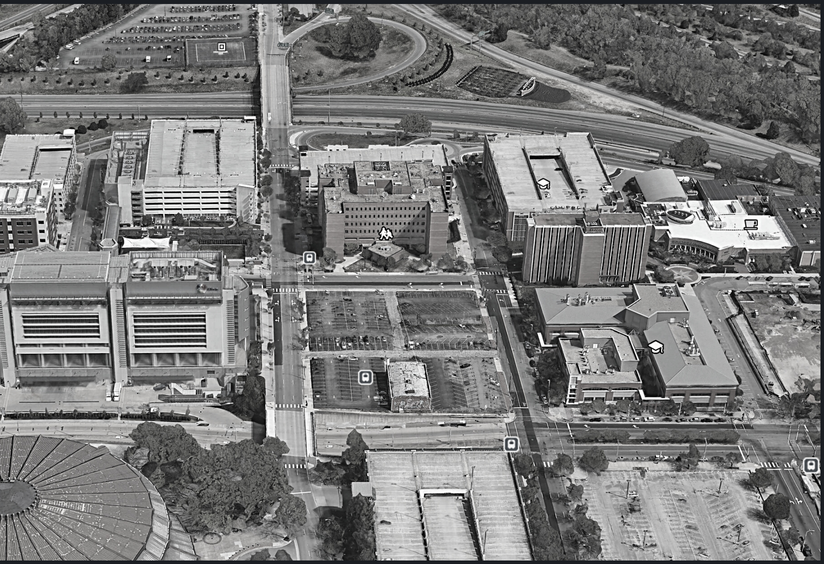
ACTIVATION CAPITAL

From start to phenomenal



VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

FINANCIAL STATEMENTS - JUNE 2020
(AUDITED)

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Annual Financial Report

for the

Virginia Biotechnology Research Partnership Authority

A Component Unit of the Commonwealth of Virginia

(Audited)
For The Fiscal Year Ended
June 30, 2020

ACTIVATION CAPITAL
From start to phenomenal

VA BIO+TECH PARK

Prepared by the Director of Business Development and Administration of the Virginia Biotechnology Research Partnership Authority

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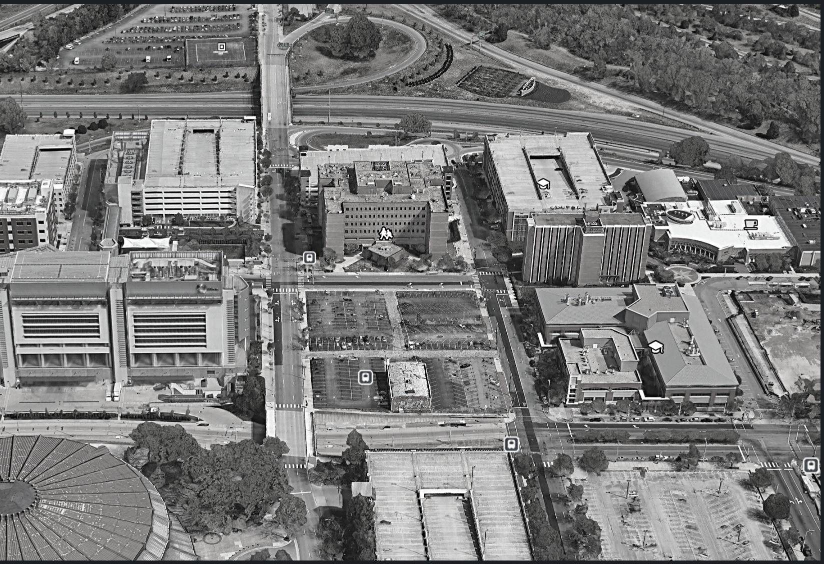
INTRODUCTION



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ACTIVATION CAPITAL

From start to phenomenal

VA BIO+TECH PARK

November 2020

Dear Board Members and Stakeholders:

Over the past year, Activation Capital has experienced growth and significant changes, including a leadership change, a global pandemic, and worldwide protests for racial equality.

In May 2020, I stepped into the President and CEO role for Activation Capital - charged with growing the organization's impact. Under my predecessor's leadership, Carrie Roth, now named COO of Activation Capital, the organization made an incredible impact on the regional entrepreneurial and innovation ecosystem.

Despite the challenges of the latter half of this fiscal year, Activation Capital can celebrate progress in strengthening the Central Virginia ecosystem in the following key areas:

Increase Awareness of the Ecosystem

The Central Virginia region offers entrepreneurs a variety of resources and opportunities to launch startups. To date, we track nine organizations that actively educate, connect, accelerate, and fund startups in the region. We recognized the opportunity to promote the collective set of activities and resources as one way to help entrepreneurs build, launch, and scale businesses. To accomplish this, we completed the beta version of *Rally Virginia* – a one-stop information source on the region's entrepreneurial ecosystem. The tool will more easily connect founders to the resources they need to launch and grow.

We have made strides in increasing awareness of Activation Capital's work and resources through marketing, sponsorships, signature events, and conference participation. As a result of the collective efforts across the region, Richmond ranked in the top 80 on Startup Genome's *Top 100 Emerging Ecosystems in the World* for the first time.

Activation Capital is uniquely positioned to be an even larger catalyst for entrepreneur development by driving "top of the funnel" awareness and activities.

Strengthen Ecosystem Engagement

Successful startup ecosystems are home to a broad mix of organizations with a common mission of developing and growing entrepreneurs and ventures. Activation Capital helps increase connectivity between the various stakeholders through the Community Engagement Committee (CEC), which has grown to nearly 20-member organizations. The ability to meet, share challenges, identify opportunities to collaborate, and deepen support has been pivotal.

Activation Capital's signature festival series is a unique opportunity to introduce entrepreneurs to the regional ecosystem and support knowledge-sharing and relationship-building each year. This year's UpRiver Festival saw 56 percent first-time participants and hosted over 200 more participants than our inaugural event, doubling the number of attendees. While the restrictions implemented to slow the spread of COVID-19 led to the cancellation of this year's

DownRiver event, we experienced a 15 percent increase in engagement through our digital channels.

There continues to be a role Activation Capital could play to help expand ecosystem engagement, ensure a stronger voice of the entrepreneur, and broaden the participation of important government, academic, and corporate stakeholders.

Increase Ecosystem Density

Understanding entrepreneur/startup density in a region is an important factor in growing the regional ecosystem. Increasing the number of active entrepreneurs will maximize knowledge-sharing, network building, startup team formation, and attract more startup funding. Activation Capital helps foster regional density through space-making. We continued to see growth and demand for our spaces this year.

<u>VA Bio+Tech Park</u>
The VA Bio+Tech Park, our life sciences and advanced-technology campus, for over 25 years has been home to an important cluster of entrepreneurs. It continues to be despite the global pandemic. Our offices and wet lab spaces are operating at full capacity, and we added 11 new companies during this fiscal year. Our event activities attracted nearly 6,500 participants to our community throughout the year.

<u>Regional Centers</u>
The Dominion Energy Innovation Center (DEIC) has been energized with a new Executive Director and team. The coworking space has quadrupled in members and is poised to expand its rentable space. The center's programming and office space serve as an important resource for local growth entrepreneurs of Hanover County and the Town of Ashland. This population currently represents about 50 percent of the center's community. DEIC has also re-emerged as a meeting point for energy entrepreneurs because of the key milestones made by the team: the expansion of industry programming, the launch of a statewide energy accelerator program that will take place in the fall of 2020, and the addition of 12 new channel partners during this fiscal year.

<u>New Innovation Center</u>
To demonstrate our commitment to growing entrepreneurial density, we continued making progress on an innovative six-story, 100,000 square feet space to be built at 8th and Leigh Street. This year, we completed the building's design and anticipate its completion in early 2022. This innovation center will allow next-stage growth for the Bio+Tech Center companies and other advanced-technology companies in the region and across the Commonwealth. The one-of-a-kind space will feature two signature event spaces, meeting spaces, wet labs, a greenhouse-ready roof, and a central convening space for founders and investors across the Commonwealth.

For much of our 27-year history, Activation Capital has been best known for the VA Bio+Tech Park. Because of the central role that space-making plays in robust ecosystems, providing office and wet-lab space for technology ventures and meeting space for the entrepreneurial community to convene will continue as an important part of our work.

Accelerate Business Formation

Our mission is to grow the number of successful high-growth entrepreneurs operating in the Commonwealth of Virginia. This fiscal year, we continued to provide administrative and financial resources to help achieve this goal.

Grant Funding
Through our Ecosystem Direct Investment Fund (EDIF), we invested in programming administered by key entrepreneur support organizations (ESOs) to accelerate the launch of technology ventures. This year's awardees included Lighthouse Labs, Startup Virginia, and VCU Ventures – totaling up to $875,000 in support.

- **Lighthouse Labs** - Our initial $1M invested in Lighthouse Labs unlocked $1M in GOVA funding to support the Lighthouse U initiative. Over two years, this project reached over 3,500 students, created 124 jobs, and attracted over $3M in outside capital for the alumni-focused cohorts.
- **Startup Virginia** - Our initial $500K funding has attracted over $460K in matching support funds and supported 78 ventures that created 454 jobs with $12M ARR.
- **VCU Ventures** - Supported ten pre-revenue ventures and 8.5 jobs.

Early-Stage Funding
There continues to be limited seed-stage funding across the Commonwealth of Virginia. The lack of early-stage funding leaves many Virginia-based founders challenged to build and scale technology ventures. As a founding partner of the Health Innovation Consortium (HIC) – created with VCU and VCU Health to make Virginia a health innovation hub – we support activities from ideation through seed-stage investment. The HIC awarded the first pre-seed grant to ClearView Surgical and funded 11 projects to support early-stage ideas directly related to the COVID pandemic.

Like our broader portfolio of work, our funding activities help create the conditions for successful venture development. The intended result is entrepreneurial pipeline growth and an increased number of "backable" founders launching and scaling high-growth companies. There are several opportunities to accomplish this:

- Doubling down on the support of tech founders of diverse backgrounds, whether gender, ethnicity, age, or region
- Exploring ways to support the development of new industry-focused clusters
- Examining ways to lend more support to mid-stage ventures

Looking Ahead

This year, as we dealt with the COVID-19 epidemic, we were presented with an opportunity to think differently about how we live and work. The global protest for racial equality also gave the startup community a moment to reflect on how to support diverse founders solving a broad range of problems. It is during uncertainty and difficult times that the entrepreneurial spirit is at its best. It is a call to fearlessly embrace challenges, diverse backgrounds, and different ideas as an opportunity to innovate. Activation Capital can help lead the charge.

We ended the year in a strong position and with a solid foundation for building the next chapter for Activation Capital. As we explore ways to expand our impact, we will prioritize growing revenue while growing the pool of backable founders.

We look forward to our continued partnership with you, regional organizations, and statewide entities like the new Virginia Innovation Partnership Authority to grow technology entrepreneurship.

Chandra Briggman
President/CEO

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VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

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Mary Doswell, Vice Chair
Gail Letts, Secretary

Ken Ampy
Eric Edwards, M.D., Ph.D.

J. Robert Mooney
Vida Williams

The Hon. Brian Ball, Ex Officio
The Hon. Levar Stoney, Ex Officio

Executive Director
Chandra Briggman

Officers to the Board
Joy Edgett, Treasurer
Sara Maddox, Assistant Secretary to the Board

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Chandra Briggman

Officers to the Board
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Sara Maddox, Assistant Secretary to the Board

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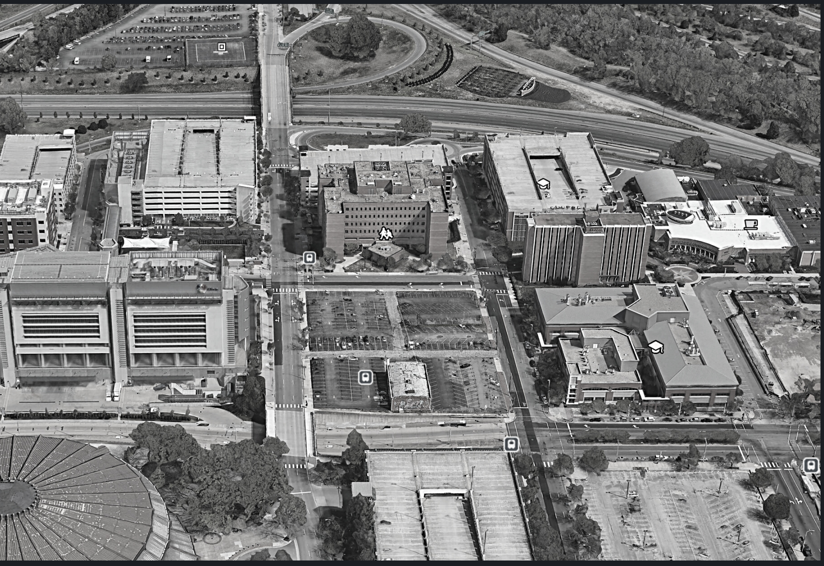
FINANCIAL INFORMATION



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Commonwealth of Virginia
Auditor of Public Accounts

Martha S. Mavredes, CPA
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

December 18, 2020

The Honorable Ralph S. Northam
Governor of Virginia

The Honorable Kenneth R. Plum
Chairman, Joint Legislative Audit
and Review Commission

Board Members
Virginia Biotechnology Research Partnership Authority Board
Virginia Biotechnology Research Park Corporation Board

INDEPENDENT AUDITOR'S REPORT

Report on Financial Statements

We have audited the accompanying financial statements of the Virginia Biotechnology Research Partnership Authority (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. We were not engaged to audit the financial statements of the Authority's discretely presented component unit. These financial statements collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Because of the matter described in the "Basis for Disclaimer of Opinion on the Discretely Presented Component Unit" paragraph; however, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on the discretely presented component unit.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall financial statement presentation.

Except for the matter described in the Basis for Disclaimer of Opinion on the Discretely Presented Component Unit paragraph, we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Basis for Disclaimer of Opinion on the Discretely Presented Component Unit

The financial statements of the Virginia Biotechnology Research Park Corporation (Corporation) have not been audited, and we were not engaged to audit the Corporation's financial statements as part of our audit of the Authority's basic financial statements.

Disclaimer of Opinion

Because of the significance of the matter described in the "Basis for Disclaimer of Opinion on the Discretely Presented Component Unit" paragraph, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on the financial statements of the discretely presented component unit of the Authority. Accordingly, we do not express an opinion on these financial statements.

Unmodified 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 changes in financial position and its cash flows thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

Restatement of 2019 Financial Statements

As discussed in Note 16 of the accompanying financial statements, the fiscal year 2019 financial statements have been restated to address a change in its presentation of the financial reporting entity. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the following be presented to supplement the basic financial statements: Management's Discussion and Analysis on pages 15 through 21; the Schedule of Changes in Net Pension Asset and Related Ratios on page 83; the Schedule of Employer's Share of Net OPEB Liability – Group Life Insurance Program on page 84; the Schedule of Changes in Net HIC OPEB Liability and Related Ratios on page 85; the Schedule of Employer's Share of Net OPEB Liability – Virginia Local Disability Program on page 86; the Schedules of Employer Contributions on page 87; and the Notes to Required Supplementary Information on pages 88 through 91. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 18, 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 to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of 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.

Martha S. Mavredes
AUDITOR OF PUBLIC ACCOUNTS

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MANAGEMENT'S DISCUSSION AND ANALYSIS
(Unaudited)

Our discussion and analysis of the Virginia Biotechnology Research Partnership Authority's (the "Authority") financial performance provides a narrative introduction, an overview of the Authority's financial activities as of, and for, the fiscal year ended June 30, 2020, with selected comparative information for the fiscal year ended June 30, 2019. It should be read in conjunction with the Authority's accompanying financial statements and notes to the financial statements.

ABOUT THE AUTHORITY

The Virginia Biotechnology Research Partnership Authority ("VA Bio+Tech Park" or "Authority") is an emerging technologies community dedicated to fostering development of Virginia's life sciences and emerging technologies, through technology transfer, new business formation, expansion of existing businesses and business attraction. Located on 34 acres in Richmond, Virginia, the VA Bio+Tech Park is adjacent to the medical sciences campus of Virginia Commonwealth University (VCU) and the VCU Medical Center. It is also close to the state capitol, the academic campus of VCU and is only ten minutes from Richmond International Airport. The VA Bio+Tech Park is home to nearly 70 private and non-profit companies, state and federal laboratories, and research institute/administrative functions of VCU and VCU Health, filling nearly 1,100,000 square feet of laboratory and office space in seven buildings and employing approximately 2,400 researchers, scientists, engineers and support personnel. Major member organizations in the VA Bio+Tech Park include The Altria Center for Research and Technology, United Network for Organ Sharing, Phlow Corporation, Medicines for All Institute, and the Division of Consolidated Laboratory Services. The VA Bio+Tech partners with neighboring Chesterfield, Hanover and Henrico Counties to extend the reach of the VA Bio+Tech Park for sites that may accommodate larger companies on suburban campuses in the Greater Richmond area. The Dominion Energy Innovation Center located in the Town of Ashland is an affiliate of the VA Bio+Tech Park.

The Virginia Biotechnology Research Park Corporation ("Corporation" or "Activation Capital") was created in 1992 when VCU and the City of Richmond agreed to designate a site as a life science research park. The Authority was established in 1993 as a political subdivision of the Commonwealth of Virginia to disseminate knowledge pertaining to scientific and technological research and development among public and private entities, including but not limited to biotechnology, by promoting scientific research and economic development through the attraction and creation of new jobs and companies. In order to facilitate and coordinate scientific and technological research and development, the Authority promotes the industrial and economic development of the VA Bio+Tech Park and the Commonwealth, and also has authority for financing construction through bonds and other authorized means. The Authority does not have taxing powers. Operations are funded from memberships, parking, community development fees, grants, ancillary service revenues, bond issuance and other supportive and related activity. The staff of the Authority support operations.

The Authority and the Corporation have a financial and operational relationship requiring the Corporation's financial statements to be presented with the Authority's financial statements (Discretely Presented Component Unit).

In 2017, the Virginia Biotechnology Research Park Corporation (a 501c3) unveiled a new brand identity as part of continued efforts to support collaboration and coordination of high-growth innovation activities in the Richmond region: "Activation Capital: from start to phenomenal." The brand identity recognizes the uniqueness of individuals and organizations needed to strengthen and grow our regional innovation ecosystem and the support needed to take an idea and bring it to success. In addition, the Innovation Council became known as the Activation Council.

In 2018, Lighthouse Labs LLC (Lighthouse Labs) was created under Activation Capital, governed by a separate board. Lighthouse Labs is a nationally-ranked accelerator advancing the growth of high-potential companies.

The Riverflow Growth Fund I, L.P. (Partnership) was established in 2019 as an Exempt Offering under Rule 506(b) of Reg. D of the Federal Securities Act, and is organized and operated to fund early health and other advance technology companies. The Authority and the Partnership have a financial and operational relationship requiring the Partnership's financial statements to be blended into the Authority's financial statements (Blended Component Unit). Condensed combining statements are presented in the notes to the financial statements.

OVERVIEW OF ANNUAL FINANCIAL STATEMENTS

Management's Discussion and Analysis (MD&A) serves as an introduction to the basic financial statements. The MD&A represents management's examination and analysis of the financial condition and performance of the Authority. The financial statements of the Authority are presented using the accrual method of accounting. The financial statements themselves consist of the Statement of Net Position; Statement of Revenues, Expenses, and Changes in Net Position; the Statement of Cash Flows; and Notes to the Financial Statements.

The Statement of Net Position presents the financial position of the Authority including information about the type and amount of resources and obligations on June 30, 2020. The Statement of Revenues, Expenses, and Changes in Net Position presents the results of the Authority's operating and non-operating activities, and provide information as to changes to the net position. The Statement of Cash Flows presents changes in cash and cash equivalents, as a result of operational, non-operational, and financing activities.

The Notes to the Financial Statements provide required disclosures and other pertinent information necessary to provide a reader of the financial statements a complete understanding of the data being presented. The notes are comprised of information about the Authority's accounting policies, significant account balances, obligations, commitments, contingencies, and subsequent events.

CONDENSED FINANCIAL INFORMATION

Statement of Net Position

The Statement of Net Position presents the financial position of the Authority and Partnership at the end of the fiscal year. The statement includes all assets and liabilities of the Authority and its blended component unit. Net position is an indicator of the current fiscal health of the organization and the Authority's financial position over time.

A condensed summary of consolidated assets and deferred outflows, liabilities and deferred inflows, and net position at June 30, 2020, and 2019, respectively, follows:

Condensed Statements of Net Position as of June 30, 2020 and 2019

	2020	2019	Value of Change	Percentage Of Change
Assets:				
Current and other assets	$25,393,417	$31,143,019	$ (5,749,602)	(18%)
Capital assets, net	6,362,467	3,847,087	2,515,380	65%
Total assets	31,755,884	34,990,106	(3,234,222)	(9%)
Deferred outflows of resources:				
OPEB deferrals	21,706	8,490	13,216	156%
Pension deferrals	61,857	9,256	52,601	568%
Deferred amount on refunding	437,842	688,038	(250,196)	(36%)
Total deferred outflows of resources	521,405	705,784	(184,379)	(26%)
Liabilities:				
Current and other liabilities	5,112,440	4,670,699	441,741	9%
Long-term liabilities	4,966,490	9,721,158	(4,754,668)	(49%)
Total liabilities	10,078,930	14,391,857	(4,312,927)	(30%)
Deferred inflows of resources:				
OPEB deferrals	3,569	4,162	(593)	(14%)
Pension deferrals	19,832	18,256	1,576	9%
Total deferred inflows of resources	23,401	22,418	983	4%
Net position:				
Net investment in capital assets	6,362,467	3,847,087	2,515,380	65%
Restricted	3,060,904	1,855,357	1,205,547	65%
Unrestricted	12,751,587	15,579,171	(2,827,584)	(18%)
Total net position	$22,174,958	$21,281,615	$ 893,343	4%

The eighteen percent decrease in current and other assets is due principally to a decrease in the Biotech 6 Lease Receivable. The sixty-five percent increase in capital assets is due mainly to construction in progress. Deferred pension and OPEB amounts increased due to fluctuations in actuarial assumptions and results. Current liabilities increased from prior year primarily due to an increase in construction-related accounts payable at year-end as well as an increase in the current portion due on the outstanding bond. Long-term liabilities decreased forty-nine percent mainly from scheduled payments made toward the outstanding bond.

Net investment in capital assets represents the land, construction in progress, equipment and lease receivable. The balance has increased significantly from the prior year due to the increase in construction in progress during the year. Restricted net position represents resources – principally cash and investments – subject to external restrictions on how they can be used. Net position restricted for pensions of $257,202 reflects the asset balance the Authority maintains and is discussed in further detail in the notes to the financials. Net position restricted for health innovation purposes of $2,803,702 is for the Authority to create investments, grants and programs that focus on health innovation. The remaining unrestricted net position may be used to fund the Authority's other ongoing obligations and initiatives.

Statement of Revenues, Expenses, and Changes in Net Position

All of the current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Change in Net Position. This statement measures the success of the Authority's and its blended component unit's operations and can be used to determine whether the Authority's and its blended component unit's fiscal condition has improved or worsened during the year.

A summary of the Authority and its blended component unit revenues, expenses and changes in net position for the years ended June 30, 2020, and 2019 are as follows:

Condensed Statements of Revenues, Expenses, and Changes in Net Position
for the years ended June 30, 2020 and 2019

	2020	2019	Value of Change	Percentage Of Change
Operating revenues:				
Membership income	$ 405,216	$ 314,427	$ 90,789	29%
Parking income	404,873	395,780	9,093	2%
Community development fees	290,629	290,874	(245)	(0%)
Business support services	230,379	118,935	111,444	94%
Interest income	84,007	133,099	(49,092)	(37%)
Other income	15,107	7,548	7,559	100%
Total operating revenues	1,430,211	1,260,663	169,548	13%
Operating expenses:				
Salaries and benefits	791,780	653,160	138,620	21%
Marketing and promotion	246,391	268,393	(22,002)	(8%)
Occupancy costs	197,178	96,075	101,103	105%
Administrative	395,740	131,814	263,926	200%
Program expenses	-	16,000	(16,000)	(100%)
Depreciation expense	53,593	53,233	360	1%
Total operating expenses	1,684,682	1,218,675	466,007	38%
Operating income (loss)	(254,471)	41,988	(296,459)	(706%)
Non-operating revenues and expenses	1,147,814	2,010,360	(862,546)	(43%)
Change in net position	893,343	2,052,348	(1,159,005)	(56%)
Net position - beginning of year	21,281,615	19,229,267	2,052,348	11%
Net position - end of year	$22,174,958	$21,281,615	$ 893,343	4%

Operating revenues increased thirteen percent due mainly to increase in business support services provided to our founders and an increase in membership income due to an additional flow-through agreement with VCU and a member for use of space. Operating expenses increased thirty-eight percent from the prior fiscal year mainly due to an increase in administrative expenses related to the search for a new Executive Director, and consulting and start-up costs related to the Riverflow Growth Fund. Additionally, the costs associated with the flow-through agreement with a member and VCU for use of space caused an increase of $103,600 in occupancy expenses. Salaries and benefits also increased due to the addition of the COO position. Net non-operating revenues and expenses decreased forty-three percent due to increased EDIF grant distributions and decreased performance on investments.

Statement of Cash Flows

The Statement of Cash Flows provides information about the cash receipts, cash payments, and net changes in cash resulting from operations, investing and financing activities, and provides insight as to the major sources and uses of cash applicable to the fiscal year. A condensed summary of the Statement of Cash Flows for the Authority and its Blended Component Unit for the fiscal years 2020 and 2019 respectively follows:

Condensed Statements of Cash Flows
for the years ended June 30, 2020 and 2019

	2020	2019	Value of Change	Percentage Of Change
Cash flows from operating activities	$ (185,293)	$ 74,025	$ (259,318)	(350%)
Cash flows from non-capital financing activities	770,240	1,101,171	(330,931)	(30%)
Cash flows from capital and related financing activities	(2,389,656)	(259,952)	(2,129,704)	819%
Cash flows from investing activities	621,459	10,333	611,126	5,914%
Net increase (decrease) in cash and cash equivalents	(1,183,250)	925,577	(2,108,827)	(228%)
Cash - beginning of year	7,070,428	6,144,851	925,577	15%
Cash - end of year	$ 5,887,178	$ 7,070,428	$ (1,183,250)	(17%)

Cash flow from operating activities decreased $259,318 due mainly to an increase in the Authority's administrative expenses as discussed above. Cash flow from non-capital financing activities decreased as a result of an increase in EDIF grant distributions and decrease in one-time proceeds from the sale of Biotech 8 in the prior year. Cash flows from capital and related financing activities reflect the increase in construction in progress costs from the prior year. Cash flows from investing activities increased by a net of $611,126 due to $600,000 withdrawal from Commonfund and the performance of the Authority's investment in the Local Government Investment Pool (LGIP). Overall available cash and cash equivalents decreased from approximately $7 million at the end of FY 2019 to approximately $5.9 million at the end of FY 2020, of which, $2.8 million is restricted for health innovation purposes.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets

The Authority's investment in capital assets as of June 30, 2020, amounted to approximately $6.4 million (net of accumulated depreciation). This investment in capital assets primarily includes land, construction in progress, and equipment. Construction on the project is anticipated to start in FY 2021 and will be financed with additional debt. Once started, the project is estimated to take 18 months. A start date has not yet been determined.

Long-Term Debt

The Authority's Lease Revenue Refunding bonds were issued in 2009 for $36.7 million. Proceeds were used to refund a portion of the Authority's Lease Revenue bonds issued in 2001, which were paid in full fiscal year 2012. The 2009 bonds carry an AA+ rating from Standard and Poor's, Aa1 rating from Moody's Investor Services and AA+ rating from Fitch Rating, Inc. The balance excluding current maturities at June 30, 2020, was approximately $4.9 million.

CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT

This financial report is designed to provide citizens, customers, investors, and creditors with a general overview of the Authority's finances and to show the Authority's accountability for the money we receive. If you have any questions about this report or need additional financial information, please contact the Authority's Director of Business Development and Administration at 800 East Leigh Street, Richmond, VA 23219, (804) 828-0963.

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VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Statement of Net Position

As of June 30, 2020

	Authority	Component Unit - Corporation	Total Reporting Entity
ASSETS			
Current assets:			
Cash and cash equivalents (Notes 1 & 2)	$ 489,409	$ 524,969	$ 1,014,378
Cash and cash equivalents with Local Government Investment Pool (Notes 2)	2,594,067	-	2,594,067
Accounts receivable	92,888	-	92,888
Grants receivable	-	64,260	64,260
Prepaid expenses	10,909	-	10,909
Net investment in lease receivable - current portion (Note 6)	4,415,000	-	4,415,000
Total current assets	7,602,273	589,229	8,191,502
Non-current assets:			
Restricted cash and cash equivalents with Local Government Investment Pool (Notes 2 & 14)	2,803,702	-	2,803,702
Net investment in lease receivable (Note 6)	4,640,000	-	4,640,000
Net pension asset (Note 9)	257,202	-	257,202
Equity in partnerships (Note 4)	55,625	-	55,625
Commonfund Investments (Notes 2 & 3)	10,034,615	-	10,034,615
Non-depreciable capital assets (Note 5)	6,199,477	-	6,199,477
Depreciable capital assets, net (Note 1 & 5)	162,990	600	163,590
Total non-current assets	24,153,611	600	24,154,211
Total assets	31,755,884	589,829	32,345,713
DEFERRED OUTFLOWS OF RESOURCES			
OPEB deferrals (Notes 10, 11, & 12)	21,706	-	21,706
Pension deferrals (Note 9)	61,857	-	61,857
Deferred amount on bond refunding (Note 1)	437,842	-	437,842
Total deferred outflows of resources	521,405	-	521,405

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

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Statement of Net Position (Continued)

As of June 30, 2020

	Authority	Component Unit - Corporation	Total Reporting Entity
LIABILITIES			
Current liabilities:			
Accounts payable	$ 235,251	$ 28,891	$ 264,142
Customer deposits	8,633	-	8,633
Compensated absences (Note 1)	89,652	-	89,652
Unearned revenue	12,988	77,917	90,905
Long-term debt - current portion (Note 8)	4,765,916	-	4,765,916
Total current liabilities	5,112,440	106,808	5,219,248
Non-current liabilities:			
Long-term debt (Note 8)	4,903,187	-	4,903,187
Net OPEB liability (Notes 10, 11, & 12)	63,303	-	63,303
Total non-current liabilities	4,966,490	-	4,966,490
Total liabilities	10,078,930	106,808	10,185,738
DEFERRED INFLOWS OF RESOURCES			
OPEB deferrals (Notes 10, 11, and 12)	3,569	-	3,569
Pension deferrals (Note 9)	19,832	-	19,832
Total deferred inflows of resources	23,401	-	23,401
NET POSITION			
Net investment in capital assets	6,362,467	600	6,363,067
Restricted for pensions	257,202	-	257,202
Restricted for designated programs	-	482,421	482,421
Restricted for health innovation purposes	2,803,702	-	2,803,702
Unrestricted	12,751,587	-	12,751,587
Total net position	$22,174,958	$ 483,021	$22,657,979

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

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Statement of Revenues, Expenses, and Changes in Net Position

For the year ended June 30, 2020

	Authority	Component Unit - Corporation	Total Reporting Entity
Operating revenues:			
Membership income	$ 405,216	$ -	$ 405,216
Parking income	404,873	-	404,873
Community development fees	290,629	-	290,629
Business support services	230,379	-	230,379
Program revenues and contributions	-	1,408,234	1,408,234
Interest Income	84,007	-	84,007
Other income	15,107	-	15,107
Total operating revenues	1,430,211	1,408,234	2,838,445
Operating expenses:			
Salaries and benefits	791,780	184,893	976,673
Marketing and promotion	246,391	33,826	280,217
Occupancy costs	197,178	11,870	209,048
Administrative	395,740	380,894	776,634
Program expenses	-	451,911	451,911
Depreciation expense (Note 5)	53,593	600	54,193
Total operating expenses	1,684,682	1,063,994	2,748,676
Income (Loss) from operations	(254,471)	344,240	89,769
Non-operating revenue/(expenses):			
Interest revenue	557,750	-	557,750
Interest expense	(457,030)	-	(457,030)
Contributions	1,500,000	-	1,500,000
Grant distributions	(756,113)	-	(756,113)
Net gain on investments	284,951	-	284,951
Gain on sale of partnership	18,256	-	18,256
Total non-operating revenue	1,147,814	-	1,147,814
Change in net position	893,343	344,240	1,237,583
Net position - beginning of year, as restated (Note 16)	21,281,615	138,781	21,420,396
Net position - end of year	$22,174,958	$ 483,021	$22,657,979

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

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Statement of Cash Flows

For the year ended June 30, 2020

	Authority	Component Unit - Corporation	Total Reporting Entity
Cash flows from operating activities:			
Cash received from memberships	$ 419,615	$ -	$ 419,615
Cash received from parking	382,962	-	382,962
Cash received from community development fees	285,354	-	285,354
Cash received from business support services	181,987	-	181,987
Cash received from miscellaneous income	15,739	-	15,739
Cash received from donors and grantors	-	1,223,177	1,223,177
Cash received for interest	84,007	-	84,007
Payments for personnel expenses	(732,239)	(183,428)	(915,667)
Payments for marketing expenses	(245,709)	(38,739)	(284,448)
Payments for occupancy expenses	(200,658)	(11,870)	(212,528)
Payments for administrative expenses	(376,351)	(243,563)	(619,914)
Payments for program services	-	(445,512)	(445,512)
Net cash provided by (used in) operating activities	(185,293)	300,065	114,772
Cash flows from non-capital financing activities:			
Proceeds from sale of Biotech 8 and Bioling	18,256	-	18,256
Deposits	8,097	-	8,097
Grant distributions from EDIF	(756,113)	-	(756,113)
Contributions received from VCU Health for health innovation purposes	1,500,000	-	1,500,000
Net cash provided by non-capital financing activities	770,240	-	770,240
Cash flows from capital and related financing activities:			
Purchase of capital assets	(2,389,656)	-	(2,389,656)
Cash flows from investing activities:			
Proceeds from Commonfund investments	600,000	-	600,000
Interest and dividends	21,459	-	21,459
Net cash provided by non-capital financing activities	621,459	-	621,459
Net increase (decrease) in cash	(1,183,250)	300,065	(883,185)
Cash and cash equivalents - 6/30/19, as restated (Note 16)	7,070,428	224,904	7,295,332
Cash and cash equivalents - 6/30/20	$ 5,887,178	$ 524,969	$ 6,412,147
Reconciliation of cash and cash equivalents to the statement of net position:			
Cash and cash equivalents	$ 489,409	$ 524,969	$ 1,014,378
Cash and cash equivalents with Local Government Investment Pool	2,594,067	-	2,594,067
Restricted cash and cash equivalents with Local Government Investment Pool	2,803,702	-	2,803,702
Total cash and cash equivalents	$ 5,887,178	$ 524,969	$ 6,412,147

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

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Statement of Cash Flows (Continued)

For the year ended June 30, 2020

	Authority	Component Unit - Corporation	Total Reporting Entity
Reconciliation of net operating income (loss) to net cash provided by (used in) operating activities:			
Operating income (loss)	$ (254,471)	$ 344,240	$ 89,769
Adjustments to reconcile operating loss to net cash used in operating activities:			
Depreciation expense	53,593	600	54,193
Changes in operating assets and liabilities:			
Receivables	(70,149)	64,459	(5,690)
Prepaid expenses	(10,003)	45,000	34,997
Other assets	3,744	-	3,744
Accounts payable	(8,976)	(7,151)	(16,127)
Customer deposits	(2,037)	-	(2,037)
Unearned revenue	10,169	(147,083)	(136,914)
Leave accrual	48,268	-	48,268
Net pension asset and related deferred inflows/outflows of resources	47,130	-	47,130
Net OPEB liability and related deferred inflows/outflows of resources	(2,561)	-	(2,561)
Net cash provided by (used in) operating activities	$ (185,293)	$ 300,065	$ 114,772

Supplemental disclosure of non-cash investing and financing activity:

	Authority	Component Unit - Corporation	Total Reporting Entity
Purchase of capital assets included in accounts payable at year-end	$ 201,287	$ -	$ 201,287
Decrease in net investment in lease receivable	(4,200,000)	-	(4,200,000)
Unrealized gain on Commonfund investments	263,492	-	263,492
Amortization of deferred amount on bond refunding	(250,196)	-	(250,196)
Decrease in long-term debt, including amortization of bond premium	4,550,916	-	4,550,916
Authority's In-Kind contributed services to the Corporation	-	102,433	102,433

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

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1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

The Virginia Biotechnology Research Partnership Authority (Authority) began operations July 1, 1993. The Authority promotes the industrial and economic development of the VA Bio+Tech Park and the Commonwealth, and also has authority for financing construction through bonds and other authorized means. The Authority does not have taxing powers. Operations are funded from memberships, parking, community development fees, grants, ancillary service revenues, bond issuance and other supportive and related activity.

The Authority is a component unit of the Commonwealth and is included in the basic financial statements of the Commonwealth. A separate report is prepared for the Commonwealth that includes all agencies, boards, commissions, and authorities over which the Commonwealth exercises or has the ability to exercise oversight authority.

The accompanying annual financial report includes the financial activities of the Authority, and its component unit. Financial information for the Authority and the component unit is accounted for in the accompanying financial statements in accordance with principles defining the governmental reporting entity adopted by the Government Accounting Standards Board.

Discretely Presented Component Unit

The Virginia Biotechnology Research Park Corporation (the Corporation) is an Internal Revenue Code Section 501(c) (3) corporation and is organized and operated exclusively for scientific, educational, and charitable purposes. The Corporation created a limited liability company called Lighthouse Labs LLC (the "Company"). The Corporation is the sole member of the Company and has the responsibility of managing the business and affairs under an operating agreement. The Authority and the Corporation have a financial relationship that requires the Corporation's financial statements be presented discretely with those of the Authority's financial statements.

Blended Component Units

Riverflow Growth Fund Manager, LLC (the Company), is a single-member limited liability company of which the Authority is the sole member. The Company is organized exclusively to manage Riverflow Growth Fund I, L.P. (the Partnership) in which the Company has a 1% general partnership interest. The Authority has a 99% limited partnership interest in the Partnership. The Partnership was formed to create pre-seed and seed-stage investments. The Authority, the Company, and the Partnership have a financial and operating relationship that required the Company's and the Partnership's financial statements to be blended in the Authority's financial statements. The activity of the Riverflow Growth Fund entities is classified as non-operating on the statement of revenues, expenses and changes in net position.

Condensed combining financial statements for the Authority and its blended component units are presented in Note 15.

Basis of Accounting

The financial statements of the Authority have been prepared using the economic resources measurement focus and the accrual basis of accounting in conformity with generally accepted accounting principles, which provides that revenues are recorded when earned and expenses are recorded when incurred. It is the policy of the Authority to first apply restricted resources when an expense is incurred for purposes for which both restricted and unrestricted net position are available.

The Authority defines operating revenues as revenue derived from the primary business activities of the Authority. These activities include the following: 1) membership revenues; 2) contributed income directly supporting the operations or advancement of the VA BIO+TECH PARK; 3) revenue derived from ownership and management of parking surface lots within the footprint of the VA BIO+TECH PARK; and 4) community development fees and other miscellaneous revenue sources such as event fees for conference facilities, and expenditure reimbursements that are not related to a specific capital outlay project.

The Authority defines non-operating revenues as revenue that does not meet the definition of operating revenue, as defined above.

The Authority established the Ecosystem Direct Investment Fund (EDIF) from resources obtained through the sale of Biotech 8 to support organizations providing support to entrepreneurs and companies in the innovation and entrepreneurial ecosystem. Distributions from this fund are classified as non-operating activities.

The Corporation defines operating revenues as revenue derived from grants, donations, awards and other funds received for programs.

Cash and Cash Equivalents

For the purpose of reporting cash flows, the Authority considers all highly-liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Investments

Investments in marketable debt in equity securities held by Commonfund are valued using fair value measurements in accordance with GASB Statement No. 72, *Fair Value Measurements and Application* (GASB 72). See Note 3 for additional information on the Authority's investments measured at fair value. The Authority also invests in certain partnerships to further the Authority's mission and purpose to promote scientific research and economic development through the attraction and creation of new jobs and companies. Equity in partnerships is valued at cost. See Note 4 for additional information on the Authority's equity in partnerships.

Asset Capitalization and Depreciation Method

Capital assets are generally assets with an initial cost of $2,500 or more and an estimated useful life in excess of two years. Capital assets are valued at historical costs or estimated historical cost if actual cost is not available. Capital assets are comprised of land, buildings, equipment, construction in progress, trademarks, and leasehold improvements. Donated capital assets are carried at market value at the date of contribution. Accumulated depreciation is reported on the statement of net position. Depreciation is computed on the straight-line basis over the estimated useful life of the asset.

Land	Non-depreciable assets
Buildings	20-48 years
Leasehold Improvements	5-15 years
Equipment	3-20 years
Trademark	5-10 years

The costs for maintenance and repairs are charged to occupancy and shared lab expense as incurred. When items are retired or otherwise disposed of, the related costs and accumulated depreciation are removed from the accounts and any resulting profit or loss on such dispositions is reflected in non-operating activities on the statement of revenues, expenses, and changes in net position.

Long-Term Debt

Long-term debts are reported as liabilities in the statement of net position. In accordance with paragraph 146 of GASB Statement No. 34, bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method. Bonds payable are reported net of the applicable bond premium or discount.

Compensated Absences

Compensated absences represent the amounts of paid time off (PTO) hours earned by employees, but not taken at June 30, 2020. PTO combines traditional vacation and sick leave. All full-time staff receive 30 days of PTO on January 1 of each year. The amount reflects all earned PTO and related payroll taxes to be paid under the Authority's leave pay out policy upon employment termination.

Interest Income

Interest income and expense from operating and Local Government Investment Pool accounts are recorded as operating revenue. Interest income and administrative fees related to the investment and bond accounts are recorded as non-operating revenue.

Unamortized Deferred Amount on Refunding

The deferred amount on refunding, resulting from the advance refunding of a portion of the Series 2006 Revenue Bonds, is being amortized on a straight-line basis over the life of the Series 2009 Bond, and as of June 30, 2020, had a balance of $437,842. The amortization of $250,196 is included in interest expense for fiscal year 2020.

Pensions

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

Health Insurance Credit Program

The Political Subdivision Health Insurance Credit Program is a multiple-employer, agent defined benefit plan that provides a credit toward the cost of health insurance coverage for retired political subdivision employees of participating employers. The Political Subdivision Health Insurance Credit Program was established pursuant to §51.1-1400 et seq. of the *Code of Virginia*, as amended, and which provides the authority under which benefit terms are established or may be amended. For purposes of measuring the net Political Subdivision Health Insurance Credit Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Health Insurance Credit Program OPEB, and the Political Subdivision Health Insurance Credit Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Political Subdivision Health Insurance Credit Program; and the additions to/deductions from the VRS Political Subdivision Health Insurance Credit Program'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.

Group Life Insurance Program

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

Political Subdivision Employee Virginia Local Disability Program

The Virginia Retirement System (VRS) Political Subdivision Employee Virginia Local Disability Program is a multiple-employer, cost-sharing plan. For purposes of measuring the net Political Subdivision Employee Virginia Local Disability Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Employee Virginia Local Disability Program OPEB, and the Political Subdivision Employee Virginia Local Disability Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Political Subdivision Employee Virginia Local Disability Program; and the additions to/deductions from the VRS Political Subdivision Employee Virginia Local Disability Program'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.

2. DEPOSITS AND INVESTMENTS

Deposits

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

Other funds of the Authority are invested in the State Treasurer's Local Government Investment Pool (LGIP). LGIP enables governmental entities to maximize their return on investments by providing for a State administered fund where monies can be commingled for investment purposes in order to realize the economies of large-scale investing and professional funds management. The LGIP is managed in accordance with the requirements of Governmental Accounting Standards Board (GASB) Statement No. 79, *Certain External Investment Pools and Pool Participants*. The LGIP is in compliance with all of the standards of GASB Statement No. 79 and elects to report its investments for financial reporting at amortized cost. Participants in the LGIP should also report their investments in the LGIP at amortized cost. The LGIP is rated AAA by Standard & Poor's rating service.

Investments

Code of Virginia Section 2.2-4500 et.seq. authorize local governments and other public bodies to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof; obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, and the African Development Bank; "prime quality" commercial paper and certain corporate notes; banker's acceptances repurchase agreements; and the State Treasurer's Local Government Investment Pool (LGIP).

Concentration of Credit Risk

The Authority places no limit on the amount the Authority may invest in any one issuer. More than 5 percent of the Authority's investments are in Commonfund Institutional Multi-Strategy Equity Fund, LLC and Commonfund Institutional Multi-Strategy Bond Fund, LLC. These investments are sixty-four percent and thirty-six percent, respectively, of the Authority's total investments in Commonfund.

The Authority invests in external investment pools and other pooled investments, which are not subject to the concentration of credit risk.

Credit Risk

The Commonfund is an external investment pool whose asset portfolio is unrated.

Interest Rate Risk

As of June 30, 2020, the weighted average effective duration for the Commonfund Institutional Multi-Strategy Bond Fund, LLC was 5.4 years.

Foreign Currency Risk

The Authority's exposure to foreign currency risk derives from its holdings of foreign securities and the use of derivatives to hedge the related foreign currency exposure back to the U.S. dollar. These foreign securities are part of the holdings included in the Commonfund Institutional Multi-Strategy Equity Fund, LLC and Commonfund Institutional Multi-Strategy Bond Fund, LLC and represent 12.24% and 6.47% of the fund's holdings, respectively. The Authority does not have a formal policy to limit foreign currency risk.

3. INVESTMENTS MEASURED AT NET ASSET VALUE

Investments measured at net asset value (NAV) per share are valued using the practical expedient at the Authority's pro-rata interest in the net assets of these funds. Investments held by these funds are valued at prices which approximate fair value. The fair value of certain investments in the underlying entities, which may include private placements and other securities for which values are not readily available, are determined in good faith by the investment advisors of the respective funds and may not reflect amounts that could be realized upon immediate sale, nor amounts that may be ultimately realized. Net asset valuations are provided monthly by these funds.

In relation to the investment funds in the following table valued using the practical expedient, the following information is presented regarding the nature of the Authority's investment and related commitments as of June 30, 2020. The fair value of the investments in each fund has been estimated using the NAV per share of investments.

Investments Measured at the Net Asset Value

	Fair Value	Unfunded Commitments	Eligible Redemption Frequency	Redemption Notice Period
Multi-Strategy Equity Fund	$ 6,406,691	n/a	Monthly	5 business days
Multi-Strategy Bond Fund	3,627,924	n/a	Monthly	5 business days
Total investments measured at net asset value	$ 10,034,615			

1. Multi-Strategy Equity Funds. To offer an actively managed, multi-manager investment program that will provide broad exposure to global equity markets. The fund seeks to add value net of fees above the return of the U.S. equity market, as measured by the S&P 500 Index, over a full market cycle. The fund's risk characteristics will vary from those of the S&P 500 due to its diversified exposures to equity markets outside of that index, including non-U.S. equity markets and to certain marketable alternative strategies. A separate composite benchmark consists of typical allocations to these strategies that the Commonfund investment managers believe provides greater insight on nearer term performance drivers and fund characteristics. It also provides an appropriate framework to understand the impact of allocation changes over time. The weights reflected in the composite represent our expectations for long run,

average exposures to the strategies.

2. Multi-Strategy Bond Funds. To offer an actively managed, multi-manager investment program that will provide broad exposure to global debt markets. The fund seeks to add value above the return of the broad U.S. Bond market, as measured by the Barclay's Capital U.S. Aggregate Bond Index, net of fees and to provide competitive returns relative to the Russell U.S. Core Plus Fixed Income Universe. The fund's risk characteristics will vary from those of the Index due to its diversified exposures to sectors outside of the Index, including below investments grade debt and international bond and currency markets.

4. EQUITY IN PARTNERSHIPS

As of June 30, 2020, the Authority had equity interests in corporations with a book value of $55,625. During fiscal year 2018, a valuation of a corporation was performed by a third party, who valued the equity interest with a market value of $464,000. No other valuations have been performed since that date.

5. CAPITAL ASSETS

A summary of changes in the Authority's Capital Assets for the year ended June 30, 2020, is presented as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
Authority				
Non-depreciable capital assets:				
Land	$ 3,369,446	$ -	$ -	$ 3,369,446
Construction in progress	273,152	2,556,879	-	2,830,031
Total non-depreciable capital assets	3,642,598	2,556,879	-	6,199,477
Depreciable capital assets:				
Equipment	411,523	5,375	-	416,898
Leasehold improvements	25,411	6,720	-	32,131
Trademark	146,649	-	-	146,649
Total depreciable capital assets	583,583	12,095	-	595,678
Less accumulated depreciation for:				
Equipment	345,957	21,159	-	367,116
Leasehold improvements	3,807	3,105	-	6,912
Trademark	29,330	29,330	-	58,660
Total accumulated depreciation	379,094	53,594	-	432,688
Depreciable capital assets, net	$ 204,489	$ (41,499)	$ -	$ 162,990
Discretely Presented Component Unit - Corporation				
Depreciable capital assets:				
Equipment	$ 1,800	$ -	$ -	$ 1,800
Less accumulated depreciation for:				
Equipment	600	600	-	1,200
Depreciable capital assets, net	$ 1,200	$ (600)	$ -	$ 600

6. LEASE RECEIVABLE

The Authority has a capital lease agreement with the Commonwealth's Department of General Services for the Bio+Tech Six building. The capital lease has a value of $9,513,375 at June 30, 2020, which equals the remaining principal and interest due on the debt for the Bio+Tech Six building. The financial statements include unearned income of $458,375 related to the capital lease receivable for interest due in future periods. Payments by the Commonwealth's Department of the Treasury under this capital lease agreement are made directly to a bond trustee for payment of the related lease revenue bonds (see Note

8). Therefore, the amortization of this lease receivable and the related lease revenue bonds payable are considered non-cash transactions as reported in the statement of cash flows.

At June 30, 2020, lease payments for each of the succeeding fiscal years are as follows:

Year	Amount
2021	$ 4,757,375
2022	4,756,000
	$ 9,513,375

The following lists the components of the net investment in lease receivable as of June 30, 2020:

Current portion:	
Minimum lease payments receivable	$ 4,757,375
Less: unearned revenue	(342,375)
Current net investment in lease receivable	4,415,000
Non-current portion:	
Minimum lease payments receivable	4,756,000
Less: unearned revenue	(116,000)
Non-current net investment in lease receivable	4,640,000
Total net investment in lease receivable	$ 9,055,000

7. CONDUIT DEBT OBLIGATIONS

On April 9, 2002, the Authority issued $12,000,000 in Series 2002 Variable Rate Revenue Bonds to fund construction of the Bio+Tech Seven project. Bio+Tech Seven is an office and data facility built specifically for United Network for Organ Sharing (UNOS). These bonds have a scheduled maturity date of April 1, 2027. The total amount of bonds outstanding at June 30, 2020, is $4,690,000.

The bonds do not constitute a debt or pledge of the faith and credit of the Authority or the Commonwealth and accordingly have not been reported in the accompanying financial statements.

8. NON-CURRENT LIABILITIES

The Authority's non-current liabilities consist of long-term debt, accrued, and other non-current liabilities.

Long-term debt of the Authority consists of the following bonds at June 30, 2020:

Original issuance rates of 3.00 percent to 5.00 percent Virginia Biotechnology Research Partnership Authority Commonwealth of Virginia Lease Revenue Bonds, (Biotech Six Consolidated Laboratories Project), Series 2009.	$ 9,055,000

A summary of changes in the Authority's non-current liabilities for the year ended June 30, 2020 is presented as follows:

	Beginning Balance	Additions	Reductions	Ending Balance	Due within One Year
Bonds payable:					
Commonwealth of Virginia lease revenue bonds	$ 13,255,000	$ -	$ 4,200,000	$ 9,055,000	$ 4,415,000
Unamortized bond premium	965,019	-	350,916	614,103	350,916
Net bonds payable	14,220,019	-	4,550,916	9,669,103	4,765,916
Net OPEB liability	52,055	9,871	-	61,926	-
Total long-term liabilities	$ 14,272,074	$ 9,871	$ 4,550,916	$ 9,731,029	$ 4,765,916

Long-term debt matures as follows:

Fiscal year	Principal	Interest	Total
2021	$ 4,415,000	$ 342,375	$ 4,757,375
2022	4,640,000	116,000	4,756,000
Total	$ 9,055,000	$ 458,375	$ 9,513,375

9. DEFINED BENEFIT PENSION PLAN

The Authority contributes to the Virginia Retirement System (VRS), an agent, multiple-employer defined benefit pension plan administered by the VRS. Information relating to these plans are available at the statewide level in the CAFR.

Plan Description

All full-time, salaried permanent employees of the Political Subdivision Authority are automatically covered by VRS Retirement Plan upon employment. This plan is administered by the Virginia Retirement System (the System) along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer 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 in the table below:

RETIREMENT PLAN PROVISIONS		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, service credit and average final compensation at retirement using a formula.	**About Plan 2** Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, service credit and average final compensation at retirement using a formula.	**About the Hybrid Retirement Plan** The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. • The defined benefit is based on a member's age, service credit 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 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.	**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.	**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*

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.	***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.	• Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014 ****Non-Eligible Members*** Some employees are not eligible to participate in the Hybrid Retirement Plan. They include: • Political subdivision employees who are covered by enhanced benefits for hazardous duty employees Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
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.	**Retirement Contributions** Same as Plan 1.	**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.
Service credit Service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit 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.	**Service credit** Same as Plan 1.	**Service credit** ***Defined Benefit Component:*** Under the defined benefit component of the plan, service credit includes active service. Members earn service credit for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit the member was granted. A member's total service credit is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit. ***Defined Contributions Component:*** Under the defined contribution component, service credit is used to determine vesting for the employer contribution portion of the plan.
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 service credit. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan.	**Vesting** Same as Plan 1.	**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 service credit. Plan 1 or Plan 2 members with at least

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.		five years (60 months) of service credit who opted into the Hybrid Retirement Plan remain vested in the defined benefit component. ***Defined Contributions Component:*** Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan. Members are always 100% vested in the contributions that they make. Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. • After two years, a member is 50% vested and may withdraw 50% of employer contributions. • After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required, except as governed by law.
Calculating the Benefit The basic benefit is determined using the average final compensation, service credit, and plan multiplier. An early retirement reduction is applied to this amount if the	**Calculating the Benefit** See definition under Plan 1.	**Calculating the Benefit** ***Defined Benefit Component:*** See definition under Plan 1 ***Defined Contribution Component:*** The benefit is based on contributions made by the member and any matching

member is retiring with a reduced benefit. In cases where the member has elected an optional form of retirement payment, an option factor specific to the option chosen is then applied.		contributions made by the employer, plus net investment earnings on those contributions.
Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	**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 is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.	**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 service credit earned, purchased or granted on or after January 1, 2013.	**Service Retirement Multiplier** ***Defined Benefit Component:*** 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. ***Defined Contribution Component:*** Not applicable.
Normal Retirement Age Age 65.	**Normal Retirement Age** Normal Social Security retirement age.	**Normal Retirement Age** ***Defined Benefit Component:*** Same as Plan 2. ***Defined Contribution Component:*** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Unreduced Retirement Eligibility Age 65 with at least five years (60 months) of service	**Earliest Unreduced Retirement Eligibility** Normal Social Security retirement age with at least	**Earliest Unreduced Retirement Eligibility** ***Defined Benefit Component:***

credit or at age 50 with at least 30 years of service credit.	five years (60 months) of service credit or when their age and service equal 90.	Normal Social Security retirement age and have at least five years (60 months) of service credit or when their age and service equal 90. ***Defined Contribution Component:*** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Reduced Retirement Eligibility Age 55 with at least five years (60 months) of service credit or age 50 with at least 10 years of service credit.	**Earliest Reduced Retirement Eligibility** Age 60 with at least five years (60 months) of service credit.	**Earliest Reduced Retirement Eligibility** ***Defined Benefit Component:*** Age 60 with at least five years (60 months) of service credit. ***Defined Contribution Component:*** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%. ***Eligibility:*** For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of service credit, 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 service credit, the COLA will	**Cost-of-Living Adjustment (COLA) in Retirement** The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%. ***Eligibility:*** Same as Plan 1	**Cost-of-Living Adjustment (COLA) in Retirement** ***Defined Benefit Component:*** Same as Plan 2. ***Defined Contribution Component:*** Not applicable. ***Eligibility:*** Same as Plan 1 and Plan 2.

go into effect on July 1 after one calendar year following the unreduced retirement eligibility date. ***Exceptions to COLA Effective Dates:*** The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances: • The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013. • The member retires on disability. • The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP). • The member is 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.	***Exceptions to COLA Effective Dates:*** Same as Plan 1	***Exceptions to COLA Effective Dates:*** Same as Plan 1 and Plan 2.
Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement	**Disability Coverage** Members who are eligible to be considered for disability retirement and retire on disability, the retirement	**Disability Coverage** Employees of political subdivisions (including Plan 1 and Plan2 opt-ins) participate in the Virginia Local Disability

multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.	multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.	Program (VLDP) unless their local governing body provides and employer-paid comparable program for its members. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.
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 service credit in their plan. Prior service credit counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.	**Purchase of Prior Service** Same as Plan 1.	**Purchase of Prior Service** ***Defined Benefit Component:*** Same as Plan 1, with the following exceptions: • Hybrid Retirement Plan members are ineligible for ported service. ***Defined Contribution Component:*** Not applicable.

Employees Covered by Benefit Terms
As of the June 30, 2018, actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	4
Inactive members:	
Vested	3
Non-vested	4
Active elsewhere in VRS	2
Total inactive members	9
Active members	6
Total	19

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 employer contribution rate for the year ended June 30, 2020, was 0.75% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $5,576 and $4,829 for the years ended June 30, 2020, and 2019, respectively.

Net Pension Asset
The VRS Retirement Plan net pension liabilities or assets are calculated separately for each employer and represents that particular employer's total pension liability determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. The Authority's net pension asset was measured as of June 30, 2019. The total pension liability used to calculate the Authority's net pension asset was determined by an actuarial valuation performed as of June 30, 2018, rolled forward to the measurement date of June 30, 2019.

Actuarial Assumptions – General Employees
The total pension liability for General Employees in the Political Subdivision's Retirement Plan was based on an actuarial valuation as of June 30, 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% per year
Salary increases, including Inflation	3.5% – 5.35% per annum
Investment Return Rate	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 pension liabilities.

Mortality rates:

- All Others (Non 10 Largest) – Non-Hazardous Duty: 15% of deaths are assumed to be service related
  - Pre-Retirement:
    - RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.
  - Post-Retirement:
    - RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.
  - Post-Disablement:
    - RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

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

- All Others (Non 10 Largest) – Non-Hazardous Duty:
  - Mortality Rates (Pre-retirement, post-retirement healthy, and disabled):
    - Update to a more current mortality table – RP-2014 projected to 2020
  - Retirement Rates:
    - Lowered rates at older ages and changed final retirement from 70 to 75
  - Withdrawal Rates:
    - Adjusted rates to better fit experience at each year age and service through 9 years of service
  - Disability Rates:
    - Lowered rates
  - Salary Scale:
    - No change
  - Line of Duty Disability:
    - Increase rate from 14% to 15%
  - Discount Rate:
    - Decrease rate from 7.00% to 6.75%

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%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - 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 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected 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%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; political subdivisions were also provided with an opportunity to use an alternate employer contribution rate. For the year ended June 30, 2019, the alternate rate was the employer contribution rate used in FY 2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017, actuarial valuations, whichever was greater. From July 1, 2019 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the Long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in Net Pension Asset

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) - (b)
Balances at June 30, 2018	$ 1,861,238	$ 2,216,595	$ (355,357)
Changes for the year:			
Service cost	56,235	-	56,235
Interest	126,290	-	126,290
Changes of assumptions	54,476	-	54,476
Difference between expected and actual experience	36,398	-	36,398
Contributions – employer	-	1,689	(1,689)
Contributions – employee	-	30,092	(30,092)
Net investment income	-	145,042	(145,042)
Benefit payments, including refunds of employee contributions	(114,204)	(114,204)	-
Administrative expense	-	(1,488)	1,488
Other changes	-	(91)	91
Net changes	159,195	61,040	98,155
Balances at June 30, 2018	$ 2,020,433	$ 2,277,635	$ (257,202)

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

The following presents the net pension asset calculated using the stated discount rate of 6.75%, as well as what the net position asset would be if it were calculated using a stated discount rate that is one-percentage-point lower (5.75%) or one-percentage-point higher (7.75%) than the current rate:

	1% Decrease 5.75%	Current Discount Rate 6.75%	1% Increase 7.75%
Authority's Net Pension Liability (Asset)	$ (17,088)	$ (257,202)	$ (449,256)

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

For the year ending June 30, 2020, the Authority recognized pension expense of $49,566. 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
Employer contributions made subsequent to the measurement date	$ 5,576	$ -
Differences between expected and actual experience	23,168	-
Changes of assumptions	33,113	-
Net difference between projected and actual earnings on plan investments	-	19,832
	$ 61,857	$ 19,832

Amounts reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as an increase to the net pension asset in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions as of June 30, 2020, will be recognized in pension expense in future reporting periods as follows:

Year ended June 30:	
2021	$ 36,465
2022	(987)
2023	(465)
2024	1,436
Total	$ 36,449

Pension Plan Data

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

10. OTHER POST-EMPLOYMENT BENEFITS – GROUP LIFE INSURANCE PROGRAM

Plan Description

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

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

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

GROUP LIFE INSURANCE PROGRAM PLAN PROVISIONS
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 coverage is automatic upon employment. Coverage end for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.
Benefit Amounts The benefits payable under the Group Life Insurance Program have several components. • *Natural Death Benefit* – The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. • *Accidental Death Benefit* – The accidental death benefit is double the natural death benefit. • *Other Benefit Provisions* – In addition to the basic natural and accidental death benefits, the program provides additional benefits provided under specific circumstances. These include: o Accidental dismemberment benefit o Safety belt benefit o Repatriation benefit o Felonious assault benefit o 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 service credit, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at $8,000 by statute. This will be increased annually based on the VRS Plan 2 cost-of-living adjustment calculation. The minimum benefit adjusted for the COLA was $8,463 as of June 30, 2020.

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 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 from the entity were $3,789 and $3,348 for the years ended June 30, 2020, and June 30, 2019, respectively.

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

At June 30, 2020, the Authority reported a liability of $53,375 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2019 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation performed as of June 30, 2018, and rolled forward to the measurement date of June 30, 2019. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the Group Life Insurance Program for the year ended June 30, 2019 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019, the participating employer's proportion was 0.00328% as compared to 0.00293% at June 30, 2018.

For the year ended June 30, 2020, the participating employer recognized GLI OPEB expense of $2,561. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

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

	Deferred Outflows of Resources	Deferred Inflows of Resources
Employer contributions made subsequent to the measurement date	$ 3,789	$ -
Differences between expected and actual experience	3,550	694
Changes of assumptions	3,370	1,609
Changes in proportion	6,221	-
Net difference between projected and actual earnings on GLI OPEB program investments	-	1,096
	$ 16,930	$ 3,399

$3,789 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the Fiscal Year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

Year ended June 30:	
2021	$ 1,516
2022	1,516
2023	1,981
2024	2,159
2025	1,974
Thereafter	596
Total	$ 9,742

Actuarial Assumptions

The total GLI 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 percent
Salary increases, including inflation –	

General state employees	3.5 percent – 5.35 percent
Teachers	3.5 percent – 5.95 percent
SPORS employees	3.5 percent – 4.75 percent
VaLORS employees	3.5 percent – 4.75 percent
JRS employees	4.5 percent
Locality – General employees	3.5 percent – 5.35 percent
Locality – Hazardous Duty employees	3.5 percent – 4.75 percent

Investment rate of return 6.75%, net of investment expenses, including inflation*

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

Mortality rates – General State Employees:

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each 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%

Discount Rate	Decrease rate from 7.00% to 6.75%

Mortality rates – Teachers:

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

Post-Retirement:
RP-2014 White Collar Employee Rates to age 49, White Collar 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 to 90.

Post-Disablement:
RP-2014 Disability Life Mortality Table projected with scale BB to 2020; 115% of rates for males and females.

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Discount Rate	Decrease rate from 7.00% to 6.75%

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience.
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted rates to better fit experience
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 85%
Discount Rate	Decrease rate from 7.00% to 6.75%

Mortality rates – VaLORS Employees:

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020 and reduced margin for future improvement I 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%
Discount Rate	Decrease rate from 7.00% to 6.75%

Mortality rates – JRS Employees:

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Decreased rates at first retirement eligibility
Withdrawal Rates	No change
Disability Rates	Removed disability rates
Salary Scale	No change
Discount Rate	Decrease rate from 7.00% to 6.75%

Mortality rates – Largest 10 Locality Employers – General Employees:

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%
Discount Rate	Decrease rate from 7.00% to 6.75%

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

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages and extended final retirement age from 70 to 75.
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%
Discount Rate	Decrease rate from 7.00% to 6.75%

Mortality rates – Largest Ten Locality Employers – Hazardous Duty Employees:

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered retirement rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Increased disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 60% to 70%
Discount Rate	Decrease rate from 7.00% to 6.75%

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

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages

Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%
Discount Rate	Decrease rate from 7.00% to 6.75%

Net GLI OPEB Liability

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

	Group Life Insurance OPEB Program
Total GLI OPEB Liability	$ 3,390,238
Plan Fiduciary Net Position	1,762,972
GLI OPEB Liability (Asset)	$ 1,627,266
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	52.00%

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

Long-Term Expected Rate of Return

The long-term expected rate of return on the System's investments was determined using a 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%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - 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 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected 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%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

Discount Rate

The discount rate used to measure the total GLI 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, 2019, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019, on, employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

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

The following presents the employer's proportionate share of the net GLI OPEB liability using the discount rate of 6.75%, as well as what the employer's proportionate share of the net GLI OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	5.75%	6.75%	7.75%
Employer's proportionate share of the Net GLI OPEB Liability	$70,120	$53,375	$39,795

Group Life Insurance Program Fiduciary Net Position

Detailed information about the Group Life Insurance Program's Fiduciary Net Position is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

11. OTHER POST-EMPLOYMENT BENEFITS – HEALTH INSURANCE CREDIT PROGRAM

Plan Description

All full-time, salaried permanent employees of participating political subdivisions are automatically covered by VRS Political Subdivision Health Insurance Credit Program upon employment. This plan is administered by the Virginia Retirement System (the System) along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia. Members earn one month of service credit toward the benefit for each month they are employed and for which they and their employer pay contributions to VRS. The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance premiums retirees pay for single coverage, excluding any portion covering the spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.

The specific information about the Political Subdivision Health Insurance Credit Program OPEB, including eligibility, coverage and benefits is set out in the table below:

POLITICAL SUBDIVISION HEALTH INSURANCE CREDIT PROGRAM (HIC) PLAN PROVISIONS
Eligible Employees The Political Subdivision Retiree Health Insurance Credit Program was established July 1, 1993 for retired political subdivision employees of employers who elect the benefit and who retire with at least 15 years of service credit. Eligible employees are enrolled automatically upon employment. They include: • Full-time permanent salaried employees of the participating political subdivision who are covered under the VRS pension plan.
Benefit Amounts The political subdivision's Retiree Health Insurance Credit Program provides the following benefits for eligible employees: • At Retirement – For employees who retire, the monthly benefit is $1.50 per year

of service per month with a maximum benefit of $45.00 per month. • Disability Retirement – For employees who retire on disability or go on long-term disability under the Virginia Local Disability Program (VLDP), the monthly benefit is $45.00 per month.
Health Insurance Credit Program Notes: • The monthly Health Insurance Credit benefit cannot exceed the individual premium amount. • No Health Insurance Credit for premiums paid and qualified under LODA; however, the employee may receive the credit for premiums paid for other qualified health plans. • Employees who retire after being on long-term disability under VLDP must have at least 15 years of service credit to qualify for the Health Insurance Credit as a retiree.

Employees Covered by Benefit Terms
As of the June 30, 2018, actuarial valuation, the following employees were covered by the benefit terms of the HIC OPEB plan:

	Number
Inactive members or their beneficiaries currently receiving benefits	2
Inactive members:	
Vested	0
Non-vested	0
Active elsewhere in VRS	0
Total inactive members	0
Active members	6
Total	8

Contributions
The contribution requirement for active employees is governed by §51.1-1402(E) 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 Authority's contractually required employer contribution rate for the year ended June 30, 2020, was 0.14% 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 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 political subdivision to the Political Subdivision Health Insurance Credit Program were $1,020 and $901 for the years ended June 30, 2020, and June 30, 2019, respectively.

Net HIC OPEB Liability

The Authority's net Health Insurance Credit OPEB liability was measured as of June 30, 2019.

The total Health Insurance Credit OPEB 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 Assumptions

The total HIC 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% per year
Salary increases, including Inflation	3.5% – 5.35% per annum
Investment Return Rate	6.75%, net of 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 7.0% to simplify preparation of OPEB liabilities.

Mortality rates:

Non - Largest 10 Locality Employers – General 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 Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

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

Non 10 Largest Locality Employers – General Employees

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled):

Update to a more current mortality table – RP-2014 projected to 2020

Retirement Rates:

Lowered rates at older ages and changed final retirement from 70 to 75

Withdrawal Rates:
Adjusted 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:
Increase rate from 14% to 15%

Discount Rate:
Decrease rate from 7.00% to 6.75%

Long-Term Expected Rate of Return

The long-term expected rate of return on 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%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - 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 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected 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%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

Discount Rate

The discount rate used to measure the total HIC OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that 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 entity for the HIC OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly, which was 100% of the actuarially determined contribution rate. From July 1, 2019, on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the HIC OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total HIC OPEB liability.

Changes in Net HIC OPEB Liability

	Total HIC OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net HIC OPEB Liability (Asset) (a) - (b)
Balances at June 30, 2018	$ 9,153	$ 1,098	$ 8,055
Changes for the year:			
Service cost	232	-	232
Interest	615	-	615
Changes of assumptions	209	-	209
Difference between expected and actual experience	352	-	352
Contributions – employer	-	902	(902)
Net investment income	-	75	(75)
Benefit payments, including refunds of employee contributions	(735)	(735)	-
Administrative expense	-	(2)	2
Other changes	-	(63)	63
Net changes	673	177	496
Balances at June 30, 2019	$ 9,826	$ 1,275	$ 8,551

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

The following presents the Authority's net HIC OPEB liability calculated using the stated discount rate of 6.75%, as well as what the net HIC OPEB liability would be if it were calculated using a stated discount rate that is one-percentage-point lower (5.75%) or one-percentage-point higher (7.75%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	5.75%	6.75%	7.75%
Authority's Net HIC OPEB Liability	$ 9,469	$ 8,551	$ 7,757

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

For the year ending June 30, 2020, the Authority recognized HIC OPEB expense of $882. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to HIC OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Employer contributions made subsequent to the measurement date	$ 1,020	$ -
Differences between expected and actual experience	483	-
Changes of assumptions	175	63
Net difference between projected and actual earnings on plan investments	-	12
	$ 1,678	$ 75

Amounts reported as deferred outflows of resources related to HIC OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the net HIC OPEB liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB as of June 30, 2020, will be recognized in pension expense in future reporting periods as follows:

Year ended June 30:	
2021	$ 111
2022	112
2036	135
2024	124
2025	92
Thereafter	9
Total	$ 583

Health Insurance Credit Program Plan Data
Information about the VRS Political Subdivision Health Insurance Credit Program is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

12. OTHER EMPLOYEE BENEFITS – VIRGINIA LOCAL DISABILITY PROGRAM

Plan Description

All full-time, salaried general employees; including local law enforcement officers, firefighters, or emergency medical technicians of political subdivisions who do not provide enhanced hazardous duty benefits; who are in the VRS Hybrid Retirement Plan benefit structure and whose employer has not elected to opt out of the VRS-sponsored program are automatically covered by the VRS Political Subdivision Employee Virginia Local Disability Program. This plan is administered by the Virginia Retirement System (the System), along with pension and other OPEB plans, for eligible 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 plan employees either through a local plan or through the Virginia Local Disability Program (VLDP).

The specific information for each plan and the eligibility for covered groups within each plan are set out in the table below:

POLITICAL SUBDIVISION EMPLOYEE VIRGINIA LOCAL DISABILITY PROGRAM (VLDP) PLAN PROVISIONS
Eligible Employees The Political Subdivision Employee Virginia Local Disability Program 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 plan retirement benefits. Eligible employees are enrolled automatically upon employment, unless their employer has elected to provide comparable coverage. They include: • Full-time general employees; including local law enforcement officers, firefighters, or emergency medical technicians who do not have enhanced hazardous duty benefits; of public political subdivisions covered under VRS.
Benefit Amounts The Political Subdivision Employee Virginia Disability Local Program (VLDP) provides the following benefits for eligible employees: *Short-Term Disability:* • The program provides a short-term disability benefit 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:* • The VLDP program provides a long-term disability benefit 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.
Virginia Local Disability 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 requirement for active hybrid plan employees is governed by §51.1-1178(C) of the *Code of Virginia*, as amended, but may be impacted as a result of funding 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 VRS Political Subdivision Employee Virginia Local Disability Program. 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 VRS Political Subdivision Employee Virginia Local Disability Program were $2,096 and $1,512 for the years ended June 30, 2020, and June 30, 2019, respectively.

Political Subdivision Employee Virginia Local Disability Program OPEB Liabilities, Political Subdivision Employee Virginia Local Disability Program OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the Political Subdivision Employee Virginia Local Disability Program OPEB

At June 30, 2020, the Authority reported a liability of $1,377 for its proportionate share of the VRS Political Subdivision Employee Virginia Local Disability Program Net OPEB Liability. The Net VRS Political Subdivision Employee Virginia Local Disability Program OPEB Liability was measured as of June 30, 2019, and the total VRS Political Subdivision Employee Virginia Local Disability Program OPEB liability used to calculate the Net VRS Political Subdivision Employee Virginia Local Disability Program OPEB Liability 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 Net VRS Political Subdivision Employee Virginia Local Disability Program OPEB Liability was based on the Authority's actuarially determined employer contributions to the VRS Political Subdivision Employee Virginia Local Disability Program OPEB plan 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, the Authority's proportion of the VRS Political Subdivision Employee Virginia Local Disability Program was 0.06796% as compared to 0.03335% at June 30, 2018.

For the year ended June 30, 2020, the Authority recognized VRS Political Subdivision Employee Virginia Local Disability Program OPEB expense of $1,672. Since there was a change in proportionate share between measurement dates, a portion of the VRS Political Subdivision Employee Virginia Local Disability Program Net 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 VRS Political Subdivision Employee Virginia Local Disability Program OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Employer contributions made subsequent to the measurement date	$ 2,096	$ -
Differences between expected and actual experience	691	42
Changes of assumptions	39	53
Changes in proportion	267	-
Net difference between projected and actual earnings on VSDP OPEB program investments	5	-
	$ 3,098	$ 95

$2,096 reported as deferred outflows of resources related to the Political Subdivision Employee VLDP OPEB resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Political Subdivision Employee VLDP OPEB Liability in the Fiscal Year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the Political Subdivision Employee VLDP OPEB will be recognized in the Political Subdivision Employee VLDP OPEB expense in future reporting periods as follows:

Year ended June 30:	
2021	$ 187
2022	186
2023	185
2024	187
2025	178
Thereafter	(16)
Total	$ 907

Actuarial Assumptions

The total Political Subdivision Employee VLDP OPEB liability for the VRS Political Subdivision Employee Virginia Local Disability Program 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 percent
Salary increases, including inflation – Political Subdivision Employees	3.5 percent – 5.95 percent
Investment rate of return	6.75%, net of investment expenses, including inflation*

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

Mortality rates – Non-Largest 10 Locality Employers – General and Non-Hazardous Duty Employees:

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

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service

Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 15%
Discount Rate	Decrease rate from 7.00% to 6.75%

Net Political Subdivision Employee VLDP OPEB Liability
The net OPEB liability (NOL) for the Political Subdivision Employee Virginia Local Disability 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 VRS Political Subdivision Employee Virginia Local Disability Program is as follows (amounts expressed in thousands):

	Political Subdivision Employee VLDP OPEB Program
Total Political Subdivision Employee VLDP OPEB Liability	$ 3,989
Plan Fiduciary Net Position	1,962
Political Subdivision Employee VLDP Net OPEB Liability	$ 2,027
Plan Fiduciary Net Position as a Percentage of the Total Political Subdivision Employee VLDP OPEB Liability	49.19%

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

Long-Term Expected Rate of Return
The long-term expected rate of return on the System's investments was determined using a 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%	1.23%
MAPS - Multi-Asset Public Strategies	6.00%	3.52%	0.21%
PIP - 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 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected 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%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

Discount Rate

The discount rate used to measure the total Political Subdivision Employee 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, 2019, the rate contributed by the entity for the Political Subdivision Employee 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, 2019, on, all agencies are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the Political Subdivision Employee 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 Political Subdivision Employee VLDP OPEB liability.

Sensitivity of the Authority's Proportionate Share of the Political Subdivision Employee VLDP Net OPEB Liability to Changes in the Discount Rate

The following presents the employer's proportionate share of the VRS Political Subdivision Employee Virginia Local Disability Program net VLDP OPEB liability using the discount rate of 6.75%, as well as what the employer's proportionate share of the net VLDP OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	5.75%	6.75%	7.75%
Employer's proportionate share of the Net VSDP OPEB Liability	$1,583	$1,377	$1,196

Political Subdivision Employee VLDP OPEB Fiduciary Net Position

Detailed information about the VRS Political Subdivision Employee Virginia Local Disability Program's Fiduciary Net Position is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2019-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

13. RISK MANAGEMENT AND EMPLOYEE HEALTH CARE PLANS

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; non-performance of duty; injuries to employees; and natural disasters.

The Authority participates in insurance plans maintained by the Commonwealth. The Department of Human Resource Management administers the state employee health care plan. The risk management insurance plans and worker's compensation plans are administered by a private insurance agency. Risk management insurance includes property and general liability plans and faithful performance of duty bond. The Authority pays premiums directly to the vendor for insurance coverage. Information relating to the Commonwealth's employee health care plan is available at the statewide level in the Commonwealth's Comprehensive Annual Financial Report.

14. RELATED PARTIES

In November, 2011, the Authority entered into a lease agreement with Virginia Commonwealth University for the use of the real property, building, and improvements located at 800 East Leigh Street, otherwise known as Bio+Tech Center. Bio+Tech Center is the property from which the Authority conducts the majority of its operations. The rent under the lease agreement was $30 and was paid in a lump sum at the beginning of the lease; therefore, there is no related rent expense represented within these financial statements. The initial lease term ends November 2041.

During FY2019, the Authority received $1.5 million from VCU Health to create investments, grants, and programs that focus on health innovation. The Authority formed two separate legal entities: Riverflow Growth Manager LLC, and Riverflow Growth Fund I, LP. $1 million of the $1.5 million received was invested in Riverflow Growth Fund I, LP for these purposes. A grant fund was set up with the $500,000. An additional $1.5 million was received during the year ended June 30, 2020, $1 million of which was again invested in Riverflow Growth Fund I, LP., and $500,000 went to the grant fund.

A Company owned by a board member of the Corporation received $120,000 in funds from the Corporation for consulting services in his capacity as Executive Director of Lighthouse Labs, LLC; a program under the Corporation.

VCU Ventures has co-working space at the VA Bio+Tech Park and receives programming assistance for the program's start-ups. During fiscal year 2020, VCU Ventures paid the Authority $75,000 which is included in business support services on the statement of revenues, expenses, and changes in net position.

A Board member of the Corporation performs consulting services for the Riverflow LLC. Fees paid for these services during fiscal year 2020 were $69,192.

The Authority has an agreement for use of space with the VCU School of Engineering. During FY2020 The Authority paid VCU $103,600.

During FY2020, the Authority awarded $ 500,000 in EDIF grants to Lighthouse Labs, LLC, for which the Corporation is the sole member. The Authority's in-kind accounting and administrative services as part of the EDIF grant during fiscal year 2020 was $102,433 and is included in program revenues and administrative expenses on the Statement of Revenues, Expenses, and Changes in Net Position.

15. BLENDED COMPONENT UNIT

The Authority accounts for the Company and the Partnership as a blended component unit. The Company holds no assets and had no activity during the year ended June 30, 2020; therefore, it was aggregated with the Partnership as "Riverflow" in the condensed combining statement of net position as follows:

Condensed Combining Statement of Net Position

	VBRPA	Riverflow	Total
Current assets	$ 5,704,365	$ 1,897,908	$ 7,602,273
Capital assets	6,362,467	-	6,362,467
Other assets	17,791,144	-	17,791,144
Total assets	29,857,976	1,897,908	31,755,884
Deferred outflows of resources	521,405	-	521,405
Current liabilities	5,112,440	-	5,112,440
Long-term liabilities	4,966,490	-	4,966,490
Total liabilities	10,078,930	-	10,078,930
Deferred inflows of resources	23,401	-	23,401
Net investment in capital assets	6,362,467	-	6,362,467
Restricted	1,162,996	1,897,908	3,060,904
Unrestricted	12,751,587	-	12,751,587
Total net position	$20,277,050	$ 1,897,908	$22,174,958

Condensed Combining Statement of Revenues, Expenses, and Changes in Net Position

	VBRPA	Riverflow	Total
Operating revenues			
Membership income	$ 301,616	$ -	$ 301,616
Parking income	404,873	-	404,873
Community development fees	290,629	-	290,629
Business support services	230,379	-	230,379
Interest income	84,007	-	84,007
Other income	15,107	-	15,107
Total operating revenues	1,326,611	-	1,326,611
Operating expenses	1,457,332	123,750	1,581,082
Operating loss	(130,721)	(123,750)	(254,471)
Nonoperating revenues (expenses)			
Interest revenue	557,750	-	557,750
Interest expense	(457,030)	-	(457,030)
Net fund contributions	(256,113)	1,000,000	743,887
Net gain on investments	263,492	21,459	284,951
Gain on sale of partnership	18,256	-	18,256
Total nonoperating revenues	126,355	1,021,459	1,147,814
Change in net position	(4,366)	897,709	893,343
Beginning net position, as restated (Note 16)	20,281,416	1,000,199	21,281,615
Ending net position	$20,277,050	$ 1,897,908	$22,174,958

Condensed Combining Statement of Cash Flows

	VBRPA	Riverflow	Total
Net cash used in operating activities	$ (61,543)	$ (123,750)	$ (185,293)
Net cash provided by non-capital financing activities	(251,219)	1,021,459	770,240
Net cash used by capital and related financing activities	(2,389,656)	-	(2,389,656)
Net cash provided by investing activities	621,459	-	621,459
Net increase (decrease) in cash and cash equivalents	(2,080,959)	897,709	(1,183,250)
Beginning cash and cash equivalents	6,070,229	1,000,199	7,070,428
Ending cash and cash equivalents	$ 3,989,270	$ 1,897,908	$ 5,887,178

16. RESTATEMENT

The financial statements as of and for the year ended June 30, 2019, reflected the Corporation as a blended component unit. During 2020, the nature of the Authority's relationship with the Corporation had changed such that this presentation in a blended format was no longer appropriate. As described in Note 1, the Corporation is discretely presented in the financial statements as of and for the year ended June 30, 2020. As a result of this change in presentation, the Authority's balances as of June 30, 2019, have been restated as follows:

	Previously Reported 6/30/2019	Restatement	As Restated 6/30/2019
Cash and cash equivalents	$ 7,295,332	$ (224,904)	$ 7,070,428
Other current assets	4,409,205	(173,719)	4,235,486
Capital assets	3,848,287	(1,200)	3,847,087
Other assets	19,837,105	-	19,837,105
Total assets	35,389,929	(399,823)	34,990,106
Deferred outflows of resources	705,784	-	705,784
Current liabilities	4,931,741	(261,042)	4,670,699
Long-term liabilities	9,721,158	-	9,721,158
Total liabilities	14,652,899	(261,042)	14,391,857
Deferred inflows of resources	22,418	-	22,418
Net investment in capital assets	3,848,287	(1,200)	3,847,087
Restricted	1,992,938	(137,581)	1,855,357
Unrestricted	15,579,171	-	15,579,171
Total net position	$21,420,396	$ (138,781)	$21,281,615

17. COMMITMENTS

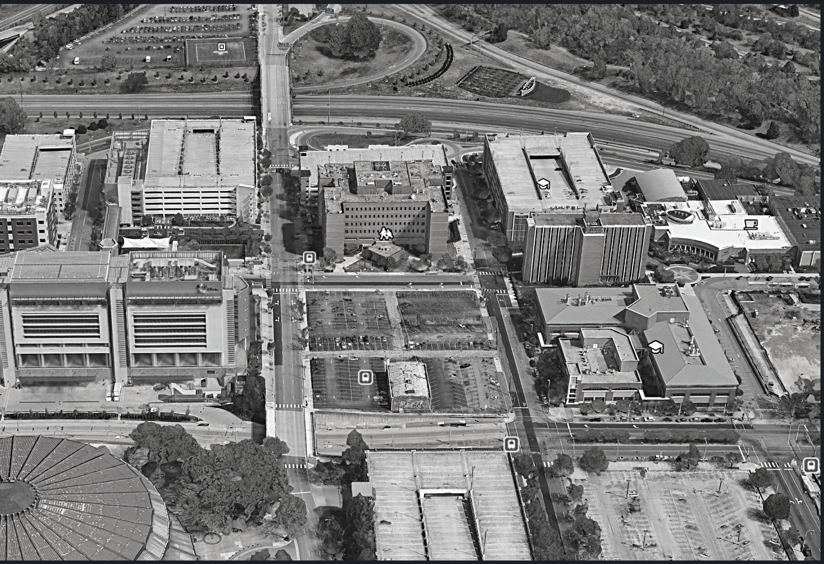
The Authority has entered into various agreements related to the construction of a new building. Amounts remaining committed to contractors under these agreements as of June 30, 2020, were $4,372,525, of which $877,014 has been approved for payment.

The Authority has awarded various EDIF grants that are to be paid out over future years. The amounts awarded but unpaid as of June 30, 2020, were cash commitments of $795,266 and in-kind administrative services of $204,734.

18. SUBSEQUENT EVENTS

We have engaged a firm for strategy work that will range between $74,100 and $82,000.

REQUIRED SUPPLEMENTARY INFORMATION



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VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Schedule of Changes in Net Pension Asset and Related Ratios

For the measurement date as of and for the year ended June 30,	2019	2018	2017	2016	2015	2014
Total pension liability						
Service cost	$ 56,235	$ 46,625	$ 44,533	$ 43,233	$ 36,492	$ 57,102
Interest	126,290	121,183	116,386	109,643	102,589	96,454
Changes of assumptions	54,476	-	828	-	-	-
Difference between expected and actual experience	36,398	7,778	(4,218)	28,675	44,487	-
Benefit payments	(114,204)	(91,067)	(86,948)	(83,470)	(82,139)	(49,685)
Net change in total pension liability	159,195	84,519	70,581	98,081	101,429	103,871
Total pension liability - beginning	1,861,238	1,776,719	1,706,138	1,608,057	1,506,628	1,402,757
Total pension liability - ending (a)	$ 2,020,433	$ 1,861,238	$ 1,776,719	$ 1,706,138	$ 1,608,057	$ 1,506,628
Plan fiduciary net position						
Contributions - employer	$ 1,689	$ 1,781	$ 2,978	$ 24,201	$ 23,518	$ 18,091
Contributions - employee	30,092	27,037	25,655	23,639	22,946	22,363
Net investment income	145,042	155,987	234,975	33,550	86,652	262,181
Benefit payments	(114,204)	(91,067)	(86,948)	(83,470)	(82,139)	(49,685)
Administrative expenses	(1,488)	(1,372)	(1,388)	(1,223)	(1,205)	(1,407)
Other changes	(91)	(247)	(330)	(14)	(19)	14
Net change in plan fiduciary net position	61,040	92,119	174,942	(3,317)	49,753	251,557
Plan fiduciary net position - beginning	2,216,595	2,124,476	1,949,534	1,952,851	1,903,098	1,651,541
Plan fiduciary net position - ending (b)	$ 2,277,635	$ 2,216,595	$ 2,124,476	$ 1,949,534	$ 1,952,851	$ 1,903,098
Authority's net pension asset - ending (b) - (a)	$ 257,202	$ 355,357	$ 347,757	$ 243,396	$ 344,794	$ 396,470
Plan fiduciary net position as a percentage of the total pension Liability	112.7%	119.1%	119.6%	114.3%	121.4%	126.3%
Covered payroll*	$ 643,844	$ 555,656	$ 523,187	$ 472,770	$ 458,917	$ 388,489
Net pension asset as a percentage of covered payroll	39.9%	64.0%	66.5%	51.5%	75.1%	102.1%

*Covered payroll represents the total pensionable payroll for employees covered under the pension plan, in accordance with GASB Statement No. 82.

Note: Information in this schedule is presented for the year in which information is available. Information will be added each year until a full 10-year trend is presented.

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

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

For the measurement date and years ended June 30,	2019	2018	2017
Employer's proportion of the net GLI OPEB liability	0.00328%	0.00293%	0.00284%
Employer's proportionate share of the net GLI OPEB liability	$ 53,375	$ 44,000	$ 43,000
Employer's covered payroll	$ 643,844	$ 555,656	$ 523,187
Employer's proportionate share of the net GLI OPEB liability as a percentage of its covered payroll	8.29%	7.92%	8.22%
Plan fiduciary net position as a percentage of the total GLI OPEB liability	52.00%	51.22%	48.86%

Note: Information in this schedule is presented for the years in which information is available. Information will be added each year until a full 10-year trend is presented.

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Schedule of Changes in Net HIC OPEB Liability and Related Ratios

For the measurement date as of and for the year ended June 30,	2019	2018
Total HIC OPEB liability		
Service cost	$ 232	$ 181
Interest	615	594
Changes of assumptions	209	-
Difference between expected and actual experience	352	293
Benefit payments	(735)	(790)
Net change in total HIC OPEB liability	673	278
Total HIC OPEB liability - beginning	9,153	8,875
Total HIC OPEB liability - ending (a)	$ 9,826	$ 9,153
Plan fiduciary net position		
Contributions - employer	$ 902	$ 780
Contributions - employee	-	-
Net investment income	75	130
Benefit payments	(735)	(790)
Administrative expenses	(2)	(2)
Other changes	(63)	(5)
Net change in plan fiduciary net position	177	113
Plan fiduciary net position - beginning	1,098	985
Plan fiduciary net position - ending (b)	$ 1,275	$ 1,098
Authority's net HIC OPEB liability - ending (b) - (a)	$ 8,551	$ 8,055
Plan fiduciary net position as a percentage of the total HIC OPEB liability	13.0%	12.0%
Covered payroll	$ 643,844	$ 555,656
Net HIC OPEB liability as a percentage of covered payroll	1.3%	1.4%

Note: Information in this schedule is presented for the year in which information is available. Information will be added each year until a full 10-year trend is presented.

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Schedule of Employer's Share of Net OPEB Liability – Virginia Local Disability Program

For the measurement date and years ended June 30,	2019	2018	2017
Employer's proportion of the net VSDP OPEB liability	0.06796%	0.03335%	0.00000%
Employer's proportionate share of the net VSDP OPEB liability	$ 1,377	$ -	$ -
Employer's covered payroll	$ 210,000	$ 79,696	$ -
Employer's proportionate share of the net VSDP OPEB liability as a percentage of its covered payroll	0.66%	0.00%	n/a
Plan fiduciary net position as a percentage of the total VSDP OPEB liability	49.19%	51.39%	38.40%

Note: Information in this schedule is presented for the years in which information is available. Information will be added each year until a full 10-year trend is presented.

VIRGINIA BIOTECHNOLOGY RESEARCH PARTNERSHIP AUTHORITY

Schedule of Employer Contributions - Pension

For the year ended June 30,	Actuarially Determined Contribution (1)	Contributions in Relation to Actuarially Determined Contribution (2)	Contribution Deficiency (Excess) (1) - (2)	Employer's Covered Payroll (3)	Contributions as a % of Covered Payroll (2) / (3)
2020	$ 5,576	$ 5,576	$ -	$ 728,661	0.77%
2019	$ 4,829	$ 4,829	$ -	$ 643,844	0.75%
2018	$ 3,027	$ 3,027	$ -	$ 555,656	0.54%
2017	$ 2,978	$ 2,978	$ -	$ 523,187	0.57%
2016	$ 24,347	$ 24,347	$ -	$ 472,770	5.15%
2015	$ 23,634	$ 23,634	$ -	$ 458,917	5.15%

Schedule of Employer Contributions - GLI OPEB

For the year ended June 30,	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (1) - (2)	Employer's Covered Payroll (3)	Contributions as a % of Covered Payroll (2) / (3)
2020	$ 3,789	$ 3,789	$ -	$ 728,661	0.52%
2019	$ 3,348	$ 3,348	$ -	$ 643,844	0.52%
2018	$ 2,912	$ 2,912	$ -	$ 555,656	0.52%
2017	$ 2,742	$ 2,742	$ -	$ 523,187	0.52%

Schedule of Employer Contributions - HIC OPEB

For the year ended June 30,	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (1) - (2)	Employer's Covered Payroll (3)	Contributions as a % of Covered Payroll (2) / (3)
2020	$ 1,020	$ 1,020	$ -	$ 728,661	0.14%
2019	$ 901	$ 901	$ -	$ 643,844	0.14%

Schedule of Employer Contributions - VLDP OPEB

For the year ended June 30,	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contribution Deficiency (Excess) (1) - (2)	Employer's Covered Payroll (3)	Contributions as a % of Covered Payroll (2) / (3)
2020	$ 2,096	$ 2,096	$ -	$ 291,167	0.72%
2019	$ 1,512	$ 1,512	$ -	$ 210,000	0.72%

Note: Information in this schedule is presented for the year in which information is available. Information will be added each year until a full 10-year trend is presented.

1. Changes of benefit terms - Pension and OPEB:

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

2. Changes of assumptions - Pension and OPEB:

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

<u>Pension and HIC OPEB</u>
Non 10 Largest Locality Employers - Non-Hazardous Duty:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal Rates: Adjusted rates to better fit experience at each year age and service year (through 9 years of service - Pension-only)
- Disability Rates: Lowered rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 15%
- Discount Rate: Decrease rate from 7.00% to 6.75%

<u>GLI OPEB</u>
General State Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal Rates: Adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability Rates: Adjusted rates to better match experience
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 25%
- Discount Rate: Decrease rate from 7.00% to 6.75%

2. Changes of assumptions - Pension and OPEB: (Continued)

GLI OPEB (continued)

Teachers:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and changed final retirement from 70 to 75
- Withdrawal Rates: Adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability Rates: Adjusted rates to better match experience
- Salary Scale: No change
- Discount Rate: Decrease rate from 7.00% to 6.75%

SPORS Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
- Retirement Rates: Increased age 50 rates and lowered rates at older ages
- Withdrawal Rates: Adjusted rates to better fit experience
- Disability Rates: Adjusted rates to better match experience
- Salary Scale: No change
- Line of Duty Disability: Increased rate from 60% to 85%
- Discount Rate: Decrease rate from 7.00% to 6.75%

VaLORS Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020 and reduced margin for future improvement in accordance with experience
- Retirement Rates: Increased age 50 rates and lowered rates at older ages
- Withdrawal Rates: Adjusted rates to better fit experience at each year age and service through 9 years of service
- Disability Rates: Adjusted rates to better match experience
- Salary Scale: No change
- Line of Duty Disability: Decreased rate from 50% to 35%
- Discount Rate: Decrease rate from 7.00% to 6.75%

JRS Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Decreased rates at first retirement eligibility
- Withdrawal Rates: No change
- Disability Rates: Removed disability rates
- Salary Scale: No change
- Discount Rate: Decrease rate from 7.00% to 6.75%

2. Changes of assumptions - Pension and OPEB: (Continued)

GLI OPEB (continued)

Largest 10 Locality Employers - General Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and 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 rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 20%
- Discount Rate: Decrease rate from 7.00% to 6.75%

Non-Largest 10 Locality Employers - General Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and 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 rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 15%
- Discount Rate: Decrease rate from 7.00% to 6.75%

Largest 10 Locality Employers - Hazardous Duty Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages
- Withdrawal Rates: Adjusted termination rates to better fit experience at each year age and service year
- Disability Rates: Increased disability rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 60% to 70%
- Discount Rate: Decrease rate from 7.00% to 6.75%

Non-Largest 10 Locality Employers - Hazardous Duty Employees:
- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Increased age 50 rates and lowered rates at older ages
- Withdrawal Rates: Adjusted termination rates to better fit experience at each year 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%
- Discount Rate: Decrease rate from 7.00% to 6.75%

VLDP OPEB Only

- Mortality Rates (Pre-retirement, post-retirement healthy, and disabled): Update to a more current mortality table - RP-2014 projected to 2020
- Retirement Rates: Lowered rates at older ages and 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 rates
- Salary Scale: No change
- Line of Duty Disability: Increase rate from 14% to 20%
- Discount Rate: Decrease rate from 7.00% to 6.75%