in cash while providing insight into 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.

This report also includes other information, in addition to the basic financial statements and accompanying notes to the financial statements. Required supplementary information concerning the Authority's progress in funding its obligation to provide pension and OPEB benefits to employees is separately presented. Supplementary information that further explains and supports information in the basic financial statements immediately follows the notes. Combining schedules provide information for the Authority's separate programs.

The compliance section is required under provisions of Title 2 of the U.S. Code of Federal Regulations (CFR), Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for

Federal Awards; and includes auditor reports on compliance and internal controls. The Schedule of Expenditures of Federal Awards provides detail of Federal assistance, followed by explanatory notes.

Overall Financial Position Analysis
The following table presents a summary of the Authority's financial position for fiscal years 2020 and 2019, followed by a description of significant changes (in thousands):

	FY2020	FY2019	$ Change	% Change
Assets				
Cash and cash equivalents	$ 334,836	$ 285,557	$ 49,279	17.3%
Investments - current	127,732	119,687	8,045	6.7%
Loans receivable - current	293,942	282,961	10,981	3.9%
Other current assets	38,519	36,382	2,137	5.9%
Investments - noncurrent	507,541	506,520	1,021	0.2%
Loans receivable - noncurrent	3,974,177	4,023,694	(49,517)	-1.2%
Capital assets, net	164	122	42	34.4%
Other noncurrent assets	136	449	(313)	-69.7%
Total assets	5,277,047	5,255,372	21,675	0.4%
Deferred outflows of resources	50,603	63,750	(13,147)	-20.6%
Total assets and deferred outflows of resources	$ 5,327,650	$ 5,319,122	$ 8,528	0.2%
Liabilities				
Bonds and loans payable - current	$ 234,055	$ 225,083	$ 8,972	4.0%
Accrued interest	25,082	26,825	(1,743)	-6.5%
Other current liabilities	2,968	1,409	1,559	110.6%
Bonds and loans payable - noncurrent	3,260,084	3,338,623	(78,539)	-2.4%
Noncurrent liabilities	279	206	73	35.4%
Total liabilities	3,522,468	3,592,146	(69,678)	-1.9%
Deferred inflows of resources	27,624	31,245	(3,621)	-11.6%
Net position				
Investment in capital assets	164	122	42	34.4%
Restricted	1,752,921	1,674,042	78,879	4.7%
Unrestricted	24,473	21,567	2,906	13.5%
Total net position	1,777,558	1,695,731	81,827	4.8%
Total liabilities, deferred inflows of resources, and net position	$ 5,327,650	$ 5,319,122	$ 8,528	0.2%

Total assets increased primarily due to an increase in cash and cash equivalents and investments offset by a decrease in loans receivable as a result of lending and repayment activity during the fiscal year. Accordingly, the decrease in total liabilities was driven by a decrease to bonds payable.

Virginia Resources Authority
Management's Discussion and Analysis
June 30, 2020

Overall Revenue and Expense Analysis
The following table presents a summary of the Authority's revenues, expenses, and change in net position for fiscal years 2020 and 2019, followed by a description of significant changes (in thousands):

	FY2020	FY2019	$ Change	% Change
Operating Revenues				
Interest on loans	$ 110,683	$ 113,394	$ (2,711)	-2.4%
Investment income	28,884	26,978	1,906	7.1%
Bond administration fees	3,341	3,319	22	0.7%
Loan administration fees	2,537	2,354	183	7.8%
Loan originiation revenue	4,551	2,140	2,411	112.7%
Gain on early extinguishment of loans	89	635	(546)	-86.0%
Other income	41	1	40	4000.0%
Total operating revenues	150,126	148,821	1,305	0.9%
Operating Expenses				
Interest on bonds and loans	113,916	120,046	(6,130)	-5.1%
Bond issuance costs	4,006	1,925	2,081	108.1%
Grants to local governments	45,784	22,523	23,261	103.3%
Principal forgiveness loans to local governments	7,937	6,712	1,225	18.3%
Loss on early extinguishment of bonds	-	670	(670)	-100.0%
Personnel services	2,215	2,090	125	6.0%
General operating	871	1,184	(313)	-26.4%
Contractual services	446	401	45	11.2%
Total operating expenses	175,175	155,551	19,624	12.6%
Operating loss	(25,049)	(6,730)	(18,319)	272.2%
Nonoperating revenues				
Contributions from other governments	107,611	87,874	19,737	22.5%
Federal interest subisidy	1,235	2,169	(934)	-43.1%
Total nonoperating revenue	108,846	90,043	18,803	20.9%
Nonoperating expenses				
Contributions to other governments	754	655	99	15.1%
Federal interest subisidy passthrough	1,216	2,096	(880)	-42.0%
Total nonoperating expense	1,970	2,751	(781)	-28.4%
Change in net position	81,827	80,562	1,265	1.6%
Beginning net position	1,695,731	1,615,169	80,562	5.0%
Ending net position	$ 1,777,558	$ 1,695,731	$ 81,827	4.8%

At the end of fiscal year 2020, net position increased 4.8% to $1.8 billion. Operating revenues increased primarily due to additional loan origination and investment income, offset by a decrease to loan interest. Operating expenses increased primarily due to increasing grant and principal forgiveness financing, offset by a decrease to bond and loan interest. The Authority typically shows an operating loss as several loan programs are supported by grant funding, which is presented as a non-operating revenue.

Debt Administration

As a financing entity, the Authority's purpose and objective is to issue and administer debt on behalf of other entities. The Authority issues bonds to finance infrastructure projects approved by the local governing bodies of counties, cities, towns, and service authorities of the Commonwealth of Virginia. Depending upon the program, all of the Authority's bonds are secured by either: (a) a pledge of the full faith and credit of the municipality, (b) a pledge of certain revenues of the municipality and funds and accounts established under the applicable bond resolution or indenture, and/or (c) a lease.

The Authority obtains bond ratings from one or more of the following: Moody's Investor Service (Moody's), Standard & Poor's (S&P), and Fitch Ratings (Fitch). The Authority, to date, has achieved an investment grade of "AA" or better on all bond issues. All Virginia Water Facilities Revolving Fund (VWFRF) leveraged issues have obtained a AAA rating from all three agencies. Under the senior/subordinate structure in the Virginia Pooled Financing Program, the senior portion of the structure (70%) has been rated "AAA" and the subordinate portion (30%) has been rated "AA." During the fiscal year, Moody's upgraded the subordinate portion from "Aa2" to "Aa1". Ratings were affirmed on subsequent issues and ratings surveillances conducted in the last fiscal year. In addition, Moody's maintains its "Aa2" rating on the Authority's outstanding VARF bonds and Fitch maintains a "AA" rating.

See Note 6 for additional information on bonds payable.

COVID-19

The United States and the Commonwealth of Virginia declared a state of emergency in March 2020 due to the global Coronavirus Disease 2019 (COVID-19) pandemic. Local governments, which comprise most of VRA's borrowers, have seen revenue declines since the onset of the pandemic. In April 2020, VRA completed a portfolio wide review of all borrowers and began outreach efforts regarding VRA's limited ability to offer payment deferral options for loans funded by public debt market proceeds.

The feedback obtained from these initial outreach efforts was very positive, with most localities proactively managing the financial implications of the pandemic. Localities implemented a variety of approaches to address anticipated revenue declines, including the elimination of non-essential expenses from budgets, hiring freezes, prioritizing debt payments in budgets, only appropriating a portion of revenue spending to allow locality leaders to periodically review revenue impacts and adjust spending accordingly, and eliminating or delaying some capital projects.

VRA's monitoring and outreach efforts will continue as localities navigate the myriad of challenges resulting from the pandemic.

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances for all those with an interest. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Director of Finance and Administration, Virginia Resources Authority, 1111 E. Main Street, Suite 1920, Richmond, VA 23219, or telephone (804) 644-3100. Additional information is also available on the Authority's website at www.virginiaresources.org

Virginia Resources Authority
Statement of Net Position
June 30, 2020

Assets	
Current assets:	
Cash	$ 21,260,127
Cash equivalents (Note 3)	313,575,512
Investments (Note 3)	127,732,023
Loans receivable, net of allowance (Note 4)	293,942,679
Receivables:	
Investment interest	3,538,323
Loan interest	33,170,509
Loan administrative fees	1,719,146
Federal funds	42,083
Other	499
Other assets	47,341
Total current assets	795,028,242
Noncurrent assets:	
Investments (Note 3)	507,541,361
Loans receivable, net of allowance (Note 4)	3,974,177,227
Net pension asset (Note 10)	136,287
Capital assets, net of accumulated depreciation (Note 5)	164,089
Total noncurrent assets	4,482,018,964
Total assets	5,277,047,206
Deferred Outflows of Resources	
Deferred outflows related to pensions (Note 10)	337,258
Deferred outflows related to OPEB (Notes 11 and 12)	37,829
Deferred loss on refunding (Note 6)	50,228,206
Total deferred outflows of resources	50,603,293
Total assets and deferred outflows of resources	$ 5,327,650,499
Liabilities	
Current liabilities:	
Bonds payable, current (Note 6)	228,676,000
Loans payable, current (Note 6)	5,379,000
Accrued interest payable	25,082,595
Agency funds	1,007,309
Accounts payable and other liabilities (Note 8)	1,960,619
Total current liabilities	262,105,523
Noncurrent liabilities:	
Net OPEB liability (Notes 11 and 12)	273,278
Bonds payable, net of current portion (Note 6)	3,187,214,307
Loans payable, net of current portion (Note 6)	72,870,000
Arbitrage rebate liability (Note 8)	5,854
Total noncurrent liabilities	3,260,363,439
Total liabilities	3,522,468,962
Deferred Inflows of Resources	
Deferred inflows related to pensions (Note 10)	93,358
Deferred inflows related to OPEB (Notes 11 and 12)	19,000
Deferred gain from localities on refunding (Note 6)	27,511,144
Total deferred inflows of resources	27,623,502
Total liabilities and deferred inflows of resources	3,550,092,464
Net position	
Investment in capital assets	164,089
Restricted (Note 7)	
Loan programs	1,745,161,084
Operating reserve	7,760,095
Unrestricted	24,472,767
Total net position	1,777,558,035
Total liabilities, deferred inflows of resources, and net position	$ 5,327,650,499

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

Virginia Resources Authority
Statement of Revenues, Expenses, and Changes in Net Position
Year Ended June 30, 2020

Operating revenues	
Interest on loans	$ 110,683,314
Investment income	28,883,744
Bond administrative fees	3,341,069
Loan administrative fees	2,537,279
Loan origination revenue	4,550,643
Gain on early extinguishment of bonds	89,393
Other income	40,995
Total operating revenues	150,126,437
Operating expenses	
Interest on bonds and loans	113,916,449
Bond issuance costs	4,006,048
Grants to local governments	45,784,065
Principal forgiveness loans	7,936,755
Personnel services	2,215,321
General operating	871,172
Contractual services	446,451
Total operating expenses	175,176,261
Operating loss	(25,049,824)
Nonoperating revenues	
Contributions from other governments (Note 9)	107,611,491
Federal interest subsidy	1,234,682
Total nonoperating revenues	108,846,173
Nonoperating expenses	
Contributions to other governments	754,184
Federal interest subsidy pass-through	1,215,883
Total nonoperating expenses	1,970,067
Change in net position	81,826,282
Net position - beginning	1,695,731,753
Net position - ending	$ 1,777,558,035

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

Virginia Resources Authority
Statement of Cash Flows
Year Ended June 30, 2020

Cash flows from operating activities		
Loan disbursements to localities	$	(658,331,396)
Principal repayments from localities on loans		661,133,102
Interest received on loans		138,051,845
Loan origination fees received		4,550,643
Bond administrative fees received		3,105,749
Loan administrative fees received		2,379,394
Cash received from other income		40,995
Cash payments for salaries and benefits		(2,145,577)
Cash payments for general operating expenses		(850,714)
Cash payments for contractual services		(456,517)
Cash payments for operating grants		(45,784,065)
Cash payments for principal forgiveness loans		(7,936,755)
Interest paid on bonds and loans		(144,371,913)
Agency funds disbursed		(420,314)
Net cash used in operating activities		(51,035,523)
Cash flows from noncapital financing activities		
Proceeds from sale of bonds		563,458,945
Bond issuance costs		(4,006,048)
Principal paid on bonds and loans		(591,434,306)
Arbitrage rebate		(241,931)
Proceeds from Federal interest subsidy		1,234,682
Cash payments to localities for Federal interest subsidy		(1,215,883)
Contributions from other governments		112,857,406
Contributions to other governments		(754,184)
Net cash provided by noncapital financing activities		79,898,681
Cash flows from capital and financing related activities		
Purchase of office equipment		(64,900)
Net cash used in noncapital financing activities		(64,900)
Cash flows from investing activities		
Purchase of investments		(256,671,213)
Proceeds from sales or maturities of investments		255,875,531
Interest received on investments - net		21,276,370
Net cash provided by investing activities		20,480,688
Net increase in cash and cash equivalents		49,278,946
Cash and cash equivalents - July 1		285,556,693
Cash and cash equivalents - June 30	$	334,835,639
Reconciliation to the Statement of Net Position		
Cash	$	21,260,127
Cash equivalents		313,575,512
	$	334,835,639

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

Virginia Resources Authority
Statement of Cash Flows (Continued)
Year Ended June 30, 2020

Reconciliation of operating loss to net cash used in operating activities		
Operating loss	$	(25,049,824)
Depreciation expense		22,899
Pension expense		101,515
Current year pension contributions subsequent to the measurement date		(71,065)
OPEB expense		53,973
Current year OPEB contributions subsequent to the measurement date		(8,851)
Interest on investments		(28,830,831)
Gain on early extinguishment of loans		(57,391)
Bond issuance costs		4,006,048
Interest, amortization and accretion - net		(6,123,440)
Effect of changes in operating assets and liabilities:		
Loans receivable		2,742,846
Loan interest receivable		(6,919,430)
Loan administrative fee receivable		(393,205)
Other assets		(1,971)
Deferred charges		9,888,761
Accounts payable and other liabilities		(395,557)
Net cash used in operating activities	$	(51,035,523)
Schedule of non-cash activities		
Change in fair value of assets	$	6,158,735

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

Note 1 – Organization and Nature of Activities

The Virginia Resources Authority (Authority or VRA) was created in 1984 by an Act of the General Assembly of the Commonwealth of Virginia. The Authority encourages the investment of both public and private funds and is authorized to make loans and grants available to local governments to finance such projects as water, sewer, storm drainage, solid waste disposal, federal facilities, public safety, aviation, brownfield remediation, transportation, Chesapeake Bay cleanup, dam safety, land conservation and preservation, local government buildings, energy, parks and recreation facilities, and broadband. Subsequent General Assembly legislation added projects for administrative and operations systems and site acquisition and development for economic and community development. The Authority's enabling legislation states that the bonds issued by the Authority do not constitute a debt or pledge of the full faith and credit of the Commonwealth of Virginia (Commonwealth) or any political subdivision thereof, other than the Authority. The bonds are payable solely from the revenue, money, or property of the Authority pledged thereon. The Authority is, however, empowered to issue bonds secured by the moral obligation of the Commonwealth, of which a maximum of $1.5 billion may be outstanding at any time.

The Authority is governed by a Board of Directors consisting of eleven members. Seven members are appointed to four-year terms by the Governor, subject to confirmation by the General Assembly. Other members consist of the State Treasurer, the State Health Commissioner, the Director of the Department of Environmental Quality, and the Director of the Department of Aviation. The Governor appoints the Chairman of the Board. The Governor also appoints the Executive Director of the Authority, who reports to but is not a member of the Board of Directors. The Executive Director serves as the ex-officio secretary of the Board of Directors and administers, manages and directs the affairs and activities of the Authority, in accordance with the policies and under the control and direction of the Board of Directors.

For financial reporting purposes, the Authority is a component unit of the Commonwealth. The accounts of the Authority, along with other similar types of funds, are included as a discretely presented component unit of the Commonwealth. The financial statements of the Authority include the activities of the Authority's pooled bond program, the Virginia Water Facilities Revolving Fund, the Virginia Water Supply Revolving Fund, the Virginia Airports Revolving Fund, the Virginia Dam Safety and Flood Prevention Fund, the Virginia Transportation Infrastructure Bank, the Virginia Brownfield Restoration and Economic Development Assistance Fund, the VirginiaSAVES Green Community Program, and the Virginia Tobacco Region Revolving Fund, which are described in more detail below.

The Authority's pooled bond program serves to provide cost-effective and efficient access to the bond markets to local government borrowers throughout Virginia by issuing bonds used to fund loans to local borrowers. The program is structured so that the maturities of principal and interest payments are matched, virtually eliminating interest rate risk within the portfolio. Yields on the loans to local borrowers are designed to slightly exceed the yields on the bonds issued to fund the program, in order to support administrative and other costs related to the program.

The Virginia Water Facilities Revolving Fund (VWFRF) was created in 1986 and received its first state appropriation on July 1, 1987. The VWFRF's purpose is to make discounted interest rate loans to municipalities under the Environmental Protection Agency's (EPA) Capitalization Grants for State Revolving Funds. The VWFRF's enabling legislation provides that the Authority and the Commonwealth's Department of Environmental Quality (DEQ) jointly administer the program. The accounts of the VWFRF are in these financial statements, except for certain administrative expenses incurred by the DEQ for the VWFRF and the associated reimbursement of the federal share of these expenses is included in the financial statements of the DEQ.

Until 1999, the sole source of financial assistance to localities for wastewater projects under the VWFRF was the Direct Loan program. The available resources for the Direct Loan program, however, were determined to be insufficient to meet the demand for financial assistance from municipalities. In response, the Authority and DEQ, with the concurrence of the EPA, decided to leverage the VWFRF through the issuance of bonds.

The Authority is authorized to transfer assets of the VWFRF to funds and accounts pledged to collateralize bonds issued by the Authority. Such assets consist of federal capitalization grants, Commonwealth Matching Share funds, and any other monies appropriated or otherwise deposited by the Commonwealth to the VWFRF, including amounts repaid by municipalities to the VWFRF from loans represented by the local bonds, and earnings on the investment of any of the foregoing. The Authority and DEQ still make Direct Loans from the VWFRF, but by leveraging the VWFRF, the Authority can provide financing for more projects than before.

During 1999, the General Assembly expanded the scope of the VWFRF by allowing the State Water Control Board to loan money for the construction of facilities or structures supporting environmental goals of agricultural best management practices, commonly referred to as Agriculture Best Management Practices (AgBMP) loans. The program provides below-market rate loans to incent implementation of AgBMPs that results in reduced agricultural nonpoint source pollution of Virginia waters. To date, $25 million has been set aside from the VWFRF to fund the program. The accounts of this program are combined with those of the VWFRF in the Authority's financial statements.

The Virginia Water Supply Revolving Fund (VWSRF) was created in 1987 and received its first state appropriation on July 1, 1988. In 1997, the VWSRF was updated to align with the Safe Drinking Water Act Amendments of 1996, which allowed the establishment of a drinking water state revolving loan fund. The VWSRF's purpose is to make discounted interest rate loans to local governments to finance water supply facilities and certain non-construction activities under the EPA's Capitalization Grants for State Revolving Funds. The VWSRF's enabling legislation provides that the Authority and the Commonwealth of Virginia Department of Health (VDH) jointly administer the program. The accounts of the VWSRF are in these financial statements, except for certain administrative expenses incurred by the VDH for the VWSRF and the associated reimbursement of these expenses, which are included in the financial statements of the VDH.

In 2000, the Virginia Airports Revolving Fund (VARF) was funded with $25 million. The VARF finances local government-owned aviation projects at discounted rates for general aviation, reliever, and commercial airports across Virginia. In February 2001, the first bonds were issued by the Authority, which leveraged the VARF to provide funds for loans to three of Virginia's airports. In June 2002, $2 million was returned to the Commonwealth to be used for other purposes. The VARF can also make direct loans out of current balances, released bond proceeds, and newly appropriated funds.

The Virginia Dam Safety and Flood Prevention Fund (VDSFPF) was created in 2006 and received its first appropriation from existing State funds on July 1, 2006. The VDSFPF's purpose is to make grants or loans to local governments for the development and implementation of flood prevention or protection projects, or for flood prevention or protection studies. In addition, the VDSFPF can be used to make grants or loans to local governments owning dams and to make loans to private entities for the design, repair and the safety modifications of qualifying dams, and to make grants for the mapping and digitization of dam break inundation zones. The VDSFPF's enabling legislation provides that the Authority and the Virginia Department of Conservation and Recreation (VDCR) jointly administer the program.

The Virginia Transportation Infrastructure Bank (VTIB) was created during the 2010 General Assembly Session to finance the design and construction of roads and highways, including toll facilities, mass transit, freight, passenger and commuter rail, including rolling stock, port, airport and other transportation facilities.

The Authority is the manager of VTIB and performs certain duties under an agreement with the Commonwealth Transportation Board and the Secretary of Finance. VTIB is capitalized with appropriations by the General Assembly. VTIB is a sub-fund of the Transportation Trust Fund and only reimbursement and expenses incurred are reflected in the Authority's financial statements.

The Virginia Brownfields Restoration and Economic Redevelopment Assistance Fund (VBAF) was created in 2002 for the purposes of promoting the restoration and redevelopment of brownfield sites and to address environmental problems or obstacles to reuse so that these sites can be effectively marketed to new economic development prospects. Funds were generally not available in the VBAF until 2012. The Virginia Economic Development Partnership, DEQ, and the Authority jointly administer the VBAF.

The VirginiaSAVES Green Community Program (VGCP) was established in 2015 to provide lower financing costs for energy efficiency, renewable energy generation and alternative fuel projects. The program was initially capitalized with $20 million in Qualified Energy Conservation Bonds (QECBs), allocated under the Governor of Virginia's Executive Order 36, with the ability to provide more QECB allocations as needed from additional QECBs available to the Commonwealth. The program is sponsored by Virginia Department of Mines Minerals and Energy, and administered jointly by CleanSource Capital and Abundant Power. The Virginia Small Business Financing Authority and the Authority serve as conduit issuers for the program.

The Virginia Tobacco Region Revolving Fund (VTRRF) was established in 2016 to create a long-term mechanism to fund revenue-generating economic revitalization projects in the tobacco region, and to recycle loan repayments to assist future projects. Funds were generally not available in the VTRRF until 2017. The Virginia Tobacco Region Revitalization Commission selects projects to be sent to VRA for credit analysis prior to a potential loan offer.

Note 2 – Summary of Significant Accounting Policies

Measurement Focus and Basis of Accounting

The funds of the Authority are reported using the economic resources measurement focus and the accrual basis of accounting, where revenues are recognized when earned and expenses are recognized when incurred in accordance with accounting principles generally accepted in the United States of America (GAAP).

The accounts of the Authority are organized on the basis of programs and activities, each of which is considered a separate accounting entity. The operations of each program are accounted for with a separate set of self-balancing accounts that comprise its assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, operating revenues, operating expenses and other non-operating revenue and expenses. All of the Authority's programs and activities are reported as a single reporting entity conforming to GAAP.

The preparation of financial statements, in conformity with GAAP, requires management of the Authority to make estimates and judgments that affect the reported amounts of assets and liabilities and the disclosures of contingencies at the date of the financial statements and revenues and expenses recognized during the reporting period. Actual results could differ from those estimates.

Assets, Liabilities, Deferred Outflow/Inflows of Resources, and Net Position

Cash equivalents – For purposes of the Statement of Cash Flows, cash equivalents are restricted to investments with original remaining maturities when purchased of three months or less.

Fair value measurements – The Authority categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Investments – Investments, principally U.S. government obligations, corporate obligations and municipal bonds, are carried at fair value with the change in fair value recognized as a component of interest on investments. The Authority also participates in the Commonwealth of Virginia Local Government Investment Pool (LGIP) program for public entities of the Commonwealth. This program offers two professionally managed investment portfolios: Virginia Treasury LGIP, a non-SEC registered external pool rated AAAm by Standard and Poor's, and Virginia Treasury LGIP Extended Maturity (EM), a non-SEC registered external pool rated AAAf/S1 by Standard and Poor's. The LGIP is managed in a manner consistent with Securities and Exchange Commission Rule 2a-7 money market fund requirements and the fair value of the position in the LGIP is the same as the value of the pool shares. The LGIP EM portfolio is a diversified portfolio structured to provide an investment alternative for public entities who wish to invest monies not needed for daily liquidity. The LGIP EM portfolio targets a one-year weighted average maturity and the value of the LGIP EM shares will fluctuate with changes in the market value of the portfolio. Pursuant to Sections 2.2-4600 through 2.2-4606 of the *Code of Virginia*, the Treasury Board of the Commonwealth of Virginia is authorized to administer the LGIP program. As permitted by law, the Treasury Board has delegated administrative aspects of managing the LGIP program to the State Treasurer, subject to the regulations and guidelines established by the Treasury Board.

Loans receivable, discounts, and premiums – Loans receivable are reported at the unpaid principal balances, net of an allowance for loan losses, if any. The Authority receives fees relating to the origination of loans. Certain of these fees are received at the origination of a loan and other fees are received over the life of the related loans. The fees received at the origination of a loan are recorded as loan origination revenue while fees received over the life of the related loan are recorded as loan administration fees and bond administration fees in the Statement of Revenues, Expenses, and Changes in Net Position. Loan discounts and premiums are amortized over the lives of the related loans using the effective interest method.

Allowance for loan losses – The allowance for loan losses is maintained to cover possible losses inherent in the loan portfolio based on management's evaluation of the loan portfolio, giving consideration to various factors, including collateral value, past loan loss experience, current facts, and economic conditions. The allowance is based on management's estimates, and ultimate losses may vary from current estimates. An annual review is performed on a risk-based sample of borrowers in VRA's loan portfolio. The review includes performing various liquidity ratios and reviewing rate covenant calculations on existing loans to identify any potential issues with loan repayments. In addition to an annual review, the Authority actively monitors borrower information for any potential impacts to loan repayments throughout the year.

Capital Assets – Capital assets are defined by the Authority as assets with an initial, individual cost of more than $5,000 and a useful life greater than one year. Such assets are recorded at historical cost and are depreciated over the useful life of the asset using the straight-line method. The Authority follows the Commonwealth's Accounting Policies and Procedures Manual (CAPP) for assigning estimated useful lives to its capital assets. The CAPP assigns an estimated useful life of 5 years to office furniture, fixtures, and equipment.

Deferred outflows of resources – In addition to assets, the Statement of Net Position will sometimes report a separate section for deferred outflows of resources. This separate financial element represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources until then. The Authority has three items that qualify for reporting in this category: accounting loss on debt refunding, deferred outflows of resources related to pensions, and deferred outflows of resources related to OPEB. Deferred losses on refundings are recognized as a component of interest expense over the shorter of the life of the old debt or new debt. Deferred outflows of resources related to pensions are amortized and recognized in pension expense over various predetermined closed periods. Deferred outflows of resources related to OPEB are amortized and recognized in OPEB expense over various predetermined closed periods.

Bond discounts and premiums – Bond discounts and premiums are amortized over the lives of the related issues using the effective interest method.

Arbitrage rebate liability – The amount of interest on investments of tax-exempt bond proceeds the Authority may earn is limited by certain federal legislation. Earnings in excess of the allowable amount must be rebated to the U.S. Department of the Treasury. These excess earnings are determined through arbitrage rebate calculations, with the arbitrage rebate liability separately reported on the Authority's financial statements. The Authority treats the estimated rebate payable as a reduction of available resources in the program that earned the arbitrage profit. Accordingly, interest earnings are reduced by the amount with a corresponding arbitrage rebate liability separately reported. The Authority contracts with arbitrage rebate specialists to perform the arbitrage rebate calculations as required.

Compensated absences – The Authority provides for accumulation of paid time off (PTO) leave with a maximum accumulation of up to 520 hours of unused PTO leave. Employees are paid for unused, earned PTO upon separation of employment, with a maximum payout of 160 hours. Individuals employed by the Authority prior to August 1, 2010 are subject to a higher maximum payout cap of 340 hours.

Pensions – The Authority participates in the Virginia Retirement System (VRS), a multi-employer, agent plan. For purposes of measuring the net pension liability, deferred outflows of resources and inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's retirement plan and the additions to/deductions from the Authority's retirement plan's net fiduciary position have been determined on the same basis as they were reported by the 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.

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

Other Post-Employment Benefits, Virginia Local Disability Program – The Authority participates in the VRS Political Subdivision Employee Virginia Local Disability Program (VLDP), a multiple-employer, cost-sharing plan. For purposes of measuring the net VLDP OPEB liability, deferred outflows of resources and deferred inflows of resources related to the VLDP OPEB, and the VLDP OPEB expense, information about the fiduciary net position of the VLDP OPEB and the additions to/deductions from the VLDP OPEB's net fiduciary position have been determined on the same basis as they were reported by VRS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Other Post-Employment Benefits, Health Insurance – The Authority provides post-employment health care benefits for qualifying retirees through a single-employer defined benefit plan. The plan is governed by the Authority's Board of Directors and can be amended at its discretion. The Authority has estimated the cost of providing this benefit using the alternative measurement method in place of an actuarial valuation. The alternative measurement method is an approach that includes the same broad measurement steps as an actuarial valuation (projecting benefit payments, discounting projected benefit payments to a present value, and attributing the present value of projected benefit payments to periods using an actuarial cost method). However, it permits simplification of certain assumptions.

Deferred inflows of resources – In addition to liabilities, the Statement of Net Position will sometimes report a separate section for deferred inflows of resources. This separate financial element represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources until that time. The Authority has three items that qualify for reporting in this category: deferred gains on debt refundings, deferred inflows of resources related to pensions, and deferred inflows related to OPEB. Deferred gains on refundings are recognized as a component of interest expense over the shorter of the life of the old debt or new debt. Deferred inflows of resources related to pensions are amortized and recognized in pension expense over various predetermined closed periods. Deferred inflows of resources related to OPEB are amortized and recognized in OPEB expense over various predetermined closed periods.

Net position – Components of net position include the following:

- Investment in capital assets amounts are those associated with non-liquid, capital assets, less any associated outstanding debt
- Restricted amounts represent the portion of total net position restricted for the purpose of making loans to local governments or by the requirements of the various bond indentures or federal and state regulations for the various revolving funds
- Unrestricted amounts are those currently available at the discretion of the Authority's Board for use in the Authority's operations

Revenues and Expenses

Pass-through grants – The Authority accounts for grants or other financial assistance that is transferred to a secondary recipient as revenues and expenses.

Operating and non-operating revenues and expenses – The Authority's policy is to report all revenues and expenses resulting from providing services in connection with the Authority's ongoing operations, including interest revenues from loans and investments as well as interest expense on bonds payable, as operating revenues and expenses since such revenues and expenses are integral to the operations of the Authority. All revenues and expenses not meeting the above criteria are reported as non-operating revenues and expenses.

Cash Flow Reporting

All cash flows related to bond issuance and administration are included in cash flows from non-capital financing activities on the Statement of Cash Flows. All cash flows related to investment activity are included in cash flows from investing activities on the Statement of Cash Flows.

Note 3 – Cash, Cash Equivalents, and Investments

Cash is held in accounts that are insured by the Federal Deposit Insurance Corporation or are collateralized under provisions of the Commonwealth of Virginia Security for Public Deposits Act, Sec. 2.2-4400 et. seq. of the *Code of Virginia*. There were no amounts that were uninsured or uncollateralized at June 30, 2020.

Fair Value of Investments

The Authority measures and records its investments using fair value measurement guidelines established by generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1: Quoted prices for identical investments in active markets;
- Level 2: Observable inputs other than quoted market prices; and,
- Level 3: Unobservable inputs.

At June 30, 2020, the Authority had the following recurring fair value measurements:

Investments by Fair Value	Fair Value	Level 1	Level 2	Level 3
Agency mortgage backed	$ 11,088,370	$ -	$ 11,088,370	$ -
Asset backed securities	39,409,134	-	39,409,134	-
Commercial paper	2,744,143	-	2,744,143	-
Corporate bonds and notes	59,166,079	-	59,166,079	-
Municipal securities	6,739,593	-	6,739,593	-
Negotiable certificates of deposit	10,856,816	-	10,856,816	-
U.S. Agency securities	41,301,871	-	41,301,871	-
U.S. Treasury securities	156,270,220	-	156,270,220	-
	$ 327,576,226	$ -	$ 327,576,226	$ -
Investments Using Other Measurements				
Guaranteed investment contracts	33,518,314			
LGIP	303,472,831			
LGIP extended maturity portfolio	6,343,721			
Money market funds – Government	8,020,337			
U.S. Treasury SLGS	267,835,125			
Virginia SNAP	2,082,342			
	621,272,670			
Total investments	$ 948,848,896			
Reconciliation to Statement of Net Position				
Cash equivalents	$ 313,575,512			
Investments – current	127,732,023			
Investments – noncurrent	507,541,361			
	$ 948,848,896			

Debt and equity securities classified in Level 1 are valued using prices quoted in active markets for those securities. Debt and equity securities classified in Level 2 are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Commercial and residential mortgage-backed securities classified in Level 3 are valued using discounted cash flow techniques. Guaranteed investment contracts are measured on a cost-basis. Investments in the Local Government Investment Pool (LGIP), LGIP extended maturity portfolio, and Virginia SNAP are measured at the net asset value per share. Money market funds are measured using amortized cost. U.S. Treasury SLGS are reported at historical cost.

Investment Policy
In accordance with the *Code of Virginia* (1950), as amended, and other applicable laws and regulations, the Authority's investment policy (Policy) permits investments in U.S. Government or Agency obligations, obligations of the Commonwealth of Virginia or political subdivisions thereof, negotiable certificates of deposit, negotiable bank deposit notes, repurchase agreements, bankers' acceptances, prime quality commercial paper, corporate notes of domestic corporations, mortgage or asset-backed securities, money market funds, guaranteed investment contracts (GICs), and the State Treasurer's LGIP and LGIP extended maturity portfolio.

As of June 30, 2020, the Authority had the following cash equivalents and investments:

		Investment Maturities			
Investment Type	**Fair Value**	**Less than 1 Year**	**1-5 Years**	**6-10 Years**	**Over 10 Years**
Agency Mortgage Backed	$ 11,088,370	$ 926,052	$ 10,159,161	$ 2,258	$ 899
Asset Backed Securities	39,409,134	422,297	38,986,837	-	-
Commercial Paper	2,744,143	2,744,143	-	-	-
Corporate Bonds and Notes	59,166,079	7,997,726	51,168,353	-	-
Guaranteed Investment Contracts	33,518,314	2,597,506	16,873,370	13,894,967	152,471
LGIP	303,472,831	303,472,831	-	-	-
LGIP extended maturity portfolio	6,343,721	6,343,721	-	-	-
Money Market Funds – Govt.	8,020,337	8,020,337	-	-	-
Municipal Securities	6,739,593	2,902,504	3,837,089	-	-
Negotiable Certificates of Deposit	10,856,816	5,759,835	5,096,981	-	-
U.S. Agency Securities	41,301,871	789,562	40,512,309	-	-
U.S. Treasury Securities	156,270,220	55,614,753	90,741,893	1,525,879	8,387,695
U.S. Treasury SLGS	267,835,125	41,633,926	13,933,218	68,557,836	143,710,145
Virginia SNAP	2,082,342	2,082,342	-	-	-
	$948,848,896	$441,307,535	$271,309,211	$83,980,940	$152,251,210

Reconciliation to Statement of Net Position	
Cash equivalents	$313,575,512
Investments – current	127,732,023
Investments – noncurrent	507,541,361
	$948,848,896

Credit Risk
Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Authority places emphasis on securities of high credit quality and marketability.

The Policy requires that bankers' acceptances maturing within one year have a rating of no less than "P-1" by Moody's Investors Service (Moody's) and "A-1" by S&P Global's Ratings Group (S&P). Negotiable certificates of deposit and negotiable bank notes maturing within one year must have at least two of the following ratings: "P-1" by Moody's, "A-1" by S&P, and "F-1" by Fitch Ratings (Fitch). Negotiable certificates of deposit and negotiable bank notes with maturities over one year but less than five years must have at least two of the following ratings: "Aa" by Moody's, "AA" by S&P, and "AA" by Fitch. Commercial paper must have a short-term debt rating of "P-1", "A-1" or "F-1" from at least two nationally recognized rating agencies, which can only include Moody's, S&P, or Fitch. Municipal obligations, must have no less than a "Aa" rating by Moody's and "AA" by S&P. For corporate notes and bonds maturing in less than five years, each issuer must receive two ratings of at least "A" by Moody's, S&P, or Fitch.

Asset-backed securities maturing in less than five years must have a "AAA" rating by at least two nationally recognized rating agencies, which can only include Moody's, S&P, or Fitch. GICs must be held with financial institutions with long-term credit ratings of at least "Aa" by Moody's or "AA" by S&P. The various bond indentures require that bond fund investments, or any collateralizing securities, have no less than an "AA" rating by at least one nationally recognized rating agency.

Although Virginia statute does not impose credit standards on repurchase agreements or money market mutual funds, the Authority has established stringent credit standards for these investments to minimize portfolio risk.

At June 30, 2020, the Authority had the following cash equivalent and investments:

Investment Type	Fair Value	S&P Rating	Moody's Rating	Percent of Portfolio
Agency Mortgage Backed	$ 11,088,370	AA+	Aaa	1.2%
Asset Backed Securities (AAA)	39,409,134	AAA	Aaa	4.2%
Commercial Paper	2,744,143	A-1+	P-1	0.3%
Corporate Bonds and Notes (AA)	19,165,760	AA+ to AA-	Aa1 to A2	2.0%
Corporate Bonds and Notes (A)	33,042,788	A+ to A-	Aa2 to A3	3.5%
Corporate Bonds and Notes (BBB)	6,957,531	BBB+/BBB-	A3/Baa2	0.7%
Guaranteed Investment Contracts	33,518,314	Various	See below	3.5%
LGIP	303,472,831	AAAm	-	32.0%
LGIP – extended maturity portfolio	6,343,721	AAAf/S1	-	0.7%
Money Market Funds - Government	8,020,337	AAAm	-	0.8%
Municipal Securities (AAA)	630,454	AAA	Aaa	0.1%
Municipal Securities (AA)	6,109,139	AA+ to AA-	AAA to Aa2	0.6%
Negotiable Certificates of Deposit (AA)	10,127,495	AA-	Aa3	1.1%
Negotiable Certificates of Deposit (A)	729,321	A+	Aa2	0.1%
U.S. Agency Securities	41,301,871	AA+	Aaa	4.4%
U.S. Treasury Securities	156,270,220	AA+	Aaa	16.5%
U.S. Treasury SLGS	267,835,125	AA+	Aaa	28.1%
Virginia SNAP	2,082,342	AAAm	-	0.2%
	$ 948,848,896			100.0%

The guaranteed investment contracts (GICs) were entered into based upon the credit rating of the GIC provider. The Moody's ratings of the GIC providers are as follows:

Provider	Fair Value	Moody's Rating	Percent of Portfolio
Citigroup	$ 1,166,710	Baa1*	0.1%
FSA / Assured Guaranty	32,351,604	A3*	3.4%
	$ 33,518,314		3.5%

*Rating fell below approved level and was collateralized with U.S. Treasury and Agency securities in accordance with the Credit Risk Policy.

Concentration of Credit Risk

Concentration of credit risk is related to the risk of loss that may be attributed to the magnitude of a government's investment in a single source.

The Policy establishes limitations on portfolio composition to control the concentration of credit risk. The maximum percentage of the portfolio permitted in each security (by fund type) is as follows:

Investment Type	Fair Value	Percentage of Portfolio	Maximum
Agency mortgage backed	$ 11,088,370	1.9%	25%
Asset backed securities	39,409,134	6.7%	25%
Commercial paper	2,744,143	0.5%	25%
Corporate bonds and notes	59,166,079	10.1%	25%
LGIP	303,472,831	51.8%	100%
LGIP extended maturity portfolio	6,343,721	1.1%	10%
Money market funds – Government	1,873,085	0.3%	100%
Municipal securities	6,739,593	1.2%	25%
Negotiable certificates of deposit	10,856,816	1.9%	10%
U.S. Agency securities	41,301,871	7.0%	100%
U.S. Treasury securities	95,110,079	16.2%	100%
U.S. Treasury SLGS	7,760,000	1.3%	100%
	$ 585,865,722	100.0%	

Reconciliation to Total Cash Equivalents and Investments	
General and Program Funds	$ 585,865,722
Bond Funds*	362,983,174
	$ 948,848,896

*Proceeds from and deposits related to the issuance of VRA bonds (Bond Funds) are held in trust by the various trustee banks under a separate Indenture of Trust and, under certain circumstances, a Supplemental Indenture of Trust (collectively, "Indentures") for each bond issue. The Policy does not establish limitations on the portfolio composition in the Bond Funds. However, the investment of Bond Funds must be diversified in such a manner to ensure the preservation of principal.

Bond Fund investments are governed by Indentures authorizing the Authority or its trustee to invest generally in obligations of the U.S. Government, the Commonwealth of Virginia, or its political subdivisions (except the Farm Credit System for all bond series issued in 1985 and 1986). The Indentures authorize the Authority to enter into repurchase agreements with any bank, as principal and not as an agent, having a combined capital, surplus and undivided profits of not less than $50 million. In addition, the collateralizing securities must have a fair market value equal to at least 100% of the amount of the repurchase obligation plus accrued interest.

The Policy also establishes limitations on portfolio composition by issuer in order to further control concentration of credit risk. No more than 3% of the Authority's portfolio will be invested in the securities of any one issuer with the exception of: (1) the U.S. Government or Agencies thereof, (2) the LGIP and LGIP extended maturity portfolios, (3) fully insured/collateralized certificates of deposit or repurchase agreements that are collateralized by the U.S. Government or Agencies thereof, and (4) mutual funds whereby the portfolio is limited to U.S. Government or Agency Securities.

Interest Rate Risk

Interest rate risk is the risk that changes in the interest rate environment will adversely affect the fair value of a fixed rate investment. The Authority has selected the Segmented Time Distribution method of disclosure. As a means of limiting exposure to fair value losses arising from rising interest rates, the Policy limits individual investments to a stated maturity of no more than five years from the date of purchase. The average maturity of the portfolio may not exceed three years.

Proceeds from the sale of bonds must be invested in compliance with specific requirements of the bond covenants and may be invested in securities with longer maturities.

As of June 30, 2020, the Authority had the following investments and maturities:

General and Program Funds

		Investment Maturities			
Investment Type	**Fair Value**	**Less than 1 Year**	**1-5 Years**	**6-10 Years**	**Over 10 Years**
Agency mortgage backed	$ 11,088,370	$ 926,052	$ 10,159,161	$ 2,258	$ 899
Asset backed securities	39,409,134	422,297	38,986,837	-	-
Commercial paper	2,744,143	2,744,143	-	-	-
Corporate bonds and notes	59,166,079	7,997,726	51,168,353	-	-
LGIP	303,472,831	303,472,831	-	-	-
LGIP extended maturity portfolio	6,343,721	-	6,343,721	-	-
Money market funds – Gov't.	1,873,085	1,873,085	-	-	-
Municipal securities	6,739,593	2,902,504	3,837,089	-	-
Negotiable certificates of deposit	10,856,816	5,759,835	5,096,981	-	-
U.S. Agency securities	41,301,871	789,562	40,512,309	-	-
U.S. Treasury securities	95,110,079	4,368,186	90,741,893	-	-
U.S. Treasury SLGS	7,760,000	1,552,000	6,208,000	-	-
	$585,865,722	$332,808,221	$253,054,344	$ 2,258	$ 899

Average maturity of investments	1.05 years

The General Account includes $3,157 of investments with maturities over five years. These investments are not expected to be held until maturity.

Bond Funds

		Investment Maturities			
Investment Type	**Fair Value**	**Less than 1 Year**	**1-5 Years**	**6-10 Years**	**Over 10 Years**
Guaranteed investment contracts	$ 33,518,314	$ 2,597,506	$ 16,873,370	$13,894,967	$ 152,471
Money market funds-Government	6,147,252	6,147,252	-	-	-
U.S. Treasury securities	61,160,141	51,246,567	-	1,525,879	8,387,695
U.S. Treasury SLGS	260,075,125	40,081,926	7,725,218	68,557,836	143,710,145
Virginia SNAP	2,082,342	2,082,342	-	-	-
	$362,983,174	$102,155,593	$ 24,598,588	$83,978,682	$152,250,311

Average maturity of investments	8.09 years

Custodial Credit Risk

For deposits, custodial credit risk is the risk that in the event of a failure of a depository financial institution, the reporting entity may not recover its deposits. The Authority's deposits at June 30, 2020 are insured by federal depository insurance or collateralized in accordance with the Virginia Security for Public Deposits Act. Under the Act, banks holding public deposits in excess of the amounts insured by the Federal Deposit

Insurance Corporation must pledge collateral in the amount of 50% of the excess deposits to a collateral pool in the name of the State Treasury Board. The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying governments of compliance by banks. A multiple financial institution collateral pool that provides for additional assessments is similar to depository insurance. If any member financial institution fails, the entire assets of the collateral pool become available to satisfy the claims of governmental entities. If the value of the pool's collateral is inadequate to cover a loss, additional amounts would be assessed on a pro-rata basis to the members of the pool.

For investments, custodial risk is the risk that, in the event of the failure of the counterparty, the reporting entity will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. The Policy requires that all investments or collateral securities purchased for the Authority be held by the Authority's designated custodian where the securities must be in the Authority's name and identifiable on the custodian's books as belonging to the Authority and the custodian must be a third party, not a counterparty to the investment transaction. As of June 30, 2020, all of the Authority's investments were held by the Authority's custodial bank in the Authority's name.

Note 4 – Loans Receivable

The Authority has outstanding loans related to its bond issues, the VWFRF, VWSRF, VARF, VTRRF, and VGCP. These loans are to various localities and other governmental entities in the Commonwealth of Virginia. Certain of these loans are secured by a pledge of the revenues from the lease, system-appropriate revenues, and certain other funds and assets of the entities. Other loans are secured by the full faith and credit of the borrowing entity. A summary of loans receivable as of June 30, 2020:

Loan receivables related to bond issues:	
VPFP	$ 2,540,794,359
VWFRF – Leveraged	540,710,376
VARF	30,125,815
Unamortized discounts/premiums, net	176,487,506
	3,288,118,056
Loan receivables related to revolving loan funds:	
VWFRF	769,926,493
VWFRF – AgBMP	2,562,847
VWSRF	174,948,255
VTRRF	2,913,974
	950,351,569
Other loan receivables:	
VGCP	30,219,281
	30,219,281
Total loans receivable	4,268,688,906
Less: allowance for loan losses – AgBMP	(569,000)
Total loans receivable, net of allowance	$ 4,268,119,906
Loans receivable – current	$ 293,942,679
Loans receivable – noncurrent	3,974,177,227
Total loans receivable, net of allowance	$ 4,268,119,906

Bonds secured by the Commonwealth's moral obligation all have bond indentures that require either the Authority or the borrower to deposit with the trustee an amount of funds, known as capital reserve funds, relating to the annual principal and interest payments required on the bonds. These capital reserve funds are available for use by the Authority to pay debt service on the bonds if the borrower defaults on any interest or principal payment on the loans. Capital reserve funds are included as investments in the accompanying Statement of Net Position.

If the Authority is required to use any of these capital reserve funds, the Governor of the Commonwealth of Virginia is required to include in the budget presented to the General Assembly, as an agency request for informational purposes only, the amount necessary to replenish the capital reserve fund to the required level. The General Assembly is under no obligation to pass the budget as presented by the Governor. Any amounts so replenished must be repaid by the Authority to the Commonwealth of Virginia, without interest, from excess operating revenues, as defined, of the Authority, to the extent available.

Loans that are outstanding related to bond issuances have rates that range from 0.22% to 6.29% and final maturities that range from FY2021 to FY2050.

The Authority also has outstanding loans to various localities and other governmental entities in the Commonwealth of Virginia from the VWFRF, VWSRF, VARF, VTRRF, and VGCP. These loans range in final maturity from FY2021 to FY2051 and accrue interest at various rates ranging from 0% to 5.15%.

As of June 30, 2020, the Authority is also obligated under outstanding commitment letters and undisbursed loans and grants to disburse approximately:

Type	VWFRF	VWSRF	VARF	VTIB	VBAF	VTRRF	Total
Committed (loan or grant closed)	$205,847,882	$ 11,368,180	$515,519	$48,663,510	$1,083,245	$ 73,072	$267,551,408
Commitment letter only (loan or grant not closed)	11,641,686	80,224,070	-	-	-	-	91,865,756
Total	$217,489,568	$ 91,592,250	$515,519	$48,663,510	$1,083,245	$ 73,072	$359,417,164

As of June 30, 2020, all loan payments other than AgBMP loans were current and there were no loans in payment default. The AgBMP loans, included within the VWFRF accounts, were determined to have a need for an allowance for loan losses in the amount of $569,000. Loan loss expense in relation to the AgBMP program is included as a general operating expense in the Statement of Revenues, Expenses, and Changes in Net Position.

Note 5 – Capital Assets

Capital asset activity for the year ending June 30, 2020 was as follows:

	June 30, 2019	Additions	Disposals	June 30, 2010
Office equipment	$ 294,283	$ 64,900	$ -	$ 359,183
Less accumulated depreciation	(172,195)	(22,899)	-	(195,094)
Total capital assets, net	$ 122,088	$ 42,001	$ -	$ 164,089

Depreciation expense was $22,899 for the year ended June 30, 2020.

Note 6 – Long-Term Debt

The Authority had the following debt outstanding as of June 30, 2020:

Description	Original Amount	Amount Outstanding
Virginia Pooled Financing Program Revenue Bonds		
Series 2002 (Capital Appreciation Bonds), dated July 31, 2002, interest rates ranging from 4.14% to 5.59%, final maturity November 1, 2031. Amount outstanding includes $16,263,537 accretion for capital appreciation bonds; $5,623,192 of the bonds defeased in 2012	27,537,167	27,021,380
Series 2002A, dated June 6, 2002, interest rates ranging from 3.00% to 5.13%, final maturity May 1, 2027; $20,125,000 of the bonds defeased in 2010; $985,000 of the bonds defeased in 2011	42,845,000	230,000
Series 2005B Senior (Non-AMT), dated June 8, 2005, interest rates ranging from 3.00% to 5.00%, final maturity November 1, 2035; $3,845,000 of the bonds were defeased in 2012; $130,000 of the bonds were defeased in 2016; $545,000 of the bonds defeased in 2018	22,055,000	545,000
Series 2005B Subordinate (Non-AMT), dated June 8, 2005, interest rates ranging from 3.00% to 5.00%, final maturity November 1, 2035; $1,615,000 of the bonds were defeased in 2012; $55,000 of the bonds were defeased in 2016; $235,000 of the bonds defeased in 2018	9,485,000	210,000
Series 2005C Senior (Non-AMT), dated December 7, 2005, interest rates ranging from 4.63% to 5.00%, final maturity November 1, 2035; $1,275,000 of the bonds defeased in 2011; $10,260,000 of the bonds were defeased in 2012; $3,160,000 of the bonds were defeased in 2013; $4,465,000 of the bonds were defeased in 2014	36,710,000	200,000
Series 2005C Subordinate (Non-AMT), dated December 7, 2005, interest rates ranging from 4.00% to 4.75%, final maturity November 1, 2035; $595,000 of the bonds defeased in 2011; $4,260,000 of the bonds were defeased in 2012; $910,000 of the bonds were defeased in 2013; $2,375,000 of the bonds were defeased in 2014	16,365,000	80,000
Series 2006A Senior (Non-AMT), dated June 8, 2006, interest rates ranging from 3.50% to 5.00%, final maturity November 1, 2036; $4,390,000 of the bonds defeased in 2014	49,145,000	245,000
Series 2006A Subordinate (Non-AMT), dated June 8, 2006, interest rates ranging from 3.65% to 5.00%, final maturity November 1, 2036; $1,895,000 of the bonds defeased in 2014; $1,145,000 of the bonds defeased in 2018	25,825,000	105,000

Description	Original Amount	Amount Outstanding
Series 2008A Senior (Non-AMT), dated June 6, 2008, interest rates ranging from 3.00% to 5.00%, final maturity November 1, 2038; $2,350,000 of the bonds defeased in 2019	48,890,000	1,040,000
Series 2008A Subordinate (Non-AMT), dated June 6, 2008, interest ranging from 2.50% to 4.625%, final maturity November 1, 2038; $2,680,000 of the bonds defeased in 2019	22,450,000	440,000
Series 2009A Senior (ACE), dated June 17, 2009, interest rates ranging from 4.00 to 5.00%, final maturity November 1, 2039; $12,725,000 of the bonds defeased in 2020	42,440,000	4,390,000
Series 2009A Subordinate (ACE), dated June 17, 2009, interest rates ranging from 4.00 to 5.00%, final maturity November 1, 2039; $6,440,000 of the bonds defeased in 2020	18,915,000	1,860,000
Series 2009B Infrastructure Revenue Bonds (Tax-Exempt), dated November 19, 2009, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2030; $1,000,000 of the bonds defeased in 2014; $13,955,000 of the bonds defeased in 2015; $7,685,000 of the bonds defeased in 2020	82,175,000	1,350,000
Series 2009B Infrastructure Revenue Bonds (Taxable - Build America Bonds), dated November 19, 2009, interest rates ranging from 4.97 to 5.70%, final maturity November 1, 2039; $2,260,000 of the bonds defeased in 2014	45,180,000	42,280,000
Series 2009B State Moral Obligation (Tax-Exempt), dated November 19, 2009, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2030; $410,000 of the bonds defeased in 2014; $5,985,000 of the bonds defeased in 2015; $6,360,000 of the bonds defeased in 2020	38,190,000	565,000
Series 2009B State Moral Obligation Bonds (Taxable - Build America Bonds), dated November 19, 2009, interest rates ranging from 5.22 to 6.00%, final maturity November 1, 2039; $955,000 of the bonds defeased in 2014	20,785,000	19,550,000
Series 2010A Infrastructure Revenue Bonds, dated June 17, 2010, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2040; $1,685,000 of the bonds defeased in 2015; $2,200,000 of the bonds defeased in 2017; $9,345,000 of the bonds defeased in 2018; $2,325,000 of the bonds defeased in 2020	50,470,000	8,875,000

Description	Original Amount	Amount Outstanding
Series 2010A State Moral Obligation, dated June 17, 2010, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2040; $475,000 of the bonds defeased in 2015; $910,000 of the bonds defeased in 2017; $3,895,000 of the bonds defeased in 2018; $1,275,000 of the bonds defeased in 2020	23,170,000	5,345,000
Series 2010B Infrastructure Revenue Bonds, dated August 18, 2010, interest rates ranging from 1.25 to 5.00%, final maturity November 1, 2040	28,320,000	725,000
Series 2010B State Moral Obligation, dated August 18, 2010, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2040	12,910,000	1,120,000
Series 2010C Infrastructure Revenue Bonds (Tax-Exempt), dated November 23, 2010, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2033; $505,000 of the bonds defeased in 2014; $75,000 of the bonds defeased in 2015; $3,715,000 of the bonds defeased in 2018; $3,560,000 of the bonds defeased in 2019; $7,760,000 of the bonds defeased in 2020	59,635,000	11,045,000
Series 2010C Infrastructure Revenue Bonds (Taxable - Build America Bonds), dated November 23, 2010, interest rates ranging from 3.83 to 5.79%, final maturity November 1, 2040; $21,165,000 of the bonds defeased in 2019	54,740,000	33,575,000
Series 2010C State Moral Obligation (Tax-Exempt), dated November 23, 2010, interest rates ranging from 2.50 to 5.00%, final maturity November 1, 2033; $220,000 of the bonds defeased in 2014; $35,000 of the bonds defeased in 2015; $1,565,000 of the bonds defeased in 2018; $1,495,000 of the bonds defeased in 2019; $3,240,000 of the bonds defeased in 2020	26,395,000	8,645,000
Series 2010C State Moral Obligation Bonds (Taxable - Build America Bonds), dated November 23, 2010, interest rates ranging from 6.19 to 6.29%, final maturity November 1, 2040; $9,055,000 of the bonds defeased in 2019; $14,320,000 of the bonds defeased in 2019	25,920,000	14,410,000
Series 2011A Infrastructure Revenue Bonds (Tax-Exempt), dated June 2, 2011, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2041; $1,805,000 of the bonds defeased in 2014; $1,375,000 of the bonds defeased in 2016; $21,540,000 of the bonds defeased in 2020	50,795,000	6,675,000

Description	Original Amount	Amount Outstanding
Series 2011A Infrastructure Revenue Bonds (Taxable), dated June 2, 2011, interest rates ranging from 3.80 to 5.10%, final maturity November 1, 2031	6,455,000	4,555,000
Series 2011A State Moral Obligation (Tax-Exempt), dated June 2, 2011, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2041; $755,000 of the bonds defeased in 2014; $565,000 of the bonds defeased in 2016; $9,265,000 of the bonds defeased in 2020	21,475,000	2,730,000
Series 2011A State Moral Obligation Bonds (Taxable), dated June 2, 2011, interest rates ranging from 3.95 to 5.25%, final maturity November 1, 2031	2,790,000	1,960,000
Series 2011B Infrastructure Revenue Bonds (Tax-Exempt), dated November 16, 2011, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2041; $9,070,000 of the bonds defeased in 2017; $19,855,000 of the bonds defeased in 2018; $32,300,000 of the bonds defeased in 2020	129,660,000	17,160,000
Series 2011B Infrastructure Revenue Bonds (Taxable), dated November 16, 2011, interest rates ranging from 4.05 to 4.65%, final maturity November 1, 2041	27,750,000	27,750,000
Series 2011B State Moral Obligation (Tax-Exempt), dated November 16, 2011, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2041; $3,885,000 of the bonds defeased in 2017; $3,945,000 of the bonds defeased in 2018; $19,005,000 of the bonds defeased in 2020	55,635,000	7,155,000
Series 2011B State Moral Obligation Bonds (Taxable), dated November 16, 2011, interest rates ranging from 4.50 to 5.05%, final maturity November 1, 2041	12,935,000	12,935,000
Series 2012A Infrastructure Revenue Bonds, dated June 13, 2012, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2042; $3,740,000 of the bonds defeased in 2018; $1,620,000 of the bonds defeased in 2019; $96,950,000 of the bonds defeased in 2020	205,405,000	25,780,000
Series 2012A State Moral Obligation, dated June 13, 2012, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2042; $2,905,000 of the bonds defeased in 2018; $1,075,000 of the bonds defeased in 2019; $44,865,000 of the bonds defeased in 2020	92,735,000	15,660,000
Series 2012A-1 Infrastructure Revenue Bonds, dated June 13, 2012, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2042; $26,555,000 of the bonds defeased in 2020	31,705,000	2,315,000

Description	Original Amount	Amount Outstanding
Series 2012A-1 State Moral Obligation, dated June 13, 2012, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2042; $12,180,000 of the bonds defeased in 2020	14,365,000	985,000
Series 2012B Infrastructure Revenue Bonds (Non-AMT), dated August 2, 2012, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2041	50,240,000	25,780,000
Series 2012B Infrastructure Revenue Bonds (AMT), dated August 2, 2012, interest rates ranging from 2.00 to 2.50%, final maturity November 1, 2024	3,840,000	1,255,000
Series 2012B State Moral Obligation Bonds (Non-AMT), dated August 2, 2012, interest rates ranging from 2.50 to 5.00%, final maturity November 1, 2041	23,385,000	12,045,000
Series 2012B State Moral Obligation Bonds (AMT), dated August 2, 2012, interest rates ranging from 2.00 to 2.75%, final maturity November 1, 2024	1,590,000	530,000
Series 2012 Capital Appreciation Bonds (Tax-Exempt), dated November 15, 2012, final maturity November 1, 2036. Amount outstanding includes $6,194,242 accretion for capital appreciation bonds	19,303,736	25,497,978
Series 2012 Current Interest Bonds (Tax-Exempt), dated November 15, 2012, interest rate of 4.00%, final maturity November 1, 2041	30,020,000	30,020,000
Series 2012 Current Interest Bonds (Taxable), dated November 15, 2012, interest rate of 3.82%, final maturity November 1, 2029	6,730,000	6,730,000
Series 2012C Infrastructure Revenue Bonds (Non-AMT), dated December 6, 2012, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2042; $1,370,000 of the bonds defeased in 2014; $2,860,000 of the bonds defeased in 2019; $3,245,000 of the bonds defeased in 2020	34,040,000	18,565,000
Series 2012C Infrastructure Revenue Bonds (AMT), dated December 6, 2012, interest rates ranging from 2.00 to 4.00%, final maturity November 1, 2022; $1,280,000 of the bonds defeased in 2014	2,890,000	600,000
Series 2012C State Moral Obligation Bonds (Non-AMT), dated December 6, 2012, interest rates ranging from 2.00 to 4.00%, final maturity November 1, 2042; $585,000 of the bonds defeased in 2014; $1,220,000 of the bonds defeased in 2019; $1,385,000 of the bonds defeased in 2020	15,375,000	8,795,000

Description	Original Amount	Amount Outstanding
Series 2012C State Moral Obligation Bonds (AMT), dated December 6, 2012, interest rates ranging from 2.50 to 3.00%, final maturity November 1, 2022; $530,000 of the bonds defeased in 2014	1,465,000	505,000
Series 2013A Infrastructure Revenue Bonds, dated June 5, 2013, interest rates ranging from 1.00 to 5.00%, final maturity November 1, 2042; $585,000 of the bonds defeased in 2014; $10,175,000 of the bonds defeased in 2020	92,810,000	33,275,000
Series 2013A State Moral Obligation, dated June 5, 2013, interest rates ranging from 2.00 to 4.00%, final maturity November 1, 2042	42,135,000	33,615,000
Series 2013B Infrastructure Revenue Bonds, dated August 14, 2013, interest rates ranging from 1.75 to 5.00%, final maturity November 1, 2043	46,410,000	31,910,000
Series 2013B State Moral Obligation, dated August 14, 2013, interest rates ranging from 4.00 to 4.75%, final maturity November 1, 2043	20,080,000	13,845,000
Series 2013C Infrastructure Revenue Bonds (Tax-Exempt), dated November 20, 2013, interest rates ranging from 1.50 to 5.00%, final maturity November 1, 2033.	13,535,000	7,650,000
Series 2013C Infrastructure Revenue Bonds (Taxable), dated November 20, 2013, interest rates ranging from 0.55 to 4.95%, final maturity November 1, 2033	3,615,000	2,895,000
Series 2013C State Moral Obligation (Tax-Exempt), dated November 20, 2013, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2033	6,280,000	3,575,000
Series 2013C State Moral Obligation Bonds (Taxable), dated November 20, 2013, interest rates ranging from 0.70 to 5.10%, final maturity November 1, 2033	1,670,000	1,355,000
Series 2014A Infrastructure Revenue Bonds, dated May 21, 2014, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2044	66,290,000	58,315,000
Series 2014A State Moral Obligation, dated May 21, 2014, interest rates ranging from 3.00 to 4.00%, final maturity November 1, 2044	29,870,000	26,515,000
Series 2014B Infrastructure Revenue Bonds, dated August 13, 2014, interest rates ranging from 1.25 to 5.00%, final maturity November 1, 2038	92,405,000	80,360,000

Description	Original Amount	Amount Outstanding
Series 2014B State Moral Obligation, dated August 13, 2014, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2038	42,085,000	36,825,000
Series 2014C Infrastructure Revenue Bonds (Non-AMT), dated November 19, 2014, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2038, $3,495,000 of the bonds defeased in 2018	103,595,000	83,810,000
Series 2014C Infrastructure Revenue Bonds (AMT), dated November 19, 2014, interest rates ranging from 2.00 to 4.00%, final maturity November 1, 2044	4,040,000	3,615,000
Series 2014C State Moral Obligation (Non-AMT), dated November 19, 2014, interest rates ranging from 4.00 to 5.00%, final maturity November 1, 2038, $1,600,000 of the bonds defeased in 2018	45,870,000	37,355,000
Series 2014C State Moral Obligation Bonds (AMT), dated November 19, 2014, interest rates ranging from 2.00 to 4.00%, final maturity November 1, 2044; $270,000 of the bonds defeased in 2018	1,730,000	1,560,000
Series 2014D Infrastructure Revenue Bonds, dated December 17, 2014, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2028	27,465,000	19,515,000
Series 2014D State Moral Obligation, dated December 17, 2014, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2028	12,835,000	9,440,000
Series 2015A Infrastructure Revenue Bonds (Tax-Exempt), dated May 28, 2015, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2040; $580,000 of the bonds defeased in 2018	83,775,000	72,950,000
Series 2015A Infrastructure Revenue Bonds (Taxable), dated May 28, 2015, interest rates ranging from 0.48 to 4.25%, final maturity November 1, 2035	11,110,000	5,665,000
Series 2015A State Moral Obligation (Tax-Exempt), dated May 28, 2015, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2040	35,225,000	30,590,000
Series 2015A State Moral Obligation Bonds (Taxable), dated May 28, 2015, interest rates ranging from 0.68 to 4.69%, final maturity November 1, 2035	5,225,000	2,925,000
Series 2015B Infrastructure Revenue Bonds (Tax-Exempt), dated November 18, 2015, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2035	42,250,000	38,205,000

Description	Original Amount	Amount Outstanding
Series 2015B Infrastructure Revenue Bonds (Taxable), dated November 18, 2015, interest rates ranging from 0.22 to 4.01%, final maturity November 1, 2030	6,310,000	5,335,000
Series 2015B State Moral Obligation (Tax-Exempt), dated November 18, 2015, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2035	18,505,000	16,895,000
Series 2015B State Moral Obligation Bonds (Taxable), dated November 18, 2015, interest rates ranging from 0.37 to 4.16%, final maturity November 1, 2030	3,005,000	2,565,000
Series 2015C Infrastructure Revenue Bonds, dated October 14, 2015, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2035	21,910,000	20,760,000
Series 2015C State Moral Obligation Bonds, dated October 14, 2015, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2035	9,850,000	9,375,000
Series 2015D Infrastructure Revenue Bonds (Tax-Exempt), dated November 18, 2015, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2036; $710,000 of the bonds defeased in 2019; $900,000 of the bonds defeased in 2020	107,760,000	96,560,000
Series 2015D Infrastructure Revenue Bonds (Taxable), dated November 18, 2015, interest rates ranging from 0,80 to 3.20%, final maturity November 1, 2025	4,475,000	3,090,000
Series 2015D State Moral Obligation (Tax-Exempt), dated November 18, 2015, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2038; $325,000 of the bonds defeased in 2019; $410,000 of the bonds defeased in 2020	52,290,000	47,135,000
Series 2015D State Moral Obligation Bonds (Taxable), dated November 18, 2015, interest ranging from 0.90 to 3.35%, final maturity November 1, 2025	2,455,000	1,810,000
Series 2016A Infrastructure Revenue Bonds, dated May 25, 20126, interest rates ranging from 4.00 to 5.00%, final maturity November 1, 2037	89,580,000	79,005,000
Series 2016A State Moral Obligation Bonds, dated May 25, 2016, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2037	47,040,000	42,110,000

Description	Original Amount	Amount Outstanding
Series 2016B Infrastructure Revenue Bonds (Tax-Exempt), dated August 10, 2016, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2036	32,635,000	29,355,000
Series 2016B Infrastructure Revenue Bonds (Taxable), dated August 10, 2016, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2046	2,340,000	1,680,000
Series 2016B State Moral Obligation (Tax-Exempt), dated August 10, 2016, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2036	16,330,000	14,760,000
Series 2016B State Moral Obligation Bonds (Taxable), dated August 10, 2016, interest ranging from 2.75 to 3.00%, final maturity November 1, 2046	1,230,000	920,000
Series 2016C Infrastructure Revenue Bonds, dated November 16, 2016, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2046	146,095,000	141,910,000
Series 2016C State Moral Obligation Bonds, dated November 16, 2016, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2046	66,820,000	64,865,000
Series 2017A Infrastructure Revenue Bonds, dated May 18, 2017, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2037	42,965,000	41,135,000
Series 2017A State Moral Obligation Bonds, dated May 18, 2017, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2038	19,130,000	18,315,000
Series 2017B Infrastructure Revenue Bonds (Tax-Exempt), dated August 16, 2017, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2041	27,675,000	26,700,000
Series 2017B Infrastructure Revenue Bonds (Taxable), dated August 16, 2017, interest rates ranging from 1.625 to 3.875%, final maturity November 1, 2037	2,655,000	2,460,000
Series 2017B State Moral Obligation Bonds (Tax-Exempt), dated August 16, 2017, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2037	7,620,000	7,205,000
Series 2017B State Moral Obligation Bonds (Taxable), dated August 16, 2017, interest rates ranging from 1.625 to 4.05%, final maturity November 1, 2037	1,215,000	1,125,000

Description	Original Amount	Amount Outstanding
Series 2017C Infrastructure Revenue Bonds, dated November 15, 2017, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2044	56,630,000	52,540,000
Series 2017C State Moral Obligation Bonds, dated November 15, 2017, interest rates ranging from 2.00 to 5.00%, final maturity November 1, 2044	30,315,000	28,265,000
Series 2018A Infrastructure Revenue Bonds (Tax-Exempt), dated May 23, 2018, interest rates ranging from 3.125 to 5.00%, final maturity November 1, 2047	70,385,000	66,830,000
Series 2018A Infrastructure Revenue Bonds (Taxable), dated May 23, 2018, interest rates ranging from 2.125 to 5.00%, final maturity November 1, 2047	2,510,000	2,415,000
Series 2018A State Moral Obligation Bonds (Tax-Exempt), dated May 23, 2018, interest rates ranging from 3.00 to 5.00%, final maturity November 1, 2047	32,275,000	30,785,000
Series 2018A State Moral Obligation Bonds (Taxable), dated May 23, 2018, interest rates ranging from 2.275 to 4.17%, final maturity November 1, 2047	1,160,000	1,110,000
Series 2018B Infrastructure Revenue Bonds, dated August 16, 2018, interest rates ranging from 3.0 to 5.0%, final maturity November 1, 2038	19,595,000	18,985,000
Series 2018B State Moral Obligation Bonds, dated August 16, 2018, interest rates ranging from 3.0 to 5.0%, final maturity Nov. 1, 2038	8,365,000	8,105,000
Series 2018C Infrastructure Revenue Bonds (Tax-Exempt), dated November 13, 2018, interest rates ranging from 4.0 to 5.0%, final maturity November 1, 2048	72,960,000	70,380,000
Series 2018C Infrastructure Revenue Bonds (Taxable), dated November 13, 2018, interest rates ranging from 2.75 to 4.25%, final maturity November 1, 2038	4,610,000	4,370,000
Series 2018C State Moral Obligation Bonds (Tax-Exempt), dated November 13, 2018, interest rates ranging from 3.25 to 5.0%, final maturity November 1, 2048	39,105,000	37,985,000
Series 2018C State Moral Obligation Bonds (Taxable), dated November 13, 2018, interest rates ranging from 2.875 to 4.35%, final maturity November 1, 2038	2,285,000	2,180,000

Description	Original Amount	Amount Outstanding
Series 2019A Infrastructure Revenue Bonds (Tax-Exempt), dated November 13, 2018, interest rates ranging from 2.625 to 5.0%, final maturity November 1, 2040	37,365,000	37,015,000
Series 2019A State Moral Obligation Bonds (Tax-Exempt), dated November 13, 2018, interest rates ranging from 3.0 to 5.0%, final maturity November 1, 2040	18,625,000	18,475,000
Series 2019B Infrastructure Revenue Bonds (Tax-Exempt), dated August 14, 2019, interest rates ranging from 3.0 to 5.0%, final maturity November 1, 2041	40,990,000	40,920,000
Series 2019B Infrastructure Revenue Bonds (AMT), dated August 14, 2019, interest rates ranging from 3.0 to 5.0%, final maturity November 1, 2049	5,515,000	5,510,000
Series 2019B Infrastructure Revenue Bonds (Taxable), dated August 14, 2019, interest rates ranging from 1.95 to 2.75%, final maturity November 1, 2034	11,740,000	11,740,000
Series 2019B State Moral Obligation Bonds (Tax-Exempt), dated August 14, 2019, interest rates ranging from 3.0 to 5.0%, final maturity Nov. 1, 2041	27,865,000	27,655,000
Series 2019B State Moral Obligation Bonds (AMT), dated August 14, 2019, interest rates ranging from 3.375 to 5.0%, final maturity Nov. 1, 2049	2,345,000	2,340,000
Series 2019B State Moral Obligation Bonds (Taxable), dated August 14, 2019, interest rates ranging from 2.05 to 3.0%, final maturity Nov. 1, 2034	5,615,000	5,615,000
Series 2019C Infrastructure Revenue Bonds (Tax-Exempt), dated November 18, 2019, interest rates ranging from 3.0 to 5.0%, final maturity November 1, 2049	71,270,000	71,270,000
Series 2019C Infrastructure Revenue Bonds (Taxable), dated November 18, 2019, interest rates ranging from 1.817 to 3.32%, final maturity November 1, 2042	193,515,000	193,515,000
Series 2019C State Moral Obligation Bonds (Tax-Exempt), dated November 18, 2019, interest rates ranging from 2.0 to 5.0%, final maturity Nov. 1, 2049	32,885,000	32,885,000
Series 2019C State Moral Obligation Bonds (Taxable), dated November 18, 2019, interest rates ranging from 1.85 to 3.25%, final maturity Nov. 1, 2042	85,900,000	85,900,000

Description	Original Amount	Amount Outstanding
Series 2020A Infrastructure Revenue Bonds (Tax-Exempt), dated June 3, 2020, interest rates ranging from 4.0 to 5.0%, final maturity November 1, 2040	12,195,000	12,195,000
Series 2020A Infrastructure Revenue Bonds (Taxable), dated June 3, 2020, interest rates ranging from 1.2 to 3.1%, final maturity November 1, 2038	37,880,000	37,880,000
Series 2020A State Moral Obligation Bonds (Tax-Exempt), dated June 3, 2020, interest rates ranging from 4.0 to 5.0%, final maturity Nov. 1, 2040	5,245,000	5,245,000
Total Virginia Pooled Financing Program Revenue Bonds	$4,160,475,903	$2,662,779,358
Airport Revolving Fund Revenue Bonds		
Series 2007 (Taxable), dated March 18, 2007, interest rates ranging from 4.98% to 5.70%, final maturity August 1, 2032	5,425,000	2,925,000
Series 2011A (Non-AMT) (Refunding), dated August 23, 2011, interest rates ranging from 2.00% to 5.00%, final maturity August 1, 2027	16,425,000	8,605,000
Series 2011B (AMT) (Refunding), dated August 23, 2011, interest rates ranging from 2.00% to 5.00%, final maturity August 1, 2026	16,725,000	8,320,000
Total Airport Revolving Fund Revenue Bonds	$ 38,575,000	$ 19,850,000
Virginia Water Facilities Revolving Loan Fund Leveraged		
Series 2005 CWSRF (Refunding), dated June 30, 2005, interest rates ranging from 3.00% to 5.50%, final maturity October 1, 2022	$ 188,475,000	$ 33,610,000
Series 2010A CWSRF (Refunding), dated April 21, 2010 interest rates ranging from 3.00% to 5.00%, final maturity October 1, 2026	94,410,000	38,835,000
Series 2010B CWSRF, dated April 21, 2010, interest rates ranging from 2.25% to 5.00%, final maturity October 1, 2031	98,785,000	4,360,000
Series 2011B CWSRF, dated September 28, 2011, interest rates ranging from 2.00% to 5.00%, final maturity October 1, 2034	34,655,000	27,875,000
Series 2013 CWSRF (Refunding), dated June 20, 2013, interest rates ranging from 1.00% to 5.00%, final maturity October 1, 2025	104,275,000	78,600,000
Series 2014B CWSRF (Refunding), dated September 30, 2014, interest rates ranging from 2.00% to 5.00%, final maturity October 1, 2031	178,935,000	170,380,000

Description	Original Amount	Amount Outstanding
Series 2015 CWSRF (Refunding), dated April 14, 2015, interest rate of 5.00%, final maturity October 1, 2031	115,225,000	115,225,000
Series 2016 CWSRF (Refunding), dated June 30, 2016, interest rate of 2.31%, final maturity October 1, 2032 (Direct Borrowing)	78,840,000	74,025,000
Series 2019 Clean Water State Match Revenue, dated June 18, 2019, interest rate of 1.97%, final maturity April 1, 2021 (Direct Borrowing)	8,881,000	4,224,000
Total Virginia Water Facilities Revolving Loan Fund	$ 902,481,000	$ 547,134,000

Changes in long-term debt for the year ended June 30, 2020 are as follows:

	June 30, 2019	Increases	Decreases	June 30, 2020	Due within One Year
Bonds outstanding	$3,172,435,419	$532,780,000	$(553,701,060)	$3,151,514,359	$194,905,002
Unamortized discounts and premiums on bonds	275,297,841	30,678,945	(71,820,119)	234,156,667	32,037,377
Notes from direct borrowings	84,036,000	-	(5,787,000)	78,249,000	5,379,000
Conduit debt	31,937,232	-	(1,717,951)	30,219,281	1,733,621
	$3,563,706,492	$563,458,945	$(633,026,130)	$3,494,139,307	$234,055,000

All bonds and direct placements are limited obligations of the Authority payable solely from and secured by a pledge of the principal and interest payments required to be made by certain local and other governmental entities on loans made by the Authority and a pledge of all funds and accounts established by the various bond indentures. The Authority has the option to redeem various bonds. The redemptions generally cannot be exercised until the bonds have been outstanding for ten years or more, as fully described in the various bond indentures.

At June 30, 2020, $933,279,358 of the outstanding bonds were secured by the moral obligation of the Commonwealth.

At June 30, 2020, the Series 2002 Revenue Bonds and Series 2012 Revenue Bonds include capital appreciation bonds with unaccreted values of $22,760,641.

The Authority's outstanding note from direct borrowings for Series 2019 Clean Water State Match in the Water Facilities Revolving Loan Fund contains a provision that in the event of default, the annual interest rate increases to the higher of (i) the Prime Rate plus four percent (4.00%), (ii) the Fed Funds Rate plus five percent (5.00%), or (iii) ten percent (10.00%).

Conduit Debt

The Authority issued bonds through the Virginia Green Communities Program (VGCP), which uses the Commonwealth's allocation of Qualified Energy Conservation Bonds to provide subsidized financing for energy efficiency, renewable energy, alternative fueling, and other qualified conservation purposes. The Authority is a conduit issuer for public borrowers with a third-party funding source providing financing for eligible projects. The terms of the VGCP bonds stipulate that the Authority does not guarantee repayment of principal and interest to the bondholders. The Authority has elected to show these bonds as liabilities and the associated loans from local borrowers as assets in the accompanying financial statements. As of June 30, 2020, the total outstanding principal amount of conduit debt obligations in the VGCP was $30,219,281.

Refundings
During the fiscal year, the Authority issued Virginia Pooled Financing Program Revenue Bonds, Series 2019B, Series 2019C, and Series 2020A, from which a portion of proceeds were used to provide resources to place in trust for the purpose of making future debt service payments for certain maturities.

As a result, the refunded bonds below are considered to be defeased and the liability has been removed from the Statement of Net Position:

Issue	Principal Defeased	Difference between Previous and New Debt Services	Economic Gain as a Result of the Refunding
2009A Series	$ 30,860,000	$ 6,172,011	$ 5,178,336
2009B	8,860,000	1,156,009	1,043,599
2010A	3,600,000	(345,191)	11,046
2010C	11,030,000	274,352	628,840
2011A	30,805,000	3,943,987	2,866,801
2011B	32,270,000	2,511,476	2,202,821
2012A	141,815,000	16,686,415	12,927,949
2012A-1	38,735,000	6,131,648	4,199,249
2013A Series	39,475,000	3,770,515	2,501,388
	$ 337,450,000	$ 40,301,222	$ 31,560,029

The amount outstanding at June 30, 2020 for bonds that have been in-substance defeased was $591,837,000. In addition to the refundings noted above, this includes bonds that were in-substance defeased during the current and prior years: Series 2002, CWSRF 2004, Series 2009A, Series 2009B, Series 2010A, Series 2010B, Series 2010C, Series 2011A, Series 2011B, Series 2012A, Series 2012C, Series 2014C, and Series 2015D.

Debt service requirements on bonds and direct borrowings at June 30, 2020 are as follows:

	Bonds			Direct Borrowings		
June 30,	Principal	Interest	Total	Principal	Interest	Total
2021	$ 196,638,623	$ 126,853,738	$ 323,492,359	$ 5,379,000	$ 1,726,692	$ 7,105,692
2022	193,772,048	118,165,203	311,937,253	5,725,000	1,595,132	7,320,132
2023	194,604,860	109,288,157	303,893,017	5,845,000	1,461,037	7,306,037
2024	184,594,097	100,761,200	285,355,297	5,990,000	1,323,784	7,313,784
2025	191,889,805	92,515,998	284,405,803	6,140,000	1,183,105	7,323,105
2026-2030	948,020,009	339,226,062	1,287,246,071	33,020,000	3,681,023	36,701,023
2031-2035	676,366,857	176,688,417	853,055,274	16,150,000	408,138	16,558,138
2036-2040	401,697,982	79,250,951	480,948,933	-	-	-
2041-2045	174,505,000	21,438,677	195,943,677	-	-	-
2046-2050	42,405,000	2,821,500	45,226,500	-	-	-
	$ 3,204,494,281	$ 1,167,009,903	$ 4,371,504,184	$ 78,249,000	$11,378,911	$ 89,627,911

Note 7 – Restricted Net Position

Restricted net position represents the portion of total net position restricted for the purpose of making loans to local governments or by the requirements of various bond indentures or federal and state regulations for the various revolving funds. Restricted net position includes Revolving Loan Fund Accounts (net of capital assets), Airport Revolving Fund Accounts, Bond Accounts, and the Operating Reserve Fund. Such loans or grants are generally made at the direction of the state agencies overseeing the related programs. All assets and liabilities included in the Authority's General Accounts are non-restricted in nature; however, the General Account has pledged assets to establish an Operating Reserve Fund for the VPFP. The Operating Reserve Fund serves as security on the Authority's Infrastructure Revenue Bonds (senior lien) and is classified as restricted. At June 30, 2020 the cash, cash equivalents, and investments restricted for use related to the Operating Reserve Fund amounted to $7,760,095.

Note 8 – Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities at June 30, 2020 consisted of:

	Current	Noncurrent	Total
Arbitrage rebate liability	$ -	$ 5,854	$ 5,854
Accounts payable and other liabilities	80,858	-	80,858
Compensated absences	127,266	-	127,266
Loan payments received prior to due date	1,752,495	-	1,752,495
	$ 1,960,619	$ 5,854	$ 1,966,473

Note 9 – Contributions from Other Governments

During the fiscal year, the Authority received $49,670,702 from the EPA under the Capitalization Grants for State Revolving Funds. Contributions from the EPA are disbursed as loans and grants to municipalities. The Authority also received $5,806,775 from the Commonwealth as part of the required state match of federal funds.

In addition, the Authority received the following funds from the Commonwealth: $43,702,147 for the VWFRF's combined sewer overflow projects; $6,130,264 for VDSFPF; $1,691,558 for VBAF; and $610,045 for VTRRF.

Note 10 – Employee Pension Plans

Plan Description

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

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

VRS Plan 1

Overview – Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.

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

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

Retirement Contributions – Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.

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

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

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

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

Service Retirement Multiplier – The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.7%.

Normal Retirement Age – Age 65.

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

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

Cost-of-Living Adjustment (COLA) in Retirement – The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%. For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.

The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:

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

Disability Coverage – Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted. VSDP members are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.

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

<u>VRS Plan 2</u>
Overview – Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.

Eligible Members – Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.

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

Retirement Contributions – Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction.

Creditable Service – Same as Plan 1.

Vesting – Same as Plan 1.

Calculating the Benefit – See definition under Plan 1.

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

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

Normal Retirement Age – Normal Social Security retirement age.

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

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

Cost-of-Living Adjustment (COLA) in Retirement – The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%. Eligibility and exceptions to COLA effective dates are the same as VRS Plan 1.

Disability Coverage –Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted. VSDP members are subject to a one-year waiting period before becoming eligible for non-work related disability benefits.

Purchase of Prior Service – Same as Plan 1.

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

Eligible Members – Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes political subdivision employees and members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014. Some employees are not eligible to participate in the Hybrid Retirement Plan. They include political subdivision employees who are covered by enhanced benefits for hazardous duty employees. Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.

Retirement Contributions – A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

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

Creditable Service, Defined Contributions Component – Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

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

Vesting, Defined Contributions Component – Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service:

- After two years, a member is 50% vested and may withdraw 50% of employer contributions
- After three years, a member is 75% vested and may withdraw 75% of employer contributions
- After four or more years, a member is 100% vested and may withdraw 100% of employer contributions

Distribution is not required by law until age 70½.

Calculating the Benefit, Defined Benefit Component – See definition under Plan 1.

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

Average Final Compensation – Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.

Service Retirement Multiplier – The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.

Normal Retirement Age, Defined Benefit Component – Same as Plan 2.

Normal Retirement Age, Defined Contribution Component – Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Unreduced Retirement Eligibility, Defined Benefit Component – Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.

Earliest Unreduced Retirement Eligibility, Defined Contribution Component – Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Reduced Retirement Eligibility, Defined Benefit Component – Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.

Earliest Reduced Retirement Eligibility, Defined Contribution Component – Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Cost-of-Living Adjustment (COLA) in Retirement, Defined Benefit Component – Same as Plan 2. Eligibility and exceptions to COLA effective dates are the same as Plan 1 and Plan 2.

Cost-of-Living Adjustment (COLA) in Retirement, Defined Contribution Component – Not applicable.

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

Purchase of Prior Service, Defined Benefit Component – Same as Plan 1, with the following exceptions: Hybrid Retirement Plan members are ineligible for ported service.

Purchase of Prior Service, Defined Contribution Component – Not applicable.

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:

Inactive members or their beneficiaries currently receiving benefits	2
Inactive members:	
Vested inactive members	7
Non-vested inactive members	4
Inactive members elsewhere in VRS	6
Total inactive members	17
Active members	13
Total covered employees	32

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

The Authority's contractually required contribution rate for the year ended June 30, 2020 was 4.67% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employee during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $71,065 and $68,090 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net Pension Liability
The Authority's net pension liability was measured as of June 30, 2019. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2018, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2019.

Actuarial Methods and Assumptions
The total pension liability for the Authority 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%
Salary increases, including inflation	3.5-5.35%
Investment rate of return	6.75%, net of pension plan investment expense, including inflation*

*Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for Government Accounting Standards Board ("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: 15% of deaths are assumed to be service related

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90
- Post-Disablement: RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates

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

- Mortality rates: update to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: lowered rates
- Salary scale: no change
- Line of Duty Disability: increase rate from 14% to 15%

Long-Term Expected Rate of Return

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	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%	1.32%
Multi-Asset Public Strategies	6.00%	3.52%	0.21%
Private Investment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
Inflation			2.50%
Expected arithmetic nominal return*			7.63%

*The above allocation provides a one-year return of 7.72%. However, one-year returns do not take in account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%.

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.

Through the fiscal year ending June 30, 2019, the rate contributed by the employer for the Political Subdivision Retirement Plan 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 pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	**Plan Fiduciary Net Position (b)**	**Net Pension Liability (Asset) (a)-(b)**
Balance at June 30, 2018	$ 1,471,853	$ 1,921,151	$ (449,298)
Changes for the year:			
Service cost	137,528	-	137,528
Interest	101,751	-	101,751
Changes of assumptions	79,464	-	79,464
Difference between expected and actual experience	264,966	-	264,966
Contributions – employer	-	65,730	(65,730)
Contributions – employee	-	71,954	(71,954)
Net investment income	-	134,272	(134,272)
Benefit payments, including refunds	(36,525)	(36,525)	-
Administrative expenses	-	(1,172)	1,172
Other changes	-	(86)	86
Net change	547,184	234,173	313,011
Balance at June 30, 2019	$ 2,019,037	$ 2,155,324	$ (136,287)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate
The following presents the Authority's net pension liability using the current discount rate, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease	**Current Rate**	**1% Increase**
Net pension liability (asset)	$ (231,420)	$ (136,287)	$ (417,380)

Pension Expense and Deferred Outflows/Inflows of Resources Related to Pensions
For the year ended June 30, 2020, the Authority recognized pension expense of $99,155. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	**Deferred Inflows of Resources**
Differences between expected and actual experience	$ 206,158	$ 31,184
Changes of assumptions	60,035	38,093
Net difference between projected and actual earnings on plan investments	-	24,081
Employer contributions subsequent to the measurement date	71,065	-
	$ 337,258	$ 93,358

Deferred outflows of resources of $71,065 resulting from the Authority's contributions subsequent to the measurement date 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 related to pensions and amounts reported as deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended June 30,	
2021	$ 51,028
2022	34,153
2023	79,334
2024	8,320
2025	-
Thereafter	-
	$ 172,835

Pension Plan Data
Information about the VRS Plan is also available in the separately issued VRS Comprehensive Annual Financial Report at http://www.varetire.org/Publications, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Note 11 – Other Post-Employment Benefits – Group Life Insurance Program

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

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

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

Eligible Employees
The Group Life Insurance Program was established July 1, 1960 for state employees, teachers and employees of political subdivisions that elect the program. Basic group life insurance is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their member contribution and accrued interest.

Benefit Amounts
The benefits payable under the Group Life Insurance Program have several components:

- Natural Death Benefit: Equal to the employee's covered compensation rounded to the next highest thousand, then doubled.
- Accidental Death Benefit: Double the natural death benefit.
- Other Benefit Provisions: In addition to the natural and accidental death benefits, the program provides additional benefits under specific circumstances, including the accidental dismember benefit, safety belt benefit, repatriation benefit, felonious assault benefit, and accelerated death benefit option.

Reduction in Benefit Amounts

The benefit amounts provided to members covered under the Group Life Insurance Program are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value.

Minimum Benefit Amount and Cost-of-Living Adjustment (COLA)

For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at $8,000 by Statute. The amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and is currently $8,111.

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation; this was allocated into an employee and employer component using a 60/40 split, resulting in the employee component of 0.79% and the employer component of 0.52%. Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution.

Each employer's contractually required employer contribution rate for the year ended June 30, 2020 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the Group Life Insurance Program for the Authority were $7,974 and $7,640 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net OPEB Liability

The net OPEB liability (NOL) for the Group Life Insurance Program represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2019, NOL amounts for the Group Life Insurance Program is as follows (in thousands):

Total OPEB liability	$ 3,390,238
Less Plan Fiduciary Net Positon	(1,762,972)
Employers' Net OPEB Liability	$ 1,627,266
Plan Fiduciary Net Positon as a percentage of the Total OPEB liability	52.00%

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

At June 30, 2020, the Authority reported a liability of $121,000 for its proportionate share of the NOL. The NOL was measured as of June 30, 2019 and the total Group Life Insurance OPEB liability used to calculate the NOL was determined by an actuarial valuation performed as of June 30, 2018, and rolled forward to the measurement date of June 30,2019. The Authority's proportion of the NOL was based on the Authority's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2019 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019 and June 30, 2018, the Authority's proportion was 0.00744 % and 0.00683%, respectively.

Actuarial Assumptions
The total Group Life insurance OPEB liability was based on an actuarial valuation as of July 1, 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%
Salary increases, including inflation	
General state employees	3.5-5.35%
Teachers	3.5-5.95%
SPORS employees	3.5-4.75%
JRS employees	4.5%
VaLORS employees	3.5-4.75%
Locality – General employees	3.5-5.35%
Locality – Hazardous Duty employees	3.5-4.75%
Investment rate of return	6.75%, net of pension plan investment expense, including inflation*

*Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment 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 OPEB liabilities.

<u>Mortality rates – General State Employees</u>

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115% of rates; females 130% of rates

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: increased rate from 14% to 25%

<u>Mortality rates – Teachers</u>

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

- Post-Retirement: RP-2014 White Collar Employee Rates to age 49, White Collar Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75-90
- Post-Disablement: RP-2014 Disability Mortality Rates projected with scale BB to 2020; 115% of rates for males and females

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: adjusted rates to better match experience
- Salary scale: no change

<u>Mortality rates – SPORS Employees</u>

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% males

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
- Retirement rates: increased age 50 rates and lowered rates at older ages
- Withdrawal rates: adjusted rates to better fit experience
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: increased rate from 60% to 85%

<u>Mortality rates – JRS Employees</u>

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males set back 1 year, 85% of rates; females set back 1 year
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year; females set back 1 year with 1.5% increase compounded from ages 70 to 85
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males 115% of rates; females 130% of rates

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: decreased rates at first retirement eligibility
- Withdrawal rates: no change
- Disability rates: removed disability rates
- Salary scale: no change

Mortality rates – VaLORS Employees

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% males

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
- Retirement rates: increased age 50 rates and lowered rates at older ages
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: decreased rate from 50% to 35%

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

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and extended final retirement age from 70 to 75
- Withdrawal rates: adjusted to better fit experience at each year age and service year
- Disability rates: lowered disability rates

- Salary scale: no change
- Line of Duty Disability: increased rate from 14% to 20%

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

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year.
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and extended final retirement age from 70 to 75
- Withdrawal rates: adjusted termination rates to better fit experience at each year age and service year
- Disability rates: lowered disability rates
- Salary scale: no change
- Line of Duty Disability: increased rate from 14% to 15%

Long-Term Expected Rate of Return

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	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%	1.32%
Multi-Asset Public Strategies	6.00%	3.52%	0.21%
Private Investment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
Inflation			2.50%
Expected arithmetic nominal return*			7.63%

*The above allocation provides a one-year return of 7.72%. However, one-year returns do not take in account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total Group Life Insurance OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the Authority for the Group Life Insurance OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the Group Life Insurance OPEB'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 Group Life Insurance OPEB liability.

Sensitivity of the Authority's Proportionate Share of the Net Group Life Insurance OPEB Liability to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net Group Life Insurance OPEB liability using the current discount rate, as well as what the Authority's proportionate share of the net Group Life

Insurance OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease	Current Rate	1% Increase
Proportionate share of the net Group Life Insurance OPEB liability	$ 159,000	$ 121,000	$ 90,000

Group Life Insurance OPEB Expense and Deferred Outflows/Inflows of Resources Related to the Group Life Insurance Program

For the year ended June 30, 2020, the Authority recognized total OPEB expense of $53,973, of which $2,640 was related to the Group Life Insurance OPEB. Since there was a change in proportionate share between measurement dates, a portion of the Group Life Insurance OPEB expense was related to deferred amounts from changes in proportion.

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 8,000	$ 2,000
Net difference between projected and actual earnings on plan investments	-	2,000
Change in assumptions	8,000	4,000
Changes in proportion	8,000	6,000
Employer contributions subsequent to the measurement date	7,974	-
	$ 31,974	$ 14,000

Deferred outflows of resources of $7,974 resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Group Life Insurance OPEB Liability in the year ended June 30, 2021.

Amounts reported as deferred inflows of resources related to the Group Life Insurance OPEB will be recognized in the Group Life Insurance OPEB expense as follows:

Year Ended June 30,	
2021	$ 1,000
2022	1,000
2023	2,000
2024	3,000
2025	2,000
Thereafter	1,000
	$ 10,000

Group Life Insurance Plan Data

Information about the Group Life Insurance Program's Fiduciary Net Position is available in the separately issued VRS Comprehensive Annual Financial Report at http://www.varetire.org/Publications, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Note 12 – Other Post-Employment Benefits – Virginia Local Disability Program

Plan Description

All full-time, salaried permanent employees of the Authority who are in the VRS Hybrid Retirement Plan benefit structure are automatically covered by the VRS Political Subdivision Employee Virginia Local Disability Program ("VLDP") upon employment. This plan is administered by the Virginia Retirement System ("System") along with pensions and other OPEB plans for public employer groups in the Commonwealth of Virginia. Political subdivisions are required by Title 51.1 of the *Code of Virginia*, as amended, to provide short-term and long-term disability benefits for their Hybrid employees either through a local plan or through the VLDP.

Eligible Employees

The VLDP was implemented January 1, 2014 to provide short-term and long-term disability benefits for non-work-related and work-related disabilities for employees with Hybrid retirement benefits. Eligible employees are enrolled automatically upon employment.

Benefit Amounts

- Short-term disability
  - Beginning after a seven-calendar day waiting period from the first day of disability. Employees become eligible for non-work-related short-term disability coverage after one year of continuous participation in VLDP with their current employer.
  - During the first five years of continuous participation in VLDP with their current employer, employees are eligible for 60% of their pre-disability income if they go out on non-work related or work-related disability.
  - Once the eligibility period is satisfied, employees are eligible for higher income replacement levels.
- Long-term disability
  - Beginning after 125 workdays of short-term disability. Members are eligible if they are unable to work at all or are working fewer than 20 hours per week.
  - Members approved for long-term disability will receive 60% of their pre-disability income. If approved for work-related long-term disability, the VLDP benefit will be offset by the workers' compensation benefit. Members will not receive a VLDP benefit if their workers' compensation benefit is greater than the VLDP benefit.

VLDP Program Notes

Members approved for short-term or long-term disability at age 60 or older will be eligible for a benefit, provided they remain medically eligible.

VLDP Long-Term Care Plan is a self-funded program that assists with the cost of covered long-term care services.

Contributions

The contribution requirements for the active Hybrid employees is governed by §51.1-1178(C) 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. Each political subdivision's contractually required employer contribution rate for the year ended June 30, 2020 was 0.72% of covered employee compensation for employees in the VLDP. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate 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 from the Authority to the VLDP were $877 and $682 for the years ended June 30, 2020 and June 30, 2019, respectively.

Net OPEB Liability

The net OPEB liability (NOL) for the VLDP represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2019, NOL amounts for the VLDP is as follows (in thousands):

Total OPEB liability	$	3,989
Less Plan Fiduciary Net Positon		(1,962)
Net OPEB Liability	$	2,027
Plan Fiduciary Net Positon as a percentage of the Total OPEB liability		49.2%

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

At June 30, 2020, the Authority reported a liability of $620 for its proportionate share of the NOL. The NOL was measured as of June 30, 2018 and the total OPEB liability used to calculate the NOL was determined by an actuarial valuation as of June 30, 2018, and rolled forward to the measurement date of June 30, 2019. The Authority's proportion of the NOL was based on the Authority's actuarially determined employer contributions to the VLDP for the year ended June 30, 2019 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019 and June 30, 2018 the Authority's proportion was 0.031% and 0.019% respectively.

Actuarial Assumptions

The total VLDP OPEB liability 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%
Salary increases, including inflation	3.5-5.35%
Investment rate of return	6.75%, net of pension plan investment expense, including inflation*

*Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment 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 OPEB liabilities.

<u>Mortality rates – Non-Largest Ten Locality Employers – General and Non-Hazardous Duty Employees</u>

- Pre-Retirement: RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 90% of rates; females set forward 1 year.
- Post-Retirement: RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.
- Post-Disablement: RP-2014 Disability Life Mortality Table projected with scale BB to 2020; males set forward 2 years; unisex using 100% male.

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

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and extended final retirement age from 70 to 75
- Withdrawal rates: adjusted termination rates to better fit experience at each year age and service year
- Disability rates: lowered disability rates
- Salary scale: no change
- Line of Duty Disability: increased rate from 14% to 15%

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	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	15.00%	8.77%	1.32%
Multi-Asset Public Strategies	6.00%	3.52%	0.21%
Private Investment Partnership	3.00%	6.29%	0.19%
Total	100.00%		5.13%
Inflation			2.50%
Expected arithmetic nominal return*			7.63%

*The above allocation provides a one-year return of 7.72%. However, one-year returns do not take in account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%.

Discount Rate
The discount rate used to measure the total VLDP OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the Authority for

the VLDP OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the VLDP OPEB'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 VLDP OPEB liability.

VLDP OPEB Expense and Deferred Outflows/Inflows of Resources Related to the VLDP
For the year ended June 30, 2020, the Authority recognized total OPEB expense of $53,973, of which $1,324 was related to the VLDP OPEB.

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ -	$ -
Net difference between projected and actual earnings on plan investments	-	-
Change in assumptions	-	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	-
Employer contributions subsequent to the measurement date	877	-
	$ 877	$ -

Deferred outflows of resources of $877 resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net VLDP OPEB Liability in the year ended June 30, 2021.

VLDP OPEB Plan Data
Information about the VLDP's Fiduciary Net Position is available in the separately issued VRS Comprehensive Annual Financial Report at http://www.varetire.org/Publications, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Note 13 – Other Post-Employment Benefits – Retiree Healthcare Plan

Plan Description
Effective July 1, 2018, the Authority began administering a single-employer defined benefit healthcare plan (the "Plan" or "Retiree Healthcare"), which provides post-employment healthcare benefits to retirees of the Authority. The Plan may be modified or discontinued at any time by the Authority's Board of Directors.

Retirees are eligible to participate in the Plan upon retiring at 50 years old with ten years of service with the Authority or 55 years old with five years of service with the Authority. Upon reaching Medicare age, participating retirees are required to join a Medicare-supplement plan.

A separate report is not issued for the Plan.

Employees Covered by Benefit Terms
As of the June 30, 2019 actuarial valuation, the following employees were covered by the benefit terms of the Plan:

Inactive employees currently receiving benefits	-
Inactive employees entitled but not receiving benefits	-
Active employees	16
Total	16

Funding Policy
Participating retirees must pay the full cost of these benefits, which results in an implicit rate subsidy for the Authority. Benefits are paid on a pay-as-you-go basis and there are no plan assets set aside in trust. This funding policy may be modified at any time by the Authority's Board of Directors.

Total OPEB Liability and OPEB Expense
For the year ended June 30, 2020, the Authority recognized total OPEB expense of $53,973, of which $50,009 was related to the Retiree Healthcare OPEB.

For the year ending June 30, 2020, the Authority reported a total Retiree Healthcare OPEB liability of $151,514.

Changes in Net OPEB Liability

	Increase (Decrease)		
	Total OPEB Liability (a)	**Plan Fiduciary Net Position (b)**	**Net OPEB Liability (a)-(b)**
Balance at June 30, 2019	$ 101,505	$ -	$ 101,505
Changes for the year:			
Service cost	-	-	-
Interest	-	-	-
Changes of assumptions	50,009	-	50,009
Difference between expected and actual experience	-	-	-
Contributions – employer	-	-	-
Contributions – employee	-	-	-
Net investment income	-	-	-
Benefit payments, including refunds	-	-	-
Administrative expenses	-	-	-
Other changes	-	-	-
Net change	50,009	-	50,009
Balance at June 30, 2020	$ 151,514	$ -	$ 151,514

Actuarial Assumptions
The total OPEB liability was based on an actuarial valuation as of June 30, 2019, using the alternative measurement method and the following assumptions, rolled forward to the measurement date of June 30, 2020:

Actuarial cost method:	Entry Age Normal
Amortization method:	Level Percentage of Payroll

Healthcare cost trend rates:	From 7.6% in the current year to 4.7% in future years, consistent with the Getzen model promulgated by the Society of Actuaries for use in long-term trend projection
Payroll growth assumption:	average annual percentage change in the Consumer Price Index – Urban Wage Earners and Clerical Workers CPI-W from 2008 to 2018.
Amortization period:	20 years
Mortality table:	RP2000 Mortality Table for Males and Females Projected 18 years; this assumption does not include a margin for future improvements in longevity
Turnover assumption:	from data maintained by the US Office of Personnel Management regarding the most recent experience of the employee group covered by the Federal Employees Retirement System

Sensitivity of the Plan's Total OPEB Liability to Changes in the Healthcare Cost Trend Rate
The following presents the Plan's total OPEB liability using healthcare trend rates 1% greater than and 1% less than the baseline trends are shown in the table below:

	Baseline Trend -1%	Baseline Trend	Baseline Trend +1%
Total OPEB liability	$ 119,052	$ 151,514	$ 193,521

Discount Rate and Sensitivity of the Plan's Total OPEB Liability to Changes in the Discount Rate
The discount rate used to measure the total OPEB liability was 2.21%. This rate reflects the Bond Buyer 20-Bond GO index as of the measurement date.

The following presents the Plan's total OPEB liability using the discount rate as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	Current Rate -1%	Current Rate	Current Rate +1%
Total OPEB liability	$ 182,725	$ 151,514	$ 126,615

Note 14 – Contingencies

The Authority participates in the Capitalization Grants for State Revolving Funds. Although the Authority's administration of the program has been audited in accordance with Title 2 of the U.S. Code of Federal Regulations (CFR), Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards through June 30, 2020, this program is still subject to federal financial and compliance audits. The amount of expenses, which may be disallowed by the granting agency, cannot be determined at this time, although the Authority expects such amounts, if any, to be immaterial.

The Authority issued Build America Bonds, a form of direct-pay bonds where issuers receive subsidy payments from the Treasury equal to 35% of their interest costs, in 2009 and 2010. As an issuer of Build America Bonds, the Authority is subject to reductions in the subsidy payments pursuant to the spending cut requirements (the "sequester") of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended. Certain automatic reductions, in the amount of 5.9%, went into effect October 1, 2019 and the reduction rate will be applied until the end of the federal fiscal year (September 30, 2020) or intervening Congressional action, at which time the sequestration rate is subject to change. The amount of any reduction to future subsidy payments of the Authority cannot be determined at this time, although the Authority expects such amounts, if any, to be immaterial.

The Authority issued Qualified Energy Conservation Bonds, a form of direct-pay bonds where issuers receive subsidy payments from the Treasury equal to 70% of the related Qualified Tax Credit Bond Rate, 2016 and 2017. As an issuer of Qualified Energy Conservation Bonds, the Authority is subject to reductions in the subsidy payments pursuant to the spending cut requirements (the "sequester") of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended. Certain automatic reductions, in the amount of 5.9%, went into effect October 1, 2019 and the reduction rate will be applied until the end of the federal fiscal year (September 30, 2020) or intervening Congressional action, at which time the sequestration rate is subject to change. The amount of any reduction to future subsidy payments of the Authority cannot be determined at this time, although the Authority expects such amounts, if any, to be immaterial.

Note 15 – Leases

The Authority leases its office space under an operating lease. Rent expense totaled $185,490 for the year ended June 30, 2020. The future minimum rental payments under this operating lease are as follows:

Year Ended June 30,	
2021	$ 190,092
2022	111,335
	$ 301,427

Note 16 – Risk Management

The Authority carries commercial insurance for various risks of loss including property, workers' compensation, theft, general liability, errors and omissions, employee health and accident, and public officials' liability. There have been no claims exceeding the amount insured resulting from these risks during the three years ended June 30, 2020 and there was no reduction in insurance coverage during the fiscal year.

Note 17 – Subsequent Events

The United States and the Commonwealth of Virginia declared a state of emergency in March 2020 due to the global Coronavirus Disease 2019 (COVID-19) pandemic. Local governments, which comprise most of VRA's borrowers, have seen revenue declines since the onset of the pandemic. In April 2020, VRA completed a portfolio wide review of all borrowers and began outreach efforts regarding VRA's limited ability to offer payment deferral options for loans funded by public debt market proceeds. Feedback obtained from this outreach was positive, with localities reporting proactive financial management steps to address anticipated revenue declines and prioritize debt service. VRA continues to monitor pandemic related developments and their potential impact on VRA's borrowers in conjunction with VRA's ongoing loan monitoring and compliance efforts. The future impact on VRA's operating costs, revenues, and any recovery from emergency funding, either federal or state, cannot be estimated.

The Authority issued revenue bonds in the amount of $61,350,000 dated July 29, 2020. Interest rates range from 1.612% to 2.536% with a final maturity date of November 1, 2041. Proceeds from the sale were used to refund and defease certain maturities of the Series 2012 bonds.

On July 31, 2020, the Authority used uncommitted equity in the VARF program to defease and redeem $2,665,000 of the Series 2007 Virginia Airports Revolving Fund Revenue Bonds. The defeasance will allow interest rate reductions on the underlying borrower loans, providing debt service savings to borrowers.

The Authority issued revenue bonds in the amount of $62,540,000 dated August 5, 2020 through the VPFP. Interest rates range from 1.0% to 5.0% with a final maturity date of November 1, 2050.

On August 13, 2020, the Authority used uncommitted equity and existing bond reserve funds to defease and redeem $117,084,000 of the Series 2010A CWSRF, Series 2016 CWSRF, and Series 2019 Clean Water State Match Revenue Bonds. The defeasance will result in debt service savings and provide additional program capacity.

Note 18 – New Accounting Standards

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

GASB Statement No. 84, ***Fiduciary Activities*** establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. The Authority early implemented this standard in fiscal year 2020 and there was no impact to the Authority's financial statements.

GASB Statement No. 87, ***Leases*** establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. This Statement is effective for the year ending June 30, 2022.

GASB Statement No. 89, ***Accounting for Interest Cost Incurred before the End of a Construction Period*** establishes guidance designed to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period. It also simplifies accounting for interest cost incurred before the end of a construction period. This Statement is effective for the year ending June 30, 2022.

GASB Statement No. 97, ***Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*** establishes guidance designed to increase the consistency and comparability of fiduciary component unit reporting. This standard also enhances the relevance, consistency, and comparability of accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. This Statement is effective for the year ending June 30, 2022.

Schedule of Changes in Net Pension Liability and Related Ratios

	Plan Year Ended June 30,					
	2014	**2015**	**2016**	**2017**	**2018**	**2019**
Total Pension Liability						
Service cost	$ 113,609	$ 138,652	$ 146,176	$ 164,504	$ 148,916	$ 137,528
Interest	49,872	61,149	79,808	96,398	96,332	101,751
Changes of assumptions	-	-	-	(96,698)	-	79,464
Difference between expected and actual experience	-	66,756	15,713	(39,168)	(28,307)	264,966
Benefit payments, including refunds of employee contributions	(4,749)	-	-	(9,413)	(242,525)	(36,525)
Net change	158,732	266,557	241,697	115,623	(25,584)	547,184
Total pension liability, beginning	714,828	873,560	1,140,117	1,381,814	1,497,437	1,471,853
Total pension liability, ending (a)	$ 873,560	$1,140,117	$1,381,814	$1,497,437	$1,471,853	$2,019,037
Plan Fiduciary Net Position						
Contributions – employer	$ 85,767	$ 46,529	$ 45,908	$ 60,777	$ 58,238	$ 65,730
Contributions – employee	77,046	64,726	65,224	71,356	64,628	71,954
Net investment income	163,643	61,565	28,964	202,035	140,948	134,272
Benefit payments, including refunds of employee contributions	(4,749)	-	-	(9,413)	(242,525)	(36,525)
Administrative expense	(736)	(720)	(828)	(1,026)	(1,323)	(1,172)
Other	8	(13)	(11)	(524)	(420)	(86)
Net change	320,979	172,087	139,257	323,205	19,546	234,173
Plan fiduciary net position, beginning	946,077	1,267,056	1,439,143	1,578,400	1,901,605	1,921,151
Plan fiduciary net position, ending (b)	$1,267,056	$1,439,143	$1,578,400	$1,901,605	$1,921,151	$2,155,324
Net Pension Asset (b)-(a)	$ 393,496	$ 299,026	$ 196,586	$ 404,168	$ 449,298	$ 136,287
Plan fiduciary net position as a percentage of the total pension liability	145.0%	126.2%	114.2%	127.0%	130.5%	106.8%
Covered payroll	$1,170,504	$1,294,522	$1,311,484	$1,342,834	$1,292,489	$1,458,029
Net pension asset as a percentage of covered payroll	33.6%	23.1%	15.0%	30.1%	34.8%	9.3%

Information is presented only for those years for which it is available.

Virginia Resources Authority
Required Supplementary Information (Unaudited)
June 30, 2020

Schedule of Pension Contributions

Fiscal Year	Contractually Required Contribution	Contributions in Relation to Contractually Required Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	$ 46,862	$ 46,862	$ -	$ 1,294,522	3.62%
2016	47,476	47,476	-	1,311,484	3.62%
2017	62,039	62,039	-	1,342,834	4.62%
2018	59,713	59,713	-	1,292,489	4.62%
2019	68,090	68,090	-	1,458,029	4.67%
2020	71,065	71,065	-	1,521,744	4.67%

Information is presented only for those years for which it is available.

Notes to Schedule of Changes in Net Pension Liability and Related Ratios and Schedule of Pension Contributions

Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this was a new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2017 are not material.

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

- Mortality rates: update to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: lowered rates
- Salary scale: no change
- Line of Duty Disability: increase rate from 14% to 15%

Virginia Resources Authority
Required Supplementary Information (Unaudited)
June 30, 2020

Schedule of Employer's Share of Net OPEB Liability – Group Life Insurance Program

	Plan Year Ended June 30, 2017	2018	2019
Proportion of the net Group Life Insurance (GLI) OPEB liability	0.0073%	0.0068%	0.0074%
Proportionate share of the net GLI OPEB liability	$ 110,000	$ 104,000	$ 121,000
Covered payroll	$ 1,342,834	$ 1,292,489	$ 1,458,029
Proportionate share of the net GLI OPEB liability as a percentage of covered-employee payroll	8.19%	8.05%	8.30%
Plan fiduciary net position as a percentage of the total GLI OPEB liability	48.86%	51.22%	52.00%

Information is presented only for those years for which it is available.

Schedule of Employer OPEB Contributions – Group Life Insurance Program

Fiscal Year	Contractually Required Contribution	Contributions in Relation to Contractually Required Contribution	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered Payroll
2017	$ 7,037	$ 7,037	-	$ 1,342,834	0.52%
2018	6,774	6,774	-	1,292,489	0.52%
2019	7,640	7,640	-	1,458,029	0.52%
2020	7,974	7,974	-	1,521,744	0.52%

Information is presented only for those years for which it is available.

Notes to Schedule of Employer's Share of Net OPEB Liability and Schedule of Employer OPEB Contributions – Group Life Insurance Program
Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

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

General State Employees

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: increase rate from 14% to 25%

Teachers

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75

- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: adjusted rates to better match experience
- Salary scale: no change

SPORS Employees

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
- Retirement rates: increased age 50 rates and lowered rates at older ages
- Withdrawal rates: adjusted rates to better fit experience
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: increased rate from 60% to 85%

VaLORS Employees

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
- Retirement rates: increased age 50 rates and lowered rates at older ages
- Withdrawal rates: adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: decreased rate from 50% to 35%

JRS Employees

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: decreased rates at first retirement eligibility
- Withdrawal rates: no change
- Disability rates: removed disability rates
- Salary scale: no change

Largest Ten Locality Employers – General Employees

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted termination rates to better fit experience at each age and service year
- Disability rates: lowered disability rates
- Salary scale: no change
- Line of Duty Disability: increase rate from 14% to 20%

Non-Largest Ten Locality Employers – General Employees

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered retirement rates at older ages and changed final retirement from 70 to 75
- Withdrawal rates: adjusted termination rates to better fit experience at each age and service year
- Disability rates: lowered disability rates
- Salary scale: no change

- Line of Duty Disability: increase rate from 14% to 15%

<u>Largest Ten Locality Employers – Hazardous Duty Employees</u>

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered retirement rates at older ages
- Withdrawal rates: adjusted termination rates to better fit experience at each age and service year
- Disability rates: lowered disability rates
- Salary scale: no change
- Line of Duty Disability: increase rate from 60% to 70%

<u>Non-Largest Ten Locality Employers – Hazardous Duty Employees</u>

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: increased age 50 rates and lowered rates at older ages
- Withdrawal rates: adjusted termination rates to better fit experience at each age and service year
- Disability rates: adjusted rates to better match experience
- Salary scale: no change
- Line of Duty Disability: decreased rate from 60% to 45%

<u>Schedule of Employer's Share of Net OPEB Liability – Virginia Local Disability Program</u>

	Plan Year Ended June 30, 2017	2018	2019
Proportion of the net Virginia Local Disability Program (VLDP) OPEB liability	0.020%	0.019%	0.031%
Proportionate share of the net VLDP OPEB liability	$ 111	$ 144	$ 144
Covered payroll	$ 36,057	$ 45,402	$ 94,727
Proportionate share of the net VLDP OPEB liability as a percentage of covered-employee payroll	0.31%	0.32%	0.65%
Plan fiduciary net position as a percentage of the total VLDP OPEB liability	38.4%	51.2%	49.2%

Information is presented only for those years for which it is available.

<u>Schedule of Employer OPEB Contributions – Virginia Local Disability Program</u>

Fiscal Year	Contractually Required Contribution	Contributions in Relation to Contractually Required Contribution	Contribution Deficiency (Excess)	Covered-Employee Payroll	Contributions as a Percentage of Covered Payroll
2017	$ 216	$ 216	-	$ 36,057	0.60%
2018	272	272	-	45,402	0.60%
2019	682	682	-	94,727	0.72%
2020	877	877	-	121,776	0.72%

Information is presented only for those years for which it is available.

Notes to Schedule of Employer's Share of Net OPEB Liability and Schedule of Employer OPEB Contributions – Virginia Local Disability Program

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

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

<u>Non-Largest Ten Locality Employers – General and Non-Hazardous Duty Employees</u>

- Mortality rates: updated to a more current mortality table – RP-2014 projected to 2020
- Retirement rates: lowered rates at older ages and extended final retirement age from 70 to 75
- Withdrawal rates: adjusted termination rates to better fit experience at each year age and service year
- Disability rates: lowered disability rates
- Salary scale: no change
- Line of Duty Disability: increased rate from 14% to 15%

Virginia Resources Authority
Required Supplementary Information (Unaudited)
June 30, 2020

Schedule of Changes in Net OPEB Liability and Related Ratios – Retiree Healthcare Plan

	Plan Year Ended June 30, 2019	Plan Year Ended June 30, 2020
Total OPEB Liability		
Service cost	$ -	$ -
Interest	-	-
Changes of assumptions	101,505	50,009
Difference between expected and actual experience	-	-
Benefit payments, including refunds	-	-
Net change	101,505	50,009
Total OPEB liability, beginning	$ -	$ 101,505
Total OPEB liability, ending (a)	$ 101,505	$ 151,514
Plan Fiduciary Net Position		
Contributions – employer	$ -	$ -
Contributions – employee	-	-
Net investment income	-	-
Benefit payments, including refunds	-	-
Administrative expense	-	-
Other changes	-	-
Net change	-	-
Plan fiduciary net position, beginning	$ -	$ -
Plan fiduciary net position, ending (b)	$ -	$ -
Net OPEB Liability (a)-(b)	$ 101,505	$ 151,514
Plan fiduciary net position as a percentage of the total pension liability	NA	NA
Covered-employee payroll	$1,458,029	$1,521,744
Net OPEB liability as a percentage of covered-employee payroll	6.96%	9.96%

Information is presented only for those years for which it is available.

Notes to Schedule of Changes in Net OPEB Liability and Related Ratios – Retiree Healthcare Plan
The Retiree Healthcare Plan became effective July 1, 2018. Benefits are paid on a pay-as-you-go basis and there are no plan assets set aside in trust.

Virginia Resources Authority
Combining Schedule of Net Position
June 30, 2020

	General Accounts	Virginia Revolving Loan Fund Accounts: Water Facilities	Virginia Revolving Loan Fund Accounts: Water Supply	Airport Accounts	Bond Accounts	Transportation Infrastructure Bank	Dam Safety Accounts	Tobacco Region Revolving Fund	Brownfields & Miscellaneous Accounts	Total
Assets										
Current assets										
Cash	$ 1,193,230	$ 14,467,140	$ 5,182,459	$ -	$ 443	$ -	$ -	$ 176,525	$ 240,330	$ 21,260,127
Cash equivalents	6,785,696	211,775,211	68,576,610	12,212,222	1,368,560	-	9,344,091	-	3,513,122	313,575,512
Investments	2,368,958	58,472,102	5,334,143	4,909,415	54,532,395	-	2,115,010	-	-	127,732,023
Loans receivable - current portion	-	119,653,585	9,196,141	4,071,730	159,219,110	-	-	68,492	1,733,621	293,942,679
Receivables:										
Investment interest	94,462	2,657,529	110,210	105,319	570,803	-	-	-	-	3,538,323
Loan interest	-	6,449,438	609,692	164,225	25,137,490	-	-	24,773	784,891	33,170,509
Loan administrative fees	-	467,222	496,680	-	755,244	-	-	-	-	1,719,146
Federal funds	-	42,083	-	-	-	-	-	-	-	42,083
Other	499	-	-	-	-	-	-	-	-	499
Other	47,341	-	-	-	-	-	-	-	-	47,341
Total current assets	10,490,186	413,984,310	89,505,935	21,462,911	241,584,045	-	11,459,101	269,790	6,271,964	795,028,242
Noncurrent assets										
Investments - non-current	21,918,697	382,225,500	14,986,015	7,535,796	80,875,353	-	-	-	-	507,541,361
Loans receivable - non-current	-	1,192,977,130	165,752,114	26,054,086	2,558,062,755	-	-	2,845,482	28,485,660	3,974,177,227
Net pension asset	136,287	-	-	-	-	-	-	-	-	136,287
Capital assets, net	164,089	-	-	-	-	-	-	-	-	164,089
Total noncurrent assets	22,219,073	1,575,202,630	180,738,129	33,589,882	2,638,938,108	-	-	2,845,482	28,485,660	4,482,018,964
Total assets	32,709,259	1,989,186,940	270,244,064	55,052,793	2,880,522,153	-	11,459,101	3,115,272	34,757,624	5,277,047,206
Deferred Outflows of Resources										
Deferred outflows - pension	337,258	-	-	-	-	-	-	-	-	337,258
Deferred outflows - OPEB	37,829	-	-	-	-	-	-	-	-	37,829
Deferred loss on refunding	-	26,571,244	-	41,347	23,615,615	-	-	-	-	50,228,206
Total deferred outflows of resources	375,087	26,571,244	-	41,347	23,615,615	-	-	-	-	50,603,293
Total assets and deferred outflows of resources	$ 33,084,346	$ 2,015,758,184	$ 270,244,064	$ 55,094,140	$ 2,904,137,768	$ -	$ 11,459,101	$ 3,115,272	$ 34,757,624	$ 5,327,650,499
Liabilities										
Current liabilities										
Bonds payable - current	$ -	$ 62,693,979	$ -	$ 2,871,631	$ 161,376,769	$ -	$ -	$ -	$ 1,733,621	$ 228,676,000
Loans payable - current	-	5,379,000	-	-	-	-	-	-	-	5,379,000
Accrued interest	-	5,986,585	-	416,428	17,894,691	-	-	-	784,891	25,082,595
Due to (from) other accounts	93,651	220,258	135,232	20,877	-	-	(470,018)	-	-	-
Agency funds	-	858,116	66,718	82,475	-	-	-	-	-	1,007,309
Accounts payable and other liabilities	208,108	964,755	652,204	94,329	-	-	-	41,223	-	1,960,619
Total current liabilities	301,759	76,102,693	854,154	3,485,740	179,271,460	-	(470,018)	41,223	2,518,512	262,105,523
Noncurrent liabilities										
Net OPEB liability	273,278	-	-	-	-	-	-	-	-	273,278
Bonds payable - noncurrent	-	443,079,006	-	17,766,919	2,697,882,722	-	-	-	28,485,660	3,187,214,307
Loans payable - noncurrent	-	72,870,000	-	-	-	-	-	-	-	72,870,000
Arbitrage rebate liability - noncurrent	-	-	-	-	5,854	-	-	-	-	5,854
Total noncurrent liabilities	273,278	515,949,006	-	17,766,919	2,697,888,576	-	-	-	28,485,660	3,260,363,439
Total liabilities	575,037	592,051,699	854,154	21,252,659	2,877,160,036	-	(470,018)	41,223	31,004,172	3,522,468,962
Deferred Inflows of Resources										
Deferred inflows - pension	93,358	-	-	-	-	-	-	-	-	93,358
Deferred inflows - OPEB	19,000	-	-	-	-	-	-	-	-	19,000
Deferred gain from localities on refunding	-	-	-	-	27,511,144	-	-	-	-	27,511,144
Total deferred inflows of resources	112,358	-	-	-	27,511,144	-	-	-	-	27,623,502
Net position										
Invested in capital assets	164,089	-	-	-	-	-	-	-	-	164,089
Restricted:										
Loan programs	-	1,423,706,485	269,389,910	33,841,481	(533,412)	-	11,929,119	3,074,049	3,753,452	1,745,161,084
Operating reserve	7,760,095	-	-	-	-	-	-	-	-	7,760,095
Unrestricted	24,472,767	-	-	-	-	-	-	-	-	24,472,767
Total net position	32,396,951	1,423,706,485	269,389,910	33,841,481	(533,412)	-	11,929,119	3,074,049	3,753,452	1,777,558,035
Total liabilities, deferred inflows of resources, and net position	$ 33,084,346	$ 2,015,758,184	$ 270,244,064	$ 55,094,140	$ 2,904,137,768	$ -	$ 11,459,101	$ 3,115,272	$ 34,757,624	$ 5,327,650,499

Virginia Resources Authority
Combining Schedule of Revenues, Expenses, and Changes in Net Position
Year Ended June 30, 2020

	General Accounts	Virginia Revolving Loan Fund Accounts: Water Facilities	Virginia Revolving Loan Fund Accounts: Water Supply	Airport Accounts	Bond Accounts	Transportation Infrastructure Bank	Dam Safety Accounts	Tobacco Region Revolving Fund	Brownfields & Miscellaneous Accounts	Total
Operating revenues										
Interest on loans	$ -	$ 19,910,473	$ 1,643,978	$ 813,763	$ 87,023,930	$ -	$ -	$ 67,740	$ 1,223,430	$ 110,683,314
Investment income	892,257	20,009,939	1,774,576	565,857	5,402,064	-	188,777	712	49,562	28,883,744
Bond administrative fees	-	-	-	-	3,341,069	-	-	-	-	3,341,069
Loan administrative fees	-	1,418,499	1,024,162	94,618	-	-	-	-	-	2,537,279
Loan origination revenue	-	-	-	-	4,550,643	-	-	-	-	4,550,643
Gain on early extinguishment of bonds	-	-	-	-	89,393	-	-	-	-	89,393
Other income	35,948	4,363	684	-	-	-	-	-	-	40,995
Total operating revenues	928,205	41,343,274	4,443,400	1,474,238	100,407,099	-	188,777	68,452	1,272,992	150,126,437
Operating expenses										
Interest on bonds and loans	-	22,149,664	-	757,827	89,785,528	-	-	-	1,223,430	113,916,449
Bond issuance costs	-	-	-	-	4,006,048	-	-	-	-	4,006,048
Grants to local governments	-	43,702,147	-	-	-	-	576,511	-	1,505,407	45,784,065
Principal Forgiveness loans to local governments	-	1,983,994	5,952,761	-	-	-	-	-	-	7,936,755
Personnel services	1,190,840	559,359	382,342	48,762	-	-	34,018	-	-	2,215,321
General operating	400,616	279,123	70,938	18,474	921	-	3,788	617	96,695	871,172
Contractual services	186,188	173,491	59,598	24,811	-	-	2,363	-	-	446,451
Total operating expenses	1,777,644	68,847,778	6,465,639	849,874	93,792,497	-	616,680	617	2,825,532	175,176,261
Operating income (loss)	(849,439)	(27,504,504)	(2,022,239)	624,364	6,614,602	-	(427,903)	67,835	(1,552,540)	(25,049,824)
Nonoperating revenues										
Contributions from other governments	-	83,662,948	15,516,676	-	-	-	6,130,264	610,045	1,691,558	107,611,491
Federal interest subsidy	-	-	-	-	1,234,682	-	-	-	-	1,234,682
Nonoperating expenses										
Contributions to other governments	-	-	-	-	-	-	(754,184)	-	-	(754,184)
Federal interest subsidy passthrough	-	-	-	-	(1,215,883)	-	-	-	-	(1,215,883)
Income (loss) before transfers	(849,439)	56,158,444	13,494,437	624,364	6,633,401	-	4,948,177	677,880	139,018	81,826,282
Operating transfers	3,796,906	-	-	-	(3,796,906)	-	-	-	-	-
Change in net position	2,947,467	56,158,444	13,494,437	624,364	2,836,495	-	4,948,177	677,880	139,018	81,826,282
Total net position - beginning	29,449,484	1,367,548,041	255,895,473	33,217,117	(3,369,907)	-	6,980,942	2,396,169	3,614,434	1,695,731,753
Total net position - ending	$ 32,396,951	$ 1,423,706,485	$ 269,389,910	$ 33,841,481	$ (533,412)	$ -	$ 11,929,119	$ 3,074,049	$ 3,753,452	$ 1,777,558,035

Virginia Resources Authority
Combining Schedule of Cash Flows
Year Ended June 30, 2020

	General Accounts	Virginia Revolving Loan Fund Accounts: Water Facilities	Virginia Revolving Loan Fund Accounts: Water Supply	Airport Accounts	Bond Accounts	Transportation Infrastructure Bank	Dam Safety Accounts	Tobacco Region Revolving Fund	Brownfields & Miscellaneous Accounts	Total
Cash flows from operating activities										
Cash payments to localities for loans	$ -	$ (92,265,898)	$ (12,289,353)	$ (6,276,028)	$ (546,171,971)	$ -	$ -	$ (1,328,146)	$ -	$ (658,331,396)
Principal repayments from localities on loans	-	121,846,038	16,183,879	3,917,941	519,150,550	-	-	34,694	-	661,133,102
Interest received on loans	-	20,143,458	1,584,248	818,636	115,422,695	-	-	82,808	-	138,051,845
Loan origination fees received	-	-	-	-	4,550,643	-	-	-	-	4,550,643
Bond administrative fees received	-	-	-	-	3,105,749	-	-	-	-	3,105,749
Loan administrative fees received	-	1,428,831	855,945	94,618	-	-	-	-	-	2,379,394
Cash received from other income	35,948	4,363	684	-	-	-	-	-	-	40,995
Cash payments for salaries and related benefits	(1,121,096)	(559,359)	(382,342)	(48,762)	-	-	(34,018)	-	-	(2,145,577)
Cash payments for general operating expenses	(417,984)	(257,980)	(41,481)	(33,856)	-	-	(3,788)	-	(95,625)	(850,714)
Cash payments for contractual services	(196,254)	(173,491)	(59,598)	(24,811)	-	-	(2,363)	-	-	(456,517)
Cash payments for operating grants	-	(43,702,147)	-	-	-	-	(576,511)	-	(1,505,407)	(45,784,065)
Cash payments for principal forgiveness loans	-	(1,983,994)	(5,952,761)	-	-	-	-	-	-	(7,936,755)
Interest paid on bonds and loans	-	(25,288,648)	-	(1,063,077)	(118,020,188)	-	-	-	-	(144,371,913)
Agency funds disbursed	-	-	-	-	-	(420,314)	-	-	-	(420,314)
Interfund activity	(574,259)	406,752	(405,735)	886	-	-	(145,268)	717,624	-	-
Net cash used in operating activities	(2,273,645)	(20,402,075)	(506,514)	(2,614,453)	(21,962,522)	(420,314)	(761,948)	(493,020)	(1,601,032)	(51,035,523)
Cash flows from noncapital financing activities										
Proceeds from sale of bonds	-	-	-	-	563,458,945	-	-	-	-	563,458,945
Bond issuance costs	-	-	-	-	(4,006,048)	-	-	-	-	(4,006,048)
Principal paid on bonds and loans	-	(59,457,000)	-	(2,520,000)	(529,457,306)	-	-	-	-	(591,434,306)
Arbitrage rebate	-	(247,785)	-	-	5,854	-	-	-	-	(241,931)
Proceeds from interest subsidy	-	-	-	-	1,234,682	-	-	-	-	1,234,682
Cash payments to localities for interest subsidy	-	-	-	-	(1,215,883)	-	-	-	-	(1,215,883)
Contributions from other governments	-	86,643,728	17,781,811	-	-	-	6,130,264	610,045	1,691,558	112,857,406
Contributions to other governments	-	-	-	-	-	-	(754,184)	-	-	(754,184)
Cash received (paid) from other accounts	3,796,906	-	-	-	(3,796,906)	-	-	-	-	-
Net cash provided by (used in) noncapital financing activities	3,796,906	26,938,943	17,781,811	(2,520,000)	26,223,338	-	5,376,080	610,045	1,691,558	79,898,681
Cash flows from capital and financing related activities										
Purchase of office equipment	(64,900)	-	-	-	-	-	-	-	-	(64,900)
Net cash used in noncapital financing activities	(64,900)	-	-	-	-	-	-	-	-	(64,900)
Cash flows from investing activities										
Purchase of investments	(23,730,558)	(210,103,001)	(9,573,123)	(78,963)	(13,146,074)	-	(39,494)	-	-	(256,671,213)
Proceeds from sales or maturities of investments	18,475,275	221,754,707	10,301,478	1,170,475	4,173,596	-	-	-	-	255,875,531
Interest received on investments - net	489,640	14,874,484	1,394,112	567,470	3,723,762	-	178,315	95	48,492	21,276,370
Net cash provided by (used in) investing activities	(4,765,643)	26,526,190	2,122,467	1,658,982	(5,248,716)	-	138,821	95	48,492	20,480,688
Net increase (decrease) in cash and cash equivalents	(3,307,282)	33,063,058	19,397,764	(3,475,471)	(987,900)	(420,314)	4,752,953	117,120	139,018	49,278,946
Cash and cash equivalents										
Beginning of year	11,286,208	193,179,293	54,361,305	15,687,693	2,356,903	420,314	4,591,138	59,405	3,614,434	285,556,693
End of year	$ 7,978,926	$ 226,242,351	$ 73,759,069	$ 12,212,222	$ 1,369,003	$ -	$ 9,344,091	$ 176,525	$ 3,753,452	$ 334,835,639
Reconciliation to the Statement of Net Position										
Cash	$ 1,193,230	$ 14,467,140	$ 5,182,459	$ -	$ 443	$ -	$ -	$ 176,525	$ 240,330	$ 21,260,127
Cash Equivalents	6,785,696	211,775,211	68,576,610	12,212,222	1,368,560	-	9,344,091	-	3,513,122	313,575,512
	$ 7,978,926	$ 226,242,351	$ 73,759,069	$ 12,212,222	$ 1,369,003	$ -	$ 9,344,091	$ 176,525	$ 3,753,452	$ 334,835,639

Virginia Resources Authority
Combining Schedule of Cash Flows (Continued)
Year Ended June 30, 2020

	General Accounts	Virginia Revolving Loan Fund Accounts: Water Facilities	Virginia Revolving Loan Fund Accounts: Water Supply	Airport Accounts	Bond Accounts	Transportation Infrastructure Bank	Dam Safety Accounts	Tobacco Region Revolving Fund	Brownfields Accounts	Total
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities										
Operating income (loss)	(849,439)	(27,504,504)	(2,022,239)	624,364	6,614,602	-	(427,903)	67,835	(1,552,540)	(25,049,824)
Depreciation expense	22,899	-	-	-	-	-	-	-	-	22,899
Pension expense	101,515	-	-	-	-	-	-	-	-	101,515
Pension contributions subsequent to the measurement date	(71,065)	-	-	-	-	-	-	-	-	(71,065)
OPEB expense	53,973	-	-	-	-	-	-	-	-	53,973
OPEB contributions subsequent to the measurement date	(8,851)	-	-	-	-	-	-	-	-	(8,851)
Interest on investments	(892,257)	(19,989,091)	(1,745,119)	(565,857)	(5,401,143)	-	(188,777)	(95)	(48,492)	(28,830,831)
Gain on early extinguishment of loans	-	-	-	-	(57,391)	-	-	-	-	(57,391)
Bond issuance cost	-	-	-	-	4,006,048	-	-	-	-	4,006,048
Interest, amortization and accretion - net	-	(9,031,255)	-	(319,207)	3,227,022	-	-	-	-	(6,123,440)
Effect of changes in operating assets and liabilities:										
Loans receivable	-	29,580,435	3,894,526	(2,417,242)	(27,021,421)	-	-	(1,293,452)	-	2,742,846
Loan interest receivable	-	232,985	(59,730)	(30,301)	(7,077,452)	-	-	15,068	-	(6,919,430)
Loan administrative fee receivable	-	10,332	(168,217)	-	(235,320)	-	-	-	-	(393,205)
Other assets	(1,971)	-	-	-	-	-	-	-	-	(1,971)
Deferred charges	-	5,892,271	-	13,957	3,982,533	-	-	-	-	9,888,761
Accounts payable and other liabilities	(54,190)	-	-	78,947	-	(420,314)	-	-	-	(395,557)
Due to other funds	(574,259)	406,752	(405,735)	886	-	-	(145,268)	717,624	-	-
Net cash provided by (used in) operating activities	$ (2,273,645)	$ (20,402,075)	$ (506,514)	$ (2,614,453)	$ (21,962,522)	$ (420,314)	$ (761,948)	$ (493,020)	$ (1,601,032)	$ (51,035,523)
Schedule of non-cash activities										
Change in fair value of assets	$ 292,924	$ 3,978,261	$ 344,470	$ 20,919	$ 1,511,698	$ -	$ 10,463	$ -	$ -	$ 6,158,735

Virginia Resources Authority
Combining Schedule of Net Position
Virginia Revolving Loan Fund Accounts - Water Facilities
June 30, 2020

	Direct Loan Accounts	Leveraged Loan Accounts	Agricultural Best Management Practices Account	Combined Sewer Overflow Fund Account	State Match Accounts	Administrative Fee Accounts	Total
Assets							
Current assets							
Cash	$ 9,522,225	$ -	$ 2,053,603	$ -	$ 2,286,348	$ 604,964	$ 14,467,140
Cash equivalents	193,541,926	147,500	6,143,938	2,631,183	4,891,726	4,418,938	211,775,211
Investments	14,850,020	30,472,686	4,674,825	-	8,240,214	234,357	58,472,102
Loans receivable, net - current portion	58,552,510	60,833,966	267,109	-	-	-	119,653,585
Receivables:							
Investment interest	857,769	1,667,268	58,764	-	57,773	15,955	2,657,529
Loan interest	2,250,338	4,146,815	52,285	-	-	-	6,449,438
Loan administrative fees	-	-	-	-	-	467,222	467,222
Federal funds	42,083	-	-	-	-	-	42,083
Total current assets	279,616,871	97,268,235	13,250,524	2,631,183	15,476,061	5,741,436	413,984,310
Noncurrent assets							
Investments - non-current	200,840,192	172,416,430	5,343,484	-	-	3,625,394	382,225,500
Loans receivable - non-current	711,373,983	479,876,410	1,726,737	-	-	-	1,192,977,130
Total noncurrent assets	912,214,175	652,292,840	7,070,221	-	-	3,625,394	1,575,202,630
Total assets	1,191,831,046	749,561,075	20,320,745	2,631,183	15,476,061	9,366,830	1,989,186,940
Deferred Outflows of Resources							
Deferred loss on refunding	-	26,571,244	-	-	-	-	26,571,244
Total assets and deferred outflows of resources	$ 1,191,831,046	$ 776,132,319	$ 20,320,745	$ 2,631,183	$ 15,476,061	$ 9,366,830	$ 2,015,758,184
Liabilities							
Current liabilities							
Bonds payable - current	-	62,693,979	-	-	-	-	62,693,979
Loans payable - current	-	1,155,000	-	-	4,224,000	-	5,379,000
Accrued interest	-	5,965,782	-	-	20,803	-	5,986,585
Due to (from) other accounts	2,135,780	(2,552)	-	-	(2,135,780)	222,810	220,258
Agency funds	858,116	-	-	-	-	-	858,116
Accounts payable and other liabilities	960,228	-	16	-	-	4,511	964,755
Total current liabilities	3,954,124	69,812,209	16	-	2,109,023	227,321	76,102,693
Noncurrent liabilities							
Bonds payable - noncurrent	-	443,079,006	-	-	-	-	443,079,006
Loans payable - noncurrent	-	72,870,000	-	-	-	-	72,870,000
Total noncurrent liabilities	-	515,949,006	-	-	-	-	515,949,006
Total liabilities	3,954,124	585,761,215	16	-	2,109,023	227,321	592,051,699
Net position							
Restricted:							
Loan programs	1,187,876,922	190,371,104	20,320,729	2,631,183	13,367,038	9,139,509	1,423,706,485
Total net position	1,187,876,922	190,371,104	20,320,729	2,631,183	13,367,038	9,139,509	1,423,706,485
Total liabilities and net position	$ 1,191,831,046	$ 776,132,319	$ 20,320,745	$ 2,631,183	$ 15,476,061	$ 9,366,830	$ 2,015,758,184

Virginia Resources Authority
Combining Schedule of Revenues, Expenses, and Changes in Net Position
Virginia Revolving Loan Fund Accounts - Water Facilities
Year Ended June 30, 2020

	Direct Loan Accounts	Leveraged Loan Accounts	Agricultural Best Management Practices Account	Combined Sewer Overflow Fund Account	State Match Accounts	Administrative Fee Accounts	Total
Operating revenues							
Interest on loans	$ 6,573,877	$ 13,296,368	$ 40,228	$ -	$ -	$ -	$ 19,910,473
Investment income	11,813,219	6,981,982	485,540	42,174	455,339	231,685	20,009,939
Loan administrative fees	-	-	-	-	-	1,418,499	1,418,499
Other income	-	-	4,363	-	-	-	4,363
Total operating revenues	18,387,096	20,278,350	530,131	42,174	455,339	1,650,184	41,343,274
Operating expenses							
Interest on bonds and loans	-	22,024,876	-	-	124,788	-	22,149,664
Grants to local governments	-	-	-	43,702,147	-	-	43,702,147
Principal forgiveness loans to local governments	1,983,994	-	-	-	-	-	1,983,994
Personnel services	559,359	-	-	-	-	-	559,359
General operating	257,980	-	13,322	-	4,071	3,750	279,123
Contractual services	173,491	-	-	-	-	-	173,491
Total operating expenses	2,974,824	22,024,876	13,322	43,702,147	128,859	3,750	68,847,778
Operating income (loss)	15,412,272	(1,746,526)	516,809	(43,659,973)	326,480	1,646,434	(27,504,504)
Nonoperating revenues							
Contributions from other governments	37,825,021	-	-	43,702,147	2,135,780	-	83,662,948
Income (loss) before transfers	53,237,293	(1,746,526)	516,809	42,174	2,462,260	1,646,434	56,158,444
Operating transfers	10,523,138	(18,657,429)	-	-	8,949,374	(815,083)	-
Change in net position	63,760,431	(20,403,955)	516,809	42,174	11,411,634	831,351	56,158,444
Total net position - beginning	1,124,116,491	210,775,059	19,803,920	2,589,009	1,955,404	8,308,158	1,367,548,041
Total net position - ending	$ 1,187,876,922	$ 190,371,104	$ 20,320,729	$ 2,631,183	$ 13,367,038	$ 9,139,509	$ 1,423,706,485

Virginia Resources Authority
Combining Schedule of Cash Flows
Virginia Revolving Loan Fund Accounts - Water Facilities
Year Ended June 30, 2020

	Direct Loan Accounts	Leveraged Loan Accounts	Agricultural Best Management Practices Account	Combined Sewer Overflow Fund Account	State Match Accounts	Administrative Fee Accounts	Total
Cash flows from operating activities							
Cash payments to localities for loans	$ (90,564,215)	$ -	$ (1,701,683)	$ -	$ -	$ -	(92,265,898)
Principal repayments from localities on loans	60,561,532	60,570,600	713,906	-	-	-	121,846,038
Interest received on loans	6,255,500	13,840,242	47,716	-	-	-	20,143,458
Loan administrative fees received	-	-	-	-	-	1,428,831	1,428,831
Cash received from other income	-	-	4,363	-	-	-	4,363
Cash payments for salaries and related benefits	(559,359)	-	-	-	-	-	(559,359)
Cash payments for general operating expenses	(257,980)	-	-	-	-	-	(257,980)
Cash payments for contractual services	(173,491)	-	-	-	-	-	(173,491)
Cash payments for operating grants	-	-	-	(43,702,147)	-	-	(43,702,147)
Cash payments for principal forgiveness loans	(1,983,994)	-	-	-	-	-	(1,983,994)
Interest paid on bonds and loans	-	(25,174,554)	-	-	(114,094)	-	(25,288,648)
Interfund activity	2,520,778	(2,552)	-	-	(2,135,780)	24,306	406,752
Net cash provided by (used in) operating activities	(24,201,229)	49,233,736	(935,698)	(43,702,147)	(2,249,874)	1,453,137	(20,402,075)
Cash flows from noncapital financing activities							
Principal paid on bonds and loans	-	(54,800,000)	-	-	(4,657,000)	-	(59,457,000)
Arbitrage rebate	-	(247,785)	-	-	-	-	(247,785)
Contributions from other governments	40,805,801	-	-	43,702,147	2,135,780	-	86,643,728
Cash received (paid) from other accounts	10,523,138	(10,476,292)	-	-	768,237	(815,083)	-
Net cash provided by (used in) noncapital financing activities	51,328,939	(65,524,077)	-	43,702,147	(1,752,983)	(815,083)	26,938,943
Cash flows from investing activities							
Purchase of investments	(175,404,780)	(28,382,513)	(3,315,312)	-	-	(3,000,396)	(210,103,001)
Proceeds from sales or maturities of investments	172,118,992	36,623,526	10,087,816	-	-	2,924,373	221,754,707
Interest received on investments - net	6,999,164	6,980,689	372,877	42,174	334,418	145,162	14,874,484
Net cash provided by (used in) investing activities	3,713,376	15,221,702	7,145,381	42,174	334,418	69,139	26,526,190
Net increase (decrease) in cash and cash equivalents	30,841,086	(1,068,639)	6,209,683	42,174	(3,668,439)	707,193	33,063,058
Cash and cash equivalents							
Beginning of year	172,223,065	1,216,139	1,987,858	2,589,009	10,846,513	4,316,709	193,179,293
End of year	$ 203,064,151	$ 147,500	$ 8,197,541	$ 2,631,183	$ 7,178,074	$ 5,023,902	226,242,351
Reconciliation to the Statement of Net Position							
Cash	$ 9,522,225	$ -	$ 2,053,603	$ -	$ 2,286,348	$ 604,964	14,467,140
Cash Equivalents	193,541,926	147,500	6,143,938	2,631,183	4,891,726	4,418,938	211,775,211
	$ 203,064,151	$ 147,500	$ 8,197,541	$ 2,631,183	$ 7,178,074	$ 5,023,902	226,242,351

Virginia Resources Authority
Combining Schedule of Cash Flows (Continued)
Virginia Revolving Loan Fund Accounts - Water Facilities
Year Ended June 30, 2020

	Direct Loan Accounts	Leveraged Loan Accounts	Agricultural Best Management Practices Account	Combined Sewer Overflow Fund Account	State Match Accounts	Administrative Fee Accounts	Total
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities							
Operating income (loss)	15,412,272	(1,746,526)	516,809	(43,659,973)	326,480	1,646,434	(27,504,504)
Interest on investments	(11,813,219)	(6,981,982)	(472,513)	(42,174)	(451,268)	(227,935)	(19,989,091)
Interest, amortization and accretion - net	-	(9,041,949)	-	-	10,694	-	(9,031,255)
Effect of changes in operating assets and liabilities:							
Loans receivable	(30,002,683)	60,570,600	(987,482)	-	-	-	29,580,435
Loan interest receivable	(318,377)	543,874	7,488	-	-	-	232,985
Loan administrative fee receivable	-	-	-	-	-	10,332	10,332
Deferred charges	-	5,892,271	-	-	-	-	5,892,271
Due to other funds	2,520,778	(2,552)	-	-	(2,135,780)	24,306	406,752
Net cash provided by (used in) operating activities	$ (24,201,229)	$ 49,233,736	$ (935,698)	$ (43,702,147)	$ (2,249,874)	$ 1,453,137	(20,402,075)
Schedule of non-cash activities							
Change in fair value of assets	$ 3,633,999	$ 69,955	$ 108,692	$ -	$ 98,095	$ 67,520	3,978,261

Virginia Resources Authority
Combining Schedule of Net Position
Virginia Revolving Loan Fund Accounts - Water Supply
June 30, 2020

	Construction Accounts	Supply Accounts	Administrative Accounts	Administrative Fee Accounts	Total
Assets					
Current assets					
Cash	$ 4,637,074	$ 193,510	$ -	$ 351,875	$ 5,182,459
Cash equivalents	66,879,521	101,020	-	1,596,069	68,576,610
Investments	5,334,143	-	-	-	5,334,143
Loans receivable - current portion	9,191,504	4,637	-	-	9,196,141
Receivables:					
Investment interest	110,210	-	-	-	110,210
Loan interest	609,692	-	-	-	609,692
Loan administrative fees	-	-	-	496,680	496,680
Total current assets	86,762,144	299,167	-	2,444,624	89,505,935
Noncurrent assets					
Investments - non-current	14,986,015	-	-	-	14,986,015
Loans receivable - non-current	165,740,520	11,594	-	-	165,752,114
Total noncurrent assets	180,726,535	11,594	-	-	180,738,129
Total assets	$ 267,488,679	$ 310,761	$ -	$ 2,444,624	$ 270,244,064
Liabilities					
Current liabilities					
Due to (from) other accounts	-	-	-	135,232	135,232
Agency funds	66,718	-	-	-	66,718
Accounts payable and other liabilities	601,213	-	-	50,991	652,204
Total current liabilities	667,931	-	-	186,223	854,154
Total liabilities	667,931	-	-	186,223	854,154
Net position					
Restricted:					
Loan programs	266,820,748	310,761	-	2,258,401	269,389,910
Total net position	266,820,748	310,761	-	2,258,401	269,389,910
Total liabilities and net position	$ 267,488,679	$ 310,761	$ -	$ 2,444,624	$ 270,244,064

Virginia Resources Authority
Combining Schedule of Revenues, Expenses, and Changes in Net Position
Virginia Revolving Loan Fund Accounts - Water Supply
Year Ended June 30, 2020

	Construction Accounts	Supply Accounts	Administrative Accounts	Administrative Fee Accounts	Total
Operating revenues					
Interest on loans	$ 1,643,978	$ -	$ -	$ -	$ 1,643,978
Investment income	1,749,940	2,798	-	21,838	1,774,576
Loan administrative fees	-	-	-	1,024,162	1,024,162
Other income	684	-	-	-	684
Total operating revenues	3,394,602	2,798	-	1,046,000	4,443,400
Operating expenses					
Principal forgiveness loans to local governments	5,952,761	-	-	-	5,952,761
Personnel services	-	-	382,342	-	382,342
General operating	29,051	406	41,481	-	70,938
Contractual services	-	-	59,598	-	59,598
Total operating expenses	5,981,812	406	483,421	-	6,465,639
Operating income (loss)	(2,587,210)	2,392	(483,421)	1,046,000	(2,022,239)
Nonoperating revenues					
Contributions from other governments	15,516,676	-	-	-	15,516,676
Income (loss) before transfers	12,929,466	2,392	(483,421)	1,046,000	13,494,437
Operating transfers	10,912	(10,912)	483,421	(483,421)	-
Change in net position	12,940,378	(8,520)	-	562,579	13,494,437
Total net position - beginning	253,880,370	319,281	-	1,695,822	255,895,473
Total net position - ending	$ 266,820,748	$ 310,761	$ -	$ 2,258,401	$ 269,389,910

Virginia Resources Authority
Combining Schedule of Cash Flows
Virginia Revolving Loan Fund Accounts - Water Supply
Year Ended June 30, 2020

	Construction Accounts	Supply Accounts	Administrative Accounts	Administrative Fee Accounts	Total
Cash flows from operating activities					
Cash payments to localities for loans	$ (12,289,353)	$ -	$ -	$ -	$ (12,289,353)
Principal repayments from localities on loans	16,179,242	4,637	-	-	16,183,879
Interest received on loans	1,584,248	-	-	-	1,584,248
Loan administrative fees received	-	-	-	855,945	855,945
Cash payments for salaries and related benefits	-	-	(382,342)	-	(382,342)
Cash payments for general operating expenses	-	-	(41,481)	-	(41,481)
Cash payments for contractual services	-	-	(59,598)	-	(59,598)
Cash received from other income	684	-	-	-	684
Cash payments for principal forgiveness loans	(5,952,761)	-	-	-	(5,952,761)
Interfund activity	(386,390)	(5,985)	-	(13,360)	(405,735)
Net cash provided by (used in) operating activities	(864,330)	(1,348)	(483,421)	842,585	(506,514)
Cash flows from noncapital financing activities					
Contributions from other governments	17,781,811	-	-	-	17,781,811
Cash received (paid) from other accounts	10,912	(10,912)	483,421	(483,421)	-
Net cash provided by (used in) noncapital financing activities	17,792,723	(10,912)	483,421	(483,421)	17,781,811
Cash flows from investing activities					
Purchase of investments	(9,573,123)	-	-	-	(9,573,123)
Proceeds from sales or maturities of investments	10,301,478	-	-	-	10,301,478
Interest received on investments - net	1,369,882	2,392	-	21,838	1,394,112
Net cash provided by investing activities	2,098,237	2,392	-	21,838	2,122,467
Net increase in cash and cash equivalents	19,026,630	(9,868)	-	381,002	19,397,764
Cash and cash equivalents					
Beginning of year	52,489,965	304,398	-	1,566,942	54,361,305
End of year	$ 71,516,595	$ 294,530	$ -	$ 1,947,944	$ 73,759,069
Reconciliation to the Statement of Net Position					
Cash	$ 4,637,074	$ 193,510	$ -	$ 351,875	$ 5,182,459
Cash Equivalents	66,879,521	101,020	-	1,596,069	68,576,610
	$ 71,516,595	$ 294,530	$ -	$ 1,947,944	$ 73,759,069
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities					
Operating income (loss)	(2,587,210)	2,392	(483,421)	1,046,000	$ (2,022,239)
Interest on investments	(1,720,889)	(2,392)	-	(21,838)	(1,745,119)
Loans receivable	3,889,889	4,637	-	-	3,894,526
Loan interest receivable	(59,730)	-	-	-	(59,730)
Loan administrative fee receivable	-	-	-	(168,217)	(168,217)
Due to other funds	(386,390)	(5,985)	-	(13,360)	(405,735)
Net cash provided by (used in) operating activities	$ (864,330)	$ (1,348)	$ (483,421)	$ 842,585	$ (506,514)
Schedule of non-cash activities					
Change in fair value of assets	$ 344,470	$ -	$ -	$ -	$ 344,470

STATISTICAL SECTION

Virginia Resources Authority
Statistical Section
June 30, 2020

The statistical section presents detailed information as a context for understanding what the information in the basic financial statements, note disclosures, and required supplementary information indicate about the Authority's financial health over an extended period of time.

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

Table 1	Net Position by Component
Table 2	Change in Net Position
Table 3	Operating Revenues
Table 4	Operating Expenses

Revenue Capacity
This table contains information to help the reader assess the Authority's significant operating revenues.

Table 5	Outstanding Loans Receivable

Debt Capacity
These tables present information to help the reader assess the affordability of the Authority's current levels of outstanding debt and the Authority's ability to issue additional debt in the future.

Table 6	Outstanding Debt

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

Table 7	Virginia Principal Employers
Table 8	Virginia Demographic and Economic Statistics

Operating Information
These schedules contain service and infrastructure 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.

Table 9	Operating Indicators
Table 10	Employees by Identifiable Activity

Sources: Unless otherwise noted, information in these tables is derived from the Authority's Comprehensive Annual Financial Report for the relevant year.

Table 1 – Net Position by Component, Last Ten Fiscal Years

Fiscal Year	Net Investment in Capital Assets	Restricted	Unrestricted	Total
2011	$ 128,757	$ 1,301,438,188	$ 7,257,442	$ 1,308,824,387
2012	206,202	1,348,104,048	8,532,138	1,356,842,388
2013	209,143	1,383,915,308	9,642,211	1,393,766,662
2014	51,500	1,426,836,084	11,285,350	1,438,172,934
2015	112,766	1,469,844,791	13,023,011	1,482,980,568
2016	103,466	1,512,101,797	14,939,060	1,527,144,323
2017	103,160	1,550,423,556	16,916,728	1,567,443,444
2018	63,451	1,596,299,523	18,805,620	1,615,168,594
2019	122,088	1,674,042,345	21,567,320	1,695,731,753
2020	164,089	1,752,921,179	24,472,767	1,777,558,035

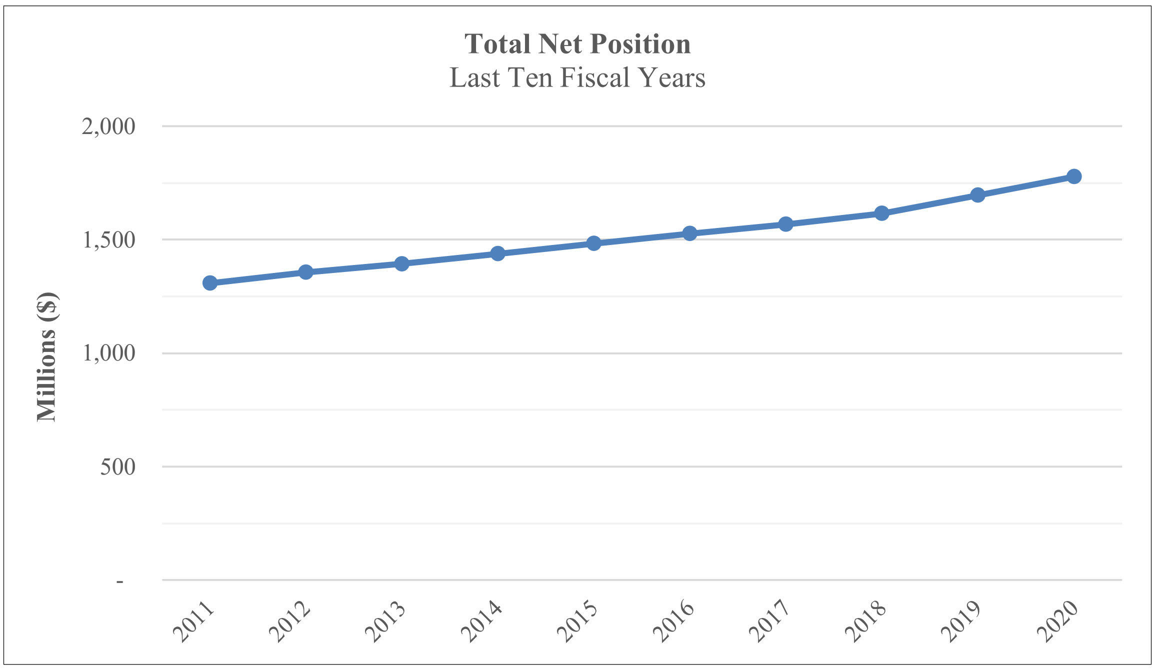


Table 2 – Change in Net Position, Last Ten Fiscal Years

Fiscal Year	Operating Revenue	Operating Expense	Operating Income	Non-operating Revenue (Expense), Net	Change in Net Position
2011	$ 128,302,561	$ 185,869,445	$ (57,566,884)	$ 99,109,632	$ 41,542,748
2012	137,943,639	140,138,739	(2,195,100)	50,213,101	48,018,001
2013	146,254,548	153,674,122	(7,419,574)	44,912,474	37,492,900
2014	146,953,955	150,936,764	(3,982,809)	48,072,063	44,089,254
2015	148,908,438	154,788,289	(5,879,851)	50,735,314	44,855,463
2016	148,046,948	151,913,487	(3,866,539)	47,982,465	44,115,926
2017	141,062,437	142,978,472	(1,916,035)	42,215,156	40,299,121
2018	139,713,451	141,185,639	(1,472,188)	49,318,112	47,845,924
2019	148,821,595	155,551,039	(6,729,444)	87,292,603	80,563,159
2020	150,126,437	175,176,261	(25,049,824)	106,876,106	81,826,282

Table 3 – Operating Revenues, Last Ten Fiscal Years

Fiscal Year	Interest on Loans	Investment Income	Admin. Reimbu-rsement	Bond Admin. Fees	Loan Admin. Fees	Loan Origination Revenue (1)	Other	Total
2011	$ 112,018,532	$ 12,291,706	309,386	$ 2,017,221	$ 1,538,438	$ -	$ 127,278	$ 128,302,561
2012	118,796,383	13,189,773	400,234	2,400,775	1,674,125	-	1,482,349	137,943,639
2013	129,061,115	11,598,881	550,179	2,771,287	1,765,758	-	507,328	146,254,548
2014	124,972,397	11,480,974	509,932	2,826,301	1,822,734	2,346,383	2,995,234	146,953,955
2015	122,794,090	11,061,275	83,816	3,042,444	1,907,580	5,211,541	4,807,692	148,908,438
2016	121,474,338	12,856,376	-	3,607,108	2,041,425	5,133,637	2,934,064	148,046,948
2017	118,893,894	13,020,537	-	2,755,079	2,154,816	4,053,518	184,593	141,062,437
2018	114,478,487	16,883,169	-	3,218,224	2,208,795	2,735,470	189,306	139,713,451
2019	113,394,150	26,978,747	-	3,319,259	2,353,592	2,139,511	636,336	148,821,595
2020	110,683,314	28,883,744	-	3,341,069	2,537,279	4,550,643	130,388	150,126,437

(1) GASB 65 was implemented in fiscal year 2014, which required the immediate recognition of loan origination revenue, which was previously deferred and recognized over the life of the loan.

Table 4 – Operating Expenses, Last Ten Fiscal Years

Fiscal Year	Interest on Bonds and Loans	Bond Issuance Costs (1)	Grants and Principal Forgiveness on Loans	Loss on Early Extinguish-ment of Bonds	Personnel Services	General Operating	Contractual Services	Total
2011	$ 116,916,498	$ -	$ 66,365,392	$ 98,553	$ 1,448,242	$ 513,357	$ 527,403	$ 185,869,445
2012	123,917,412	-	11,673,235	1,941,069	1,440,715	618,621	547,687	140,138,739
2013	135,666,875	-	14,312,957	489,821	1,636,027	803,924	764,518	153,674,122
2014	132,360,014	1,893,419	10,141,816	3,151,663	1,657,123	1,069,847	662,882	150,936,764
2015	129,993,652	5,461,806	12,285,923	4,071,026	1,626,424	919,259	430,199	154,788,289
2016	127,374,789	3,688,101	14,944,559	2,886,783	1,630,865	932,924	455,466	151,913,487
2017	127,518,234	2,849,010	9,141,740	126,575	1,623,718	1,256,502	462,693	142,978,472
2018	122,994,971	2,302,158	12,909,090	167,975	1,677,275	689,643	444,527	141,185,639
2019	120,045,825	1,925,208	29,235,617	669,613	2,089,310	1,183,969	401,497	155,551,039
2020	113,916,449	4,006,048	53,720,820	-	2,215,321	871,172	446,451	175,176,261

(1) GASB 65 was implemented in fiscal year 2014, which required the immediate recognition of bond issuance costs, which were previously deferred and recognized over the life of the bond.

Table 5 – Outstanding Loans Receivable, Last Ten Fiscal Years

Loans from Bond Issues

Fiscal Year	Revenue Bonds	VWFRF – Leveraged	VARF	Unamortized Discount/ Premium (1)	Total
2011	$ 1,591,117,427	$ 892,326,275	$ 58,387,411	$ 33,853,485	$ 2,575,684,598
2012	2,058,638,456	912,046,985	56,455,812	99,850,641	3,126,991,894
2013	2,192,704,353	907,752,044	52,527,348	118,873,800	3,271,857,545
2014	2,194,934,597	874,358,580	48,430,013	159,999,677	3,277,722,867
2015	2,325,204,904	828,049,020	43,526,294	197,078,938	3,393,859,156
2016	2,438,694,318	781,696,843	40,580,256	221,659,494	3,482,630,911
2017	2,515,813,162	725,939,770	37,716,253	226,735,757	3,506,204,942
2018	2,560,058,692	659,660,119	33,550,896	224,221,552	3,477,491,259
2019	2,514,255,420	601,280,976	27,708,574	211,481,241	3,354,726,211
2020	2,540,794,359	540,710,376	30,125,815	176,487,506	3,288,118,056

(1) GASB 65 was implemented in fiscal year 2014, which required the immediate recognition of bond issuance costs. In this table, prior years include the cost of issuance in the Unamortized Discount/Premium column.

Loans from Revolving Funds

Fiscal Year	VWFRF	VWFRF AgBMP	VWSRF	VTRRF	Total
2011	$ 674,624,834	$ 7,480,392	$ 120,330,927	$ -	$ 802,436,153
2012	694,033,376	7,099,516	126,771,814	-	827,904,706
2013	694,530,427	7,601,297	131,938,920	-	834,070,644
2014	699,775,722	5,691,138	144,578,587	-	850,045,447
2015	717,089,183	4,291,226	157,547,699	-	878,928,108
2016	729,475,535	3,920,074	163,074,966	-	896,470,575
2017	732,123,967	2,379,091	165,249,684	-	899,752,742
2018	720,275,558	2,195,062	168,294,548	540,000	891,305,168
2019	739,019,014	1,692,364	178,362,854	1,603,062	920,677,294
2020	769,926,493	2,562,847	174,948,255	2,913,974	950,351,569

Loans from Other Programs

Fiscal Year	ETF	VGCP	General Fund PRM Reserve	Total	Loans Receivable, Combined Total
2011	$ 5,663,892	$ -	$ -	$ 5,663,892	$ 3,383,784,643
2012	4,100,079	-	-	4,100,079	3,958,996,679
2013	2,383,510	-	-	2,383,510	4,108,311,699
2014	1,737,275	-	-	1,737,275	4,129,505,589
2015	325,102	-	-	325,102	4,273,112,366
2016	104,562	12,004,595	-	12,109,157	4,391,210,643
2017	53,121	28,173,001	-	28,226,122	4,434,183,806
2018	-	33,597,177	780,000	34,377,177	4,403,173,604
2019	-	31,937,232	-	31,937,232	4,307,340,737
2020	-	30,219,281	-	30,219,281	4,268,688,906

Table 6 – Outstanding Debt, Last Ten Fiscal Years

Fiscal Year	Total Outstanding Revenue Bonds	Unamortized Discounts / Premiums (1)	Net Bonds Payable	Outstanding Bonds Secured by the Moral Obligation of the Commonwealth	Commonwealth Limit on Moral Obligation Debt	Remaining Capacity for Moral Obligation Debt	Revenue Bonds per Capita (2)
2011	$2,626,917,427	$ 117,485,263	$2,744,402,690	$ 684,004,427	$ 1,500,000,000	$ 815,995,573	$ 327.39
2012	3,090,678,456	188,948,095	3,279,626,551	801,383,906	1,500,000,000	698,616,094	381.51
2013	3,185,224,353	234,354,212	3,419,578,565	836,655,903	1,500,000,000	663,344,097	389.15
2014	3,140,914,596	226,960,909	3,367,875,505	831,164,596	1,500,000,000	668,835,404	380.60
2015	3,212,994,904	296,032,824	3,509,027,728	877,874,904	1,500,000,000	622,125,096	386.60
2016	3,300,763,913	310,765,995	3,611,529,908	907,209,309	1,500,000,000	592,790,691	394.74
2017	3,347,331,162	303,590,898	3,650,922,060	928,088,162	1,500,000,000	571,911,838	398.01
2018	3,337,580,869	292,549,585	3,630,130,454	927,833,692	1,500,000,000	572,166,308	394.35
2019	3,288,408,651	275,297,841	3,563,706,492	926,540,419	1,500,000,000	573,459,581	386.81
2020	3,259,982,640	234,156,667	3,494,139,307	933,279,358	1,500,000,000	566,720,642	381.93

(1) The Authority adopted GASB 65 in FY2013, which treated all cost of issuance amounts as expensed in the year incurred. For this table, FY2012 and prior amounts in the Unamortized Discount/Premium column include the cost of issuance.
(2) Population for the proceeding calendar year (*Source: Table 8)*

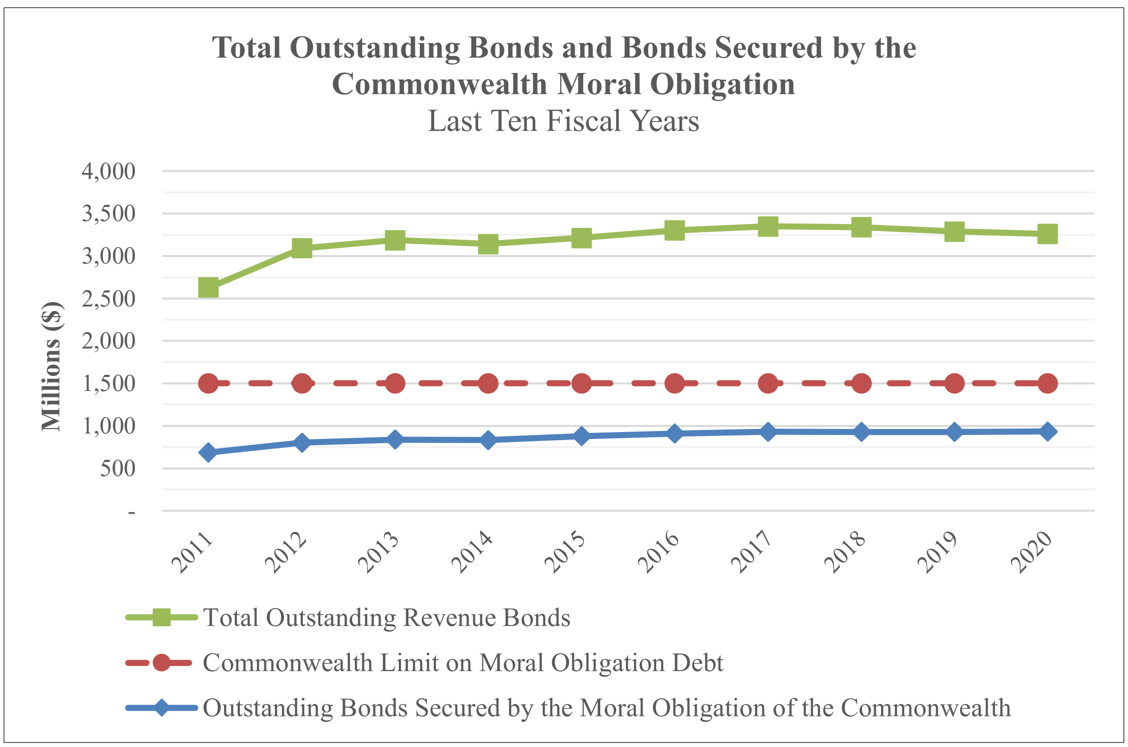


Table 7 – Virginia Principal Employers, Current and Ten Years Ago

Employer (1)	Fiscal Year 2020 (1, 2) Ranking	Fiscal Year 2011 (1, 2) Ranking
U.S. Department of Defense	1	1
Wal-Mart	2	2
Fairfax County Public Schools	3	3
Sentara Health Care	4	6
Huntington Ingalls Industries, Inc.	5	4
University of Virginia/Blue Ridge Hospital	6	14
Capital One Bank	7	-
Food Lion	8	8
U.S. Postal Services	9	5
Inova Health System	10	13
County of Fairfax	11	7
Booz, Allen, and Hamilton	20	9
City of Virginia Beach Schools	17	10

(1) Final quarter data for most recent calendar year (2019 and 2010).
(2) 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 in this table have over 1,000 individuals employed.

Source: Virginia Employment Commission

Table 8 – Virginia Demographic and Economic Statistics, Current and Ten Years Ago

Fiscal Year	Population Estimate(1)	Personal Income (1)	Per Capita Income (1)	Public Primary and Secondary School Enrollment	Unemployment Rate (1) (2)
2011	8,023,699	$ 365,041,400	$ 45,495	1,252,266	6.7%
2012	8,101,155	387,003,900	47,771	1,258,896	6.2%
2013	8,185,080	405,863,900	49,586	1,265,277	5.6%
2014	8,252,427	403,199,100	48,858	1,273,532	5.1%
2015	8,310,993	421,874,500	50,761	1,280,370	4.6%
2016	8,361,808	442,331,400	52,899	1,284,114	3.8%
2017	8,410,106	450,870,200	53,611	1,288,033	3.8%
2018	8,463,587	468,177,300	55,317	1,292,706	3.1%
2019	8,501,286	492,312,700	57,910	1,290,513	2.8%
2020	8,535,519	513,121,500	60,116	1,298,083	2.4%

(1) For the preceding calendar year, as revised.
(2) Not seasonally adjusted, as revised.

Sources: Population, Personal Income and Per Capita Income – U.S. Bureau of Economic Analysis
Public Primary and Secondary School Enrollment – Virginia Department of Education
Unemployment Rate – U.S. Bureau of Labor Statistics

Table 9 – Operating Indicators, Last Ten Fiscal Years

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Virginia Pooled Financing Program										
Projects	30	40	38	20	44	39	24	24	20	41
Lending	$284,180,000	$561,860,000	$318,753,736	$185,115,000	$458,215,000	$396,200,000	$321,620,000	$223,025,000	$191,370,000	$516,760,000
Clean Water Revolving Loan Fund										
Projects	18	22	22	14	12	13	14	18	10	15
Closed loans	$ 72,689,048	$103,970,305	$86,105,110	$139,221,106	$112,279,105	$ 37,029,027	$ 30,952,582	$115,555,569	$69,252,668	$201,678,861
AgBMP Program										
Projects	-	-	-	-	-	-	-	-	-	11
Closed loans	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,655,268
Virginia Drinking Water State Revolving Fund										
Projects	16	15	15	19	20	24	19	24	34	20
Closed loans	$ 15,496,872	$ 18,281,172	$ 26,752,886	$ 28,182,614	$ 16,262,052	$ 16,912,070	$ 17,157,567	$ 27,088,449	$ 19,256,987	$ 12,142,839
Virginia Airports Revolving Fund										
Projects	1	3	1	-	1	-	1	1	1	2
Closed loans	$ 654,184	$ 2,239,000	$ 325,500	$ -	$ 1,612,000	$ -	$ 2,010,000	$ 1,846,000	$ 2,400,000	$ 3,212,473
Dam Safety and Flood Prevention										
Projects	1	25	37	55	65	70	40	45	39	21
Closed grants	$ 1,000	$ 233,519	$ 558,711	$ 996,146	$ 824,860	$ 326,916	$ 1,041,301	$ 1,347,437	$ 473,179	$ 423,772
Virginia Brownfields Restoration and Economic Redevelopment Assistance Fund										
Projects	-	10	8	2	2	12	16	18	18	18
Closed grants	$ -	$ 199,873	$ 316,560	$ 100,000	$ 70,200	$ 445,585	$ 833,434	$ 997,770	$ 1,288,352	$ 835,130
VirginiaSAVES Green Communities										
Projects	-	-	-	-	-	2	3	1	-	-
Closed loans	$ -	$ -	$ -	$ -	$ -	$ 12,004,595	$ 16,384,987	$ 6,512,144	$ -	$ -
Virginia Tobacco Region Revolving Fund										
Projects	-	-	-	-	-	-	-	1	1	2
Closed loans	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 540,000	$ 1,100,000	$ 1,400,000
Total new projects	66	115	121	110	144	160	117	132	123	130
Total entities served	53	71	74	80	101	104	88	93	77	107
Total new financings	$373,021,104	$686,783,869	$432,812,503	$353,614,866	$589,263,217	$462,918,193	$389,999,871	$376,912,369	$285,141,186	$739,108,343

Table 10 – Employees (1) by Identifiable Activity, Current and Ten Years Ago

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Executive Director	1	1	1	1	1	1	1	1	1	1
Financial Services	4	4	4	4	4	4	4	4	4	4
Finance and Administration	5	5	5	5	5	6	5	5	5	5
Program Management	2	2	1	3	3	3	3	3	3	3
Policy and Compliance	2	2	2	2	2	2	2	3	4	4
Total	14	14	13	15	15	16	15	16	17	17

(1) Permanent employees

COMPLIANCE SECTION

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*

The Honorable Members of the Board of Directors
Virginia Resources Authority
Richmond, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Virginia Resources 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 August 31, 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 opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

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

The Honorable Members of the Board of Directors
Virginia Resources Authority

Compliance and Other Matters

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

Purpose of this Report

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

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Arlington, Virginia
August 31, 2020

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE

The Board of Directors
Virginia Resources Authority
Richmond, Virginia

We have audited the Virginia Resources Authority's (the "Authority") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the Authority's major federal programs for the year ended June 30, 2020. The Authority's major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of the Authority's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance 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 audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the Authority's compliance.

Opinion on Each Major Federal Program

In our opinion, the Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2020.

The Board of Directors
Virginia Resources Authority

Report on Internal Control Over Compliance

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

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

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

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Arlington, Virginia
August 31, 2020

Virginia Resources Authority
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2020

Federal Grantor / Pass-through Grantor / Program or Cluster Title	Federal CDFA Number	Pass-through Identifying Number	Federal Expenditure
Environmental Protection Agency			
Pass-through payments from the Commonwealth of Virginia:			
Department of Environmental Quality			
Capitalization Grants for Clean Water State Revolving Funds (VWFRF) Cluster	66.458	90317, 90318, 90319	$ 37,825,021
Department of Health			
Capitalization Grants for Drinking Water State Revolving Funds (VWSRF) Cluster	66.468	66195	11,845,681
Total Expenditures of Federal Awards			$ 49,670,702

See notes to the Schedule of Expenditures of Federal Awards

Virginia Resources Authority
Notes to Schedule of Expenditures of Federal Awards
June 30, 2020

Note 1 – General

The accompanying Schedule of Expenditures of Federal Awards (Schedule) presents the activity of the federal award programs of the Authority. All federal awards received directly from federal agencies, as well as federal awards passed through from other government agencies are included.

Note 2 – Basis of Accounting

The accompanying Schedule is presented on the accrual basis of accounting, which is more fully described in Note 1 of the Authority's basic financial statements.

Note 3 – Loan and Grant Commitments

The Authority is obligated under outstanding commitments for undisbursed loans and grants to disburse approximately $217,489,568 from the VWFRF and $91,592,250 from the VWSRF as of June 30, 2020.

Note 4 – Relationship to Federal Financial Reports

Amounts reported in the accompanying Schedule agree with the amounts reported to the Commonwealth of Virginia Department of Environmental Quality (DEQ) and the Commonwealth of Virginia Department of Health (VDH), the grantees for the federal programs. The DEQ and VDH consolidate amounts reported by the Authority with their own expenditures for federal financial reporting purposes.

Note 5 – Relationship to the Authority's Basic Financial Statements

The federal awards in the accompanying schedule are reported as revenue (contributions from other governments) in the Authority's basic financial statements as follows:

	VWFRF	VWSRF	Other	Total
Revenue per Financial Statements:				
Contributions from other Governments	$ 83,662,948	$15,516,676	$ 8,431,867	$107,611,491
Total Governmental Revenues				
Less amounts not related to federal financial assistance	(45,837,927)	(3,670,995)	(8,431,867)	(57,940,789)
Schedule of Expenditures of Federal Awards	$ 37,825,021	$ 11,845,681	$ -	$ 49,670,702

Note 6 – Indirect Cost Rate

The Authority did not elect to use the 10% de minimis indirect cost rate.

Virginia Resources Authority
Schedule of Findings and Questioned Costs
June 30, 2020

Section I – Summary of Auditors' Results

Financial Statements

1. Type of auditors' report issued: Unmodified

2. Internal control over financial reporting:

   - Material weakness(es) identified? ____ yes __x__ no
   - Significant deficiency(ies) identified? ____ yes __x__ none reported

3. Noncompliance material to financial statements noted? ____ yes __x__ no

Federal Awards

1. Internal control over major federal programs:

   - Material weakness(es) identified? ____ yes __x__ no
   - Significant deficiency(ies) identified? ____ yes __x__ none reported

2. Type of auditors' report issued on compliance for major federal programs: Unmodified

3. Any audit findings disclosed that are required to be reported in accordance with
   - 2 CFR 200.516(a)? ____ yes __x__ no

Identification of Major Federal Programs

CFDA Number(s)	Name of Federal Program or Cluster
66.468	Capitalization Grants for Drinking Water State Revolving Funds

Dollar threshold used to distinguish between Type A and Type B programs: $750,000

Auditee qualified as low-risk auditee? __x__ yes ____ no

Virginia Resources Authority
Schedule of Findings and Questioned Costs
June 30, 2020

Section II – Financial Statement Audit

None

Section III – Major Federal Award Program Audit

None