

PRINCE WILLIAM COUNTY SERVICE AUTHORITY

# 2022 ANNUAL COMPREHENSIVE FINANCIAL REPORT





The Service Authority's complex system of pipes, pumps and treatment processes is supported by a team of professionals who are dedicated to providing clean water and exceptional service to our customers. Both are essential to fulfilling our mission.

Similarly, the water that the Service Authority distributes and reclaims is the product of a highly interconnected system. The journey begins in our region's waterways, continues in local homes and businesses, undergoes rigorous treatment processes and ultimately concludes in the Chesapeake Bay. Each step serves a vital purpose that benefits our health, our community and our environment.

It takes all of these elements – well-maintained infrastructure, an outstanding workforce and a commitment to the environment – to ensure that the Service Authority provides clean, safe and reliable water to our customers.

As you will see in this annual comprehensive financial report, the Service Authority is committed to excellence and we are passionate about the service we provide to our vibrant and diverse community.

Calvin D. Farr, Jr., PE

General Manager/Chief Executive Officer



PRINCE WILLIAM COUNTY SERVICE AUTHORITY

### 2022 ANNUAL COMPREHENSIVE FINANCIAL REPORT

Prepared by the Finance Division:

Brian E. Sipes, CPA

Director of Finance

For the Fiscal Years Ended June 30, 2022 and June 30, 2021

Woodbridge, Virginia

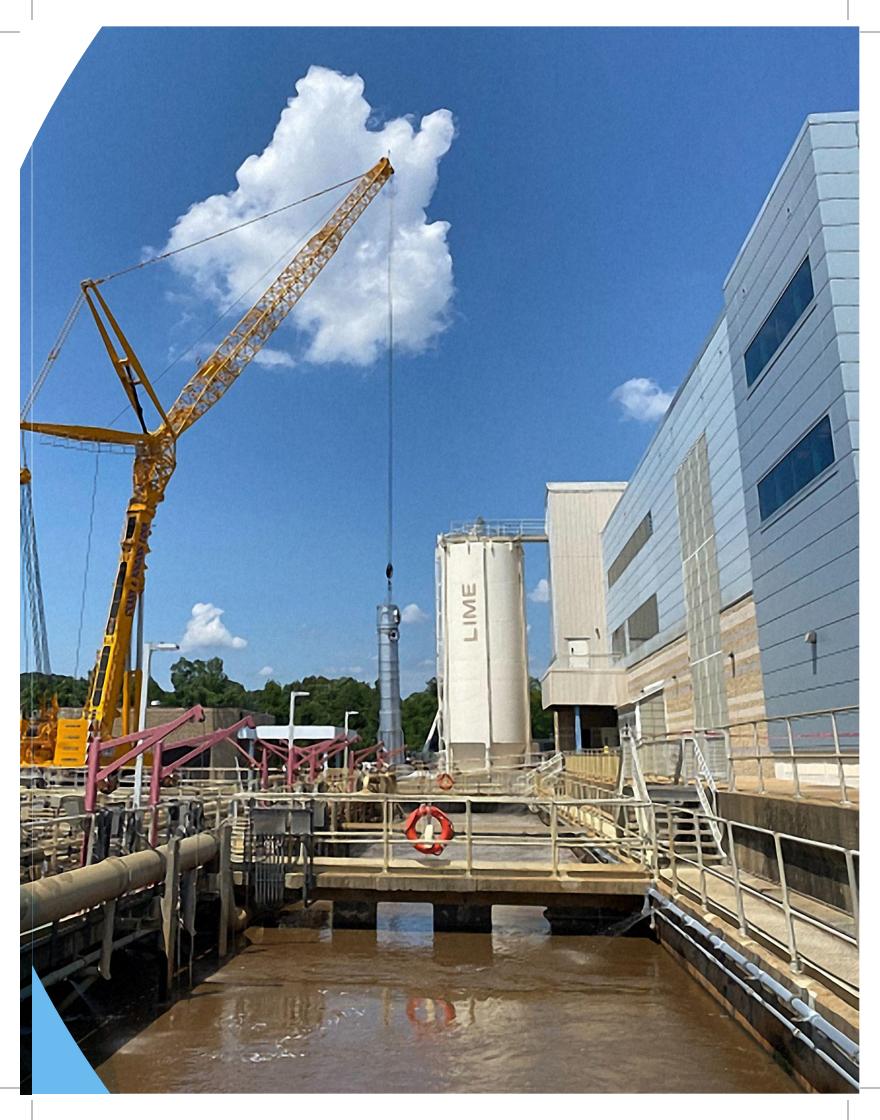
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## INTRODUCTORY SECTION



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B. Paul O'Meara, Jr., Chairman
Paul Colangelo, Jr., Vice Chairman
Harry W. Wiggins, Secretary-Treasurer
Jim Almond, Member
Dean E. Dickey, Member
Joyce P. Eagles, Member
K. Jack Kooyoomjian, Ph.D., Member
Marlo Thomas Watson, Member

Calvin D. Farr, Jr., P.E., General Manager/CEO



December 7, 2022

Board of Directors of the Prince William County Service Authority Woodbridge, Virginia

#### Ladies and Gentlemen:

The Annual Comprehensive Financial Report (ACFR) for the Prince William County Service Authority (the Authority) for the fiscal years ended June 30, 2022 and 2021 is submitted herewith. Financial data, including all appropriate disclosures, have been prepared in accordance with the standards for financial reporting promulgated or permitted by the Governmental Accounting Standards Board (GASB).

Management is responsible, in all material respects, for the accuracy of the data and the completeness and fairness of the presentations, including all disclosures. We believe the data presents fairly the financial position and results of operations of the Authority.

This letter of transmittal is designed to complement the Management's Discussion and Analysis (MD&A) found in the financial section of the ACFR, and should be read in conjunction with it.

#### **The Authority**

The Authority was created by a resolution of the Board of County Supervisors (BOCS) of Prince William County, Virginia (the County) on January 11, 1983. The Authority is chartered by the State Corporation Commission and is an independent public body responsible for providing a comprehensive county-wide water and sewer system.

The management of the Authority is vested in a Board of eight members appointed by the County's BOCS. The Authority's Board appoints the General Manager, who is responsible for the daily management of the Authority.

#### **Economic Conditions and Outlook**

Prince William County is the second-largest county in the Commonwealth of Virginia with a population of over 492,000, as of June 30, 2022. The County is located approximately 35 miles southwest of Washington, D.C. and encompasses a total area of 348 square miles that includes independent cities and towns, state and federal park properties, and the Quantico Marine Corps Base. A highly-educated, racially and ethnically diverse population makes the county one of the most globally represented communities in the region. Steeped in rich history, surrounded by beautiful parks and open space, Prince William County is a community of choice where individuals, families and businesses choose to live, work and play.

According to the 2016-2020 American Community Survey, the 2020 median household income in the County was \$107,707 which ranks near the top among regions in the Commonwealth of Virginia, and the entire United States. Employment within the service area is well diversified, and as of June 2022, the average unemployment rate was 2.8%, which is below the national level and within Virginia state-wide level. The total civilian labor force in Prince William County at June 30, 2022, was estimated at approximately 245,000 persons, up 1.5% from 2021 and up 6.2% from 2013. Based on the most current available data, the County has experienced improvement in the residential real estate market, as the average assessed value in 2022 was up 62.9% from the low point in 2013.

The Authority's major customers are well-established entities consisting of schools, local utilities, internet data centers, multi-family housing complexes, retail outlets, and a hospital. In total, the ten largest customers represent 6.2% of total consumption revenues. Overall, the Authority's customer base is primarily residential accounts, representing more than 90% of the accounts. The Authority continues to experience growth in customer accounts, with an additional 1,009 accounts added during fiscal year 2022, representing an increase of 1.1% over the prior year.

The Authority's emergency planning and preparedness ensure the continuity of operations and delivery of essential services to our customers during the coronavirus pandemic. The Authority's financial position and operating results reflect sufficient funds available to pay for operating costs and long-term debt, as well as to invest in the infrastructure improvements needed to maintain and replace critical capital assets.

#### **Long-Term Financial Planning**

In order to facilitate long-term planning, the Authority maintains a model of its finances projecting 20 years into the future, with particular attention to the immediate five year period. This model includes projections of water and sewer capacity utilization, system growth and related availability fee revenue, operating revenues and expenses, debt service requirements, and cash flows.

The Authority also maintains and updates a Capital Improvements Program (CIP) on an annual basis, which details capital projects that are necessary for system expansion, rehabilitation and improved system reliability. This program details planned spending for the ensuing five year period, and aggregate capital spending anticipated for identified projects in subsequent years.

The Authority uses this data to facilitate projection of necessary rate increases and additional capacity requirements, to ensure proper debt coverage as well as to provide for adequate funding for the Authority's ongoing activities and obligations.

The Authority uses a Strategic Plan developed with input from the Board of Directors, management, and staff as a tool to ensure that financial planning will support the future needs, priorities and vision of the organization. Within the plan, a set of goals, both financial and operational, are created each year to prioritize future actions to align with the strategic vision.

The Authority maintains a AAA/Aaa rating from Standard & Poor's Ratings Services (S&P) and Moody's Investors Service, Inc. (Moody's), respectively, on its outstanding revenue bonds, the highest ratings that can be awarded to local governments. This further demonstrates and validates the Authority's sound financial condition and the positive impact of long-term financial planning.

#### **Internal Control Structure and Budgetary Controls**

The Authority's management is responsible for establishing and maintaining a system of internal accounting controls. The objectives of internal controls are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and financial records for preparing financial statements and maintaining asset accountability are reliable. The concept of reasonable assurance recognizes that estimates and judgments made by management are required to assess the expected benefits and related costs of internal accounting control procedures and that the cost of a control should not exceed the benefits likely to be derived. Management reviews internal controls on a continuing basis.

The Authority prepares an annual budget for operating expenditures and capital outlays. The proposed budget is prepared by management and submitted to the Board of Directors for approval. The Authority's spending budget for fiscal year 2023 reflects a 9.9% increase, from the prior year budget. The Authority controls current year expenses at both the functional and operating division levels. Division directors are responsible for budgetary items that are controllable within their divisions. The Division of Management and Budget is responsible for monitoring expenses by function for the Authority as a whole. Controlling all expenses at different levels strengthens overall budgetary and management controls.

#### **Independent Audit**

The Virginia State Code Section 15.2-2511 requires an annual audit be performed. The Authority's financial statements for the year ended June 30, 2022 and 2021 have been audited by PBMares, LLP, a firm of licensed certified public accountants. The fiscal year 2022 Independent Auditor's Report is located in the financial section of this document.

#### **Awards**

The Government Finance Officers Association (GFOA) of the United States and Canada awarded a Certificate of Achievement for Excellence in Financial Reporting to the Prince William County Service Authority for its ACFR for the fiscal year ended June 30, 2021. This was the 33rd consecutive year that the Authority has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government entity must publish an easily readable and efficiently organized ACFR, which must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe this year's ACFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for continued recognition under this program.

#### **Acknowledgments**

The preparation of the annual ACFR could not have been accomplished without the dedicated services of the Authority's Finance staff. All individuals who assisted in this effort have my sincere appreciation for their contributions made in the preparation of this report. I would also like to thank the Board of Directors, the General Manager, the Deputy General Managers and the Division of Management and Budget for their continued interest and support in planning and conducting the financial operations of the Authority in a responsible and progressive manner.

Respectfully submitted,

Brian E. Sipes, CPA Director of Finance



B. Paul O'Meara, Jr. Chair



Paul Colangelo, Jr. Vice Chair



Harry W. Wiggins Secretary-Treasurer



Jim Almond



Dean E. Dickey



Joyce P. Eagles



Dr. K. Jack Kooyoomjian



Marlo Thomas Watson

#### **AUDIT COMMITTEE**

Joyce P. Eagles, AC Chair Paul Colangelo, Jr. Marlo Thomas Watson Harry W. Wiggins

#### **BOARD OF DIRECTORS**

B. Paul O'Meara, Jr., Chair Paul Colangelo, Jr., Vice Chair Harry W. Wiggins, Secretary-Treasurer Jim Almond Dean E. Dickey Joyce P. Eagles Dr. K. Jack Kooyoomjian

#### Calvin D. Farr, Jr.

Marlo Thomas Watson

General Manager/Chief Executive Officer

#### **Don Pannell**

Deputy General Manager/ Chief Operating Officer

#### Sandra Hardeman

Chief People and Talent Officer/Human Resources & Organizational Development

Shannon Spence
Director,
Project
Management Office

#### Hari Kurup

Chief Information Technology Officer

#### **Samer Beidas**

Director, Engineering & Planning

#### Doug Shoop

Director, Operations & Maintenance

#### Jeanetta Williams

Director, Data Management

Director, Information Technology

**Tony Piccione** 

#### Astrid B. Nelson

Deputy General Manager / Chief Financial & Administrative Officer

#### Lyle Beefelt

Director, Management & Budget

#### **Brian Sipes**

Director, Finance

#### Kathleen Bentz

Acting Director, Communications



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

## Prince William County Service Authority Virginia

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO



# FINANCIAL SECTION



#### INDEPENDENT AUDITOR'S REPORT

To the Honorable Board of Directors Prince William County Service Authority

#### **Opinion**

We have audited the accompanying financial statements of the Prince William County Service Authority (Authority), as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the financial position of Authority as of June 30, 2022 and 2021, and respective changes in financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions* issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Our responsibilities under those standards and specifications are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Authority's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Authority's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

#### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 16-31 and the required supplementary information on pages 84-94 be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory section and statistical section but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

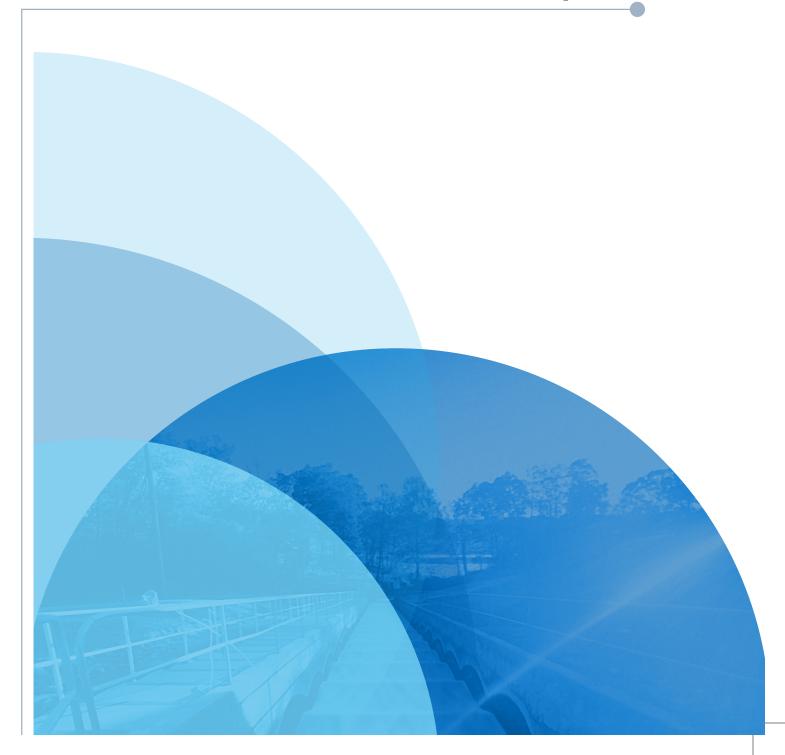
#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 7, 2022 on our consideration of Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Authority's internal control over financial reporting and compliance.

PBMares, LLP

Harrisonburg, Virginia December 7, 2022

## Management's Discussion and Analysis



#### MANAGEMENT'S DISCUSSION AND ANALYSIS

This section of Prince William County Service Authority's ACFR presents management's analysis of the Authority's financial performance during the fiscal year ended June 30, 2022. This analysis should be read in conjunction with the basic financial statements, which are located in the next section of the ACFR.

#### **Financial Highlights**

The Authority provides water and wastewater services in Prince William County, which is the second largest county in Virginia with an estimated population of 492,000 and a median household income of \$107,707. In fiscal year 2022, the Authority's financial condition remained very strong, highlighted by the following:

- Although the pace of development is down from the prior year, growth continued with 1,393 equivalent residential
  units (ERU) certified in fiscal year 2022, resulting in availability fee revenue from new connections of \$21.2 million
  and an increase in the customer base of 1.1%. An ERU is the established average use of a single-family residence.
- In fiscal year 2022, operating revenues were \$125.9 million, a 2.8% increase over the prior fiscal year.
- Operating expenses increased \$2.2 million over the prior fiscal year. Increases occurred in materials and supplies, contractual services, purchased resources and personnel costs.
- In fiscal year 2022, total capital assets increased by \$32.3 million, or 3.0% primarily due to \$76.5 million in additions, offset by depreciation and disposals. The Authority maintained the highest bond ratings from Moody's and S&P and exceeded all debt coverage requirements.
- Cash and investments at June 30, 2022 decreased \$27.2 million to \$359.9 million. However, the Authority's debt coverage and cash position remain strong. This decrease reflects our continued acquisition and construction of capital assets and lower availability fee revenue in fiscal year 2022.
- The Authority entered into a \$100 million loan with the Virginia Resources Authority for funding of a design-build upgrade project of the HL Mooney AWRF and we expect to draw on those funds over the next 5 years.
- Net position increased in fiscal year 2022 by \$9.6 million to \$1.40 billion.

Additional discussion of operating results is included in subsequent sections of Management's Discussion and Analysis.

The Authority's financial position and results from operations ensure the Authority will continue to have sufficient funds available to pay for operating costs and long-term debt, as well as to invest in infrastructure improvements needed to maintain and replace capital assets.

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

The Authority operates as an enterprise fund. Enterprise funds are a type of proprietary fund and function similar to a private business in that user charges and fees are expected to cover costs. The Authority's basic financial statements are presented using the accrual basis of accounting, which provides for revenue recognition in the period in which water and water reclamation services are provided and expense recognition when goods and services are received. Additionally, the Authority's basic financial statements utilize the flow of economic resources measurement focus, in which all assets, deferred outflows of resources, liabilities and deferred inflows of resources are reflected on the Statements of Net Position. The Statements of Changes in Revenues, Expenses and Net Position include all transactions, such as revenues and expenses, that increase or decrease net position.

This ACFR is presented in three sections: introductory, financial and statistical. The introductory section includes a letter of transmittal submitted by the Authority's Director of Finance, a listing of the Authority's Board of Directors and organizational chart as of June 30, 2022, and a copy of the Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting that has been awarded to the Authority for the fiscal year ended June 30, 2021.

The financial section consists of the Independent Auditor's Report, Management's Discussion and Analysis, and the Authority's basic financial statements which are discussed below, and are presented comparatively for the fiscal years ended June 30, 2022 and 2021.

- Statements of Net Position
- Statements of Revenues, Expenses and Changes in Net Position
- Statements of Cash Flows
- Notes to Financial Statements
- Required Supplementary Information

The Statements of Net Position report the Authority's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, providing information about the nature and amounts of investments in resources (assets) and obligations to creditors (liabilities). These statements may be used to evaluate the capital structure, liquidity, and financial flexibility of the Authority. The Statements of Revenues, Expenses and Changes in Net Position reflect revenue and expense activity of the Authority for the fiscal years presented. These statements allow the user to measure the Authority's profitability and creditworthiness by the financial performance of the Authority's operations, and to determine whether the Authority has successfully recovered its operating costs through user fees and other charges. The Statements of Cash Flows present the Authority's inflows and outflows of cash during the financial reporting periods by reporting cash receipts, cash payments, and the net changes in cash. Cash flows are categorized by operating, non-capital financing, capital and related financing, and investing activities. The Notes to Financial Statements and the Required Supplementary Information provide necessary disclosures essential to a full understanding of the data provided in the aforementioned basic financial statements.

The statistical section includes selected financial, operational, and demographic information presented on a multi-year basis.

#### **Financial Analysis of the Authority**

During fiscal year 2022, the Authority maintained its sound financial condition, as demonstrated by the Authority's continued AAA bond rating from S&P and Aaa rating from Moody's. These ratings reflect the Authority's continued growth in total net position and strong cash and investment portfolio, along with the strategic management of its debt borrowings. These are all outlined in the financial statements and schedules included in this report. While exercising prudent fiscal discipline, the Authority continues to ensure it is able to provide safe, reliable and environmentally compliant water and water reclamation services to its customers.

#### **Net Position**

The Authority's net position increased by \$9.6 million during fiscal year 2022, which represented a 0.7% increase from the prior fiscal year net position. At June 30, 2022, total net position was \$1.40 billion as compared to \$1.39 billion the previous year.

The following table reflects the Authority's net position at June 30, 2022 and 2021:

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

		2022	2021	Increase	% Change
		2022	2021	(Decrease)	% Change
Capital assets, net	\$	1,095,176,910	\$ 1,062,841,249	\$ 32,335,661	3.0%
Investments		299,529,325	302,520,387	(2,991,062)	(1.0)
Other current and non-current assets		142,754,970	159,027,381	(16,272,411)	(10.2)
Total assets	_	1,537,461,205	1,524,389,017	13,072,188	0.9
Deferred outflows of resources Total assets and deferred		7,249,804	8,476,800	(1,226,996)	(14.5)
outflows of resources	\$	1,544,711,009	\$ 1,532,865,817	\$ 11,845,192	0.8
Bonds and VRA loans payable	\$	88,061,280	\$ 98,171,165	\$ (10,109,885)	(10.3)
Lease Liabilities		72,702	-	72,702	100
Other liabilities		41,357,866	47,363,407	(6,005,541)	(12.7)
Total liabilities		129,491,848	145,534,572	(16,042,724)	(11.0)
Deferred inflows of resources	_	18,847,323	549,913	18,297,410	3,327.3
Total liabilities and deferred inflows of resources		148,339,171	146,084,485	2,254,686	1.5
Net position:					
Net investment in capital assets		1,000,621,917	966,503,582	34,118,335	3.5
Restricted		16,692,924	18,095,794	(1,402,870)	(7.8)
Unrestricted		379,056,997	402,181,956	(23,124,959)	(5.7)
Total net position		1,396,371,838	1,386,781,332	9,590,506	0.7
Total liabilities, deferred inflows of resources and					
net position	\$	1,544,711,009	\$ 1,532,865,817	\$ 11,845,192	0.8%

The Authority's net position increased by \$34.4 million during fiscal year 2021, which represented a 2.5% increase from the prior fiscal year net position. At June 30, 2021, total net position was \$1.39 billion as compared to \$1.35 billion the previous year.

The following table reflects the Authority's net position at June 30, 2021 and 2020:

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

	Increase							
		2021		2020		(Decrease)	% Change	
Capital assets, net	\$	1,062,841,249	\$	1,055,269,955	\$	7,571,294	0.7%	
Investments		302,520,387		275,892,856		26,627,531	9.7	
Other current and non-current assets		159,027,381		166,495,564		(7,468,183)	(4.5)	
Total assets		1,524,389,017		1,497,658,375		26,730,642	1.8	
Deferred outflows of resources	_	8,476,800		9,219,162		(742,362)	(8.1)	
Total assets and deferred outflows of resources	\$	1,532,865,817	\$	1,506,877,537	\$	25,988,280	1.7	
Bonds and VRA loans payable	\$	98,171,165	\$	108,263,490	\$	(10,092,325)	(9.3)	
Other liabilities		47,363,407		45,000,932		2,362,475	5.2	
Total liabilities		145,534,572		153,264,422		(7,729,850)	(5.0)	
Deferred inflows of resources Total liabilities and deferred		549,913		1,220,648		(670,735)	(54.9)	
inflows of resources		146,084,485		154,485,070		(8,400,585)	(5.4)	
Net position:								
Net investment in capital assets		966,503,582		949,098,154		17,405,428	1.8	
Restricted		18,095,794		21,268,484		(3,172,690)	(14.9)	
Unrestricted		402,181,956		382,025,829		20,156,127	5.3	
Total net position		1,386,781,332		1,352,392,467		34,388,865	2.5	
Total liabilities, deferred inflows of resources and	٥	1 500 005 017	^	1 506 077 507	^	05,000,000	1 70	
net position	\$	1,532,865,817	\$	1,506,877,537	\$	25,988,280	1.7%	

#### **Net Investment in Capital Assets**

Investments in capital assets are essential to the Authority's infrastructure and the ability to provide quality services to its customers. Net investment in capital assets consists of property, plant, and equipment, leases, construction in progress and advance capacity payments, and is after the deduction of any related long-term debt outstanding.

#### **2022-2021 Comparison**

Net investment in capital assets was \$1.0 billion at June 30, 2022 and represented 71.7% of total net position. Net investment in capital assets increased by 3.5% or \$34.1 million over the prior year. The principal factors for this increase were \$76.5 million in capital asset additions, primarily consisting of \$49.3 million in construction in progress and \$21.9 million in lines and improvements, partially offset by \$44.3 million in depreciation and amortization and a \$10.3 million reduction in bonds and VRA loans payable through scheduled debt service payments. Capital asset additions increased as the Authority continued to progress on projects that were delayed during the pandemic.

#### **2021-2020 Comparison**

Net investment in capital assets was \$966.5 million at June 30, 2021 and represented 69.7% of total net position. Net investment in capital assets increased by 1.8% or \$17.4 million over the prior year. The principal factors for this increase were \$52.7 million in capital asset additions, primarily consisting of \$24.5 million in construction in progress and \$21.1 million in lines and improvements, partially offset by \$43.3 million in depreciation and amortization and a \$10.1 million reduction in bonds and VRA loans payable through scheduled debt service payments.

#### **Restricted Net Position**

Restricted net position is comprised of restricted cash and investments and related interest receivable, and is generally subject to external restrictions on how it may be utilized. Restricted cash and investments consist principally of money market funds held by a trustee for debt service and capital project accounts, in addition to customer deposits and other project-related escrow funds.

#### **2022-2021 Comparison**

Restricted net position was \$16.7 million at June 30, 2022 and represented 1.2% of total net position. The net decrease of \$1.4 million is primarily due to decreases in restricted cash and cash equivalents and investments.

#### **2021-2020 Comparison**

Restricted net position was \$18.1 million at June 30, 2021 and represented 1.3% of total net position. The net decrease of \$3.2 million is primarily due to decreases in restricted cash and cash equivalents and investments.



#### **Unrestricted Net Position**

Unrestricted net position is used to fund ongoing operating needs and the Authority's CIP. Unrestricted net position is comprised of the Authority's unrestricted cash and investments, receivables, equity interest in UOSA, and other non-capital assets, less other liabilities. Unrestricted cash and investments consist of government securities, bank deposits and other cash equivalents. These assets may be used to finance day-to-day operations without restrictions established by debt covenants or other requirements. When making investments, the Authority considers cash flow requirements as well as the quality and return of potential investments, with the primary goal of preservation of invested capital. The equity interest in UOSA represents the Authority's share of UOSA's net position and is not liquid.

#### **2022-2021 Comparison**

Unrestricted net position decreased \$23.1 million during fiscal year 2022 to \$379.1 million, a 5.7% decrease from the prior year. Unrestricted net position comprises 27.1% of total net position. The decrease is primarily due to a \$25.8 million reduction in unrestricted cash and investments, a \$7.9 million reduction in the Authority's equity interest in UOSA and other normal fluctuations in unrestricted asset and liability accounts. At June 30, 2022, unrestricted cash and investments represented 90.5% of unrestricted net position.

#### **2021-2020 Comparison**

Unrestricted net position increased \$20.2 million during fiscal year 2021 to \$402.2 million, a 5.3% increase from the prior year. Unrestricted net position comprises 29.0% of total net position. The increase is primarily due to a \$24.4 million increase in unrestricted cash and investments, offset partially by a \$4.8 million reduction in the Authority's equity interest in UOSA and other normal fluctuations in unrestricted asset and liability accounts. At June 30, 2021, unrestricted cash and investments represented 91.7% of unrestricted net position.

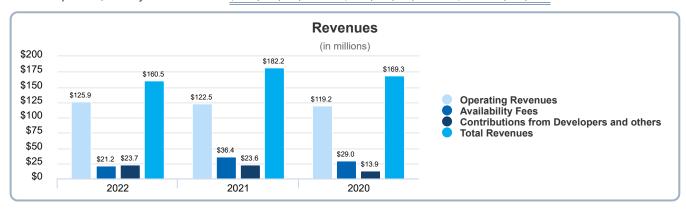
#### **Changes in Revenues, Expenses and Net Position**

While the Statements of Net Position reflect the change in the Authority's financial position, the Statements of Revenues, Expenses and Changes in Net Position that follow provide insight as to the nature and source of those changes.

The following table summarizes changes in revenues and expenses between fiscal year 2022 and 2021:

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

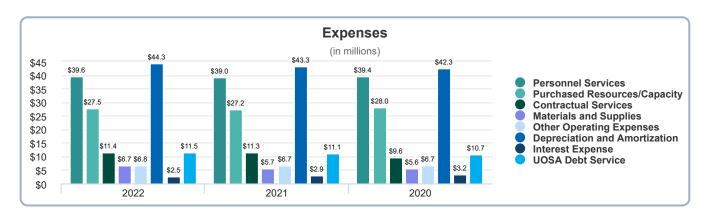
		2022		2021		Increase (Decrease)	% Change
Water and sewer user charges	\$	123,650,905	\$	120,192,707	\$	3,458,198	2.9%
Development charges		1,497,025		1,548,490		(51,465)	(3.3)
Other		775,640		794,785		(19,145)	(2.4)
Total operating revenues		125,923,570		122,535,982		3,387,588	2.8
Availability fees		21,225,247		36,390,288		(15,165,041)	(41.7)
Investment income		(5,189,453)		722,348		(5,911,801)	(818.4)
Grant revenues		1,483,020		1,502,167		(19,147)	(1.3)
Equity interest in UOSA		(7,919,751)		(4,835,657)		(3,084,094)	63.8
Other		1,339,017		2,206,454		(867,437)	(39.3)
Total non-operating revenues		10,938,080		35,985,600		(25,047,520)	(69.6)
Contributions from developers and others Total revenues	_	23,683,518 160,545,168		23,648,463 182,170,045		35,055 (21,624,877)	0.1 (11.9)
						<u> </u>	, ,
Personnel services		39,568,806		38,988,019		580,787	1.5
Purchased resources Contractual services		27,542,977 11,438,105		27,232,073 11,322,160		310,904 115,945	1.1 1.0
Materials and supplies		6,691,542		5,662,684		1,028,858	18.2
Other		6,805,891		6,655,323		150,568	2.3
Total operating expenses		92,047,321		89,860,259		2,187,062	2.4
Depreciation and amortization		44,260,700		43,261,866		998,834	2.3
Interest expense		2,511,491		2,891,220		(379,729)	(13.1)
Payments for UOSA debt service		11,467,146		11,099,831		367,315	3.3
Purchased capacity		668,004		668,004			-
Total expenses		150,954,662		147,781,180		3,173,482	2.1
Change in net position		9,590,506		34,388,865		(24,798,359)	(72.1)
Total net position, beginning of year		1,386,781,332		1,352,392,467		34,388,865	2.5
Total net position, end of year	\$	1,396,371,838	\$	1,386,781,332	\$	9,590,506	0.7%
rotal het position, end of year	Ą	1,090,071,000	٧	1,000,701,002	Ų	9,090,000	0.7 /0



The following table summarizes changes in revenues and expenses between fiscal year 2021 and 2020:

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

		Increase			
	 2021	2020		(Decrease)	% Change
Water and sewer user charges	\$ 120,192,707	\$ 116,694,479	\$	3,498,228	3.0%
Development charges	1,548,490	1,775,068		(226,578)	(12.8)
Other	794,785	684,730		110,055	16.1
Total operating revenues	122,535,982	119,154,277		3,381,705	2.8
Availability fees	36,390,288	28,996,478		7,393,810	25.5
Investment income	722,348	10,426,352		(9,704,004)	(93.1)
Grant revenue	1,502,167	5,000		1,497,167	29,943.3
Equity interest in UOSA	(4,835,657)	(4,042,609)		(793,048)	19.6
Other	2,206,454	932,625		1,273,829	136.6
Total non-operating revenues	35,985,600	36,317,846		(332,246)	(0.9)
Contributions from developers					
and others	 23,648,463	13,872,544		9,775,919	70.5
Total revenues	 182,170,045	169,344,667		12,825,378	7.6
Personnel services	38,988,019	39,352,185		(364,166)	(0.9)
Purchased resources	27,232,073	28,030,998		(798,925)	(2.9)
Contractual services	11,322,160	9,561,195		1,760,965	18.4
Materials and supplies	5,662,684	5,649,709		12,975	0.2
Other	 6,655,323	6,708,100		(52,777)	(8.0)
Total operating expenses	89,860,259	89,302,187		558,072	0.6
Depreciation and amortization	43,261,866	42,260,795		1,001,071	2.4
Interest expense	2,891,220	3,151,552		(260,332)	(8.3)
Payments for UOSA debt service	11,099,831	10,686,076		413,755	3.9
Purchased capacity	668,004	668,004		-	-
Total expenses	 147,781,180	146,068,614		1,712,566	1.2
Change in net position	34,388,865	23,276,053		11,112,812	47.7
Total net position,					
beginning of year	 1,352,392,467	1,329,116,414		23,276,053	1.8
Total net position, end of year	\$ 1,386,781,332	\$ 1,352,392,467	\$	34,388,865	2.5%



#### **Operating Revenues**

Operating revenues consist of water and sewer user charges, development charges and other operating revenues, which primarily consist of refuse collection fees, lab testing fees, and grinder pump maintenance fees. Operating revenues are, in part, based on local environmental and economic factors. Demand for water is affected by climatological influences such as temperature, precipitation amounts, and precipitation frequency. In addition, the volume of water sold increases in the summer months as customers increase their water usage for irrigation systems, swimming pools, and other applications.

The Authority's Board of Directors adopt rates and fees to cover the cost of service provided. Water and sewer user charges consist of fixed and variable charges. Variable charges are based on the amount of water used. The amount of water used during the peak season of May through October for outdoor watering and commercial cooling is influenced by the weather. Development charges are impacted by development in the County during the year.

#### **2022-2021 Comparison**

Operating revenues increased \$3.4 million, or 2.8% over the prior fiscal year to \$125.9 million. The increase is primarily due to higher demand. Decreased precipitation resulted in increased water demand for irrigation, particularly during the first quarter of fiscal year 2022. In addition, the number of accounts increased by 1.1%. The Service Authority also resumed late fees and service disconnects, resulting in higher administrative fee revenue of \$1.6 million. Accounts receivable over 90 days decreased to \$1 million at June 30, 2022 due to grant money received from the American Recovery Plan Act to assist past-due customers, as well as the Authority working with past-due customers to establish payment plans.

#### **2021-2020 Comparison**

Operating revenues increased \$3.4 million, or 2.8% over the prior fiscal year to \$122.5 million. The increase is primarily due to favorable weather, increases in water consumption during the pandemic due to more customers staying home, rates adopted in fiscal year 2020 that continued into fiscal year 2021, and 1.2% growth in customer accounts. In March 2020, the Service Authority suspended late fees and service disconnects, resulting in lower administrative fee revenue of \$1.3 million in fiscal year 2021. Accounts receivable over 90 days increased to \$1.5 million as of June 30, 2021; however, the Authority expects to collect the majority of outstanding receivables through customer payment plans as well as state and federal assistance programs. Developer charges decreased \$227,000 predominantly due to decreases in inspections, plan reviews, and as-builts.

#### **Non-Operating Revenues**

Non-operating revenues consist of availability fees, investment income, grant revenues and other non-operating revenues, which consist of property rental income, proceeds from the sale of capital assets and other miscellaneous revenues. Availability fees cover the cost of a customer's pro-rata share of capacity and infrastructure. Availability fees are charged in ERUs at the time of certification, which authorizes a customer to establish service and physically connect to the Authority's system.

#### **2022-2021 Comparison**

Non-operating revenues decreased by \$25.0 million, or 69.6% in fiscal year 2022 from the prior fiscal year. The primary factors impacting the change were a decrease of \$15.2 million in availability fees primarily related to decreased certifications, a \$867,000 decrease in other operating revenues, and a \$5.9 million decrease in investment income due to a \$7.4 million fair value investment adjustment and a \$3.1 million decrease in the equity interest in UOSA. Revenue from availability fees is directly related to economic development in the County and decreased in fiscal year 2022 as the number of ERUs sold decreased by 1,122 to 1,393. In addition, to assist customers during the coronavirus pandemic, the Authority was awarded \$1,483,020 in Federal, State and Local Fiscal Recovery Funds (SLFRF) through the American Recovery Plan Act (ARPA) for the COVID-19 ARPA SLFRF Municipal Utility Assistance Progam.

#### **2021-2020 Comparison**

Non-operating revenues decreased by \$332,000, or 0.9% in fiscal year 2021 from the prior fiscal year. The primary factors impacting the change were an increase of \$7.4 million in availability fees primarily related to increased multi-family and commercial certifications, including new data centers, and a \$1.3 million increase in other operating revenues offset by a \$9.7 million decrease in investment income due to lower yields on investments in the current low interest rate environment and a \$793,048 decrease in the equity interest in UOSA. Revenue from availability fees is directly related

to economic development in the County and increased in fiscal year 2021 as the number of ERUs sold increased by 644 to 2,515. In addition, to assist customers during the coronavirus pandemic, the Authority distributed approximately \$1.5 million in federal Coronavirus Aid, Relief, and Economic Security (CARES) Act funds to eligible customers in the form of bill credits.

#### **Contributions from Developers and Others**

Developer contributions may consist of cash, tangible property, including such items as water mains, sanitary sewer lines, pumping stations, fire hydrants, manholes and associated infrastructure received from developers and governmental entities. Fluctuations in the value of contributions from year to year are due to the number of development projects and the timing of when developers complete expansion projects and convey the related assets to the Authority.

#### **2022-2021 Comparison**

Revenue from developer contributions remained relatively flat compared to fiscal year 2021. Assets deeded to the Authority in fiscal years 2022 and 2021 were approximately \$23.7 million and \$23.6 million, respectively.

#### **2021-2020 Comparison**

Revenue from developer contributions increased by \$9.8 million, or 70.5%, from fiscal year 2020. Assets deeded to the Authority in fiscal years 2021 and 2020 were approximately \$23.6 million and \$13.9 million, respectively.

#### **Operating Expenses**

Operating expenses consist of personnel services, purchased resources, contractual services, materials and supplies, utilities and other operating expenses, which consist of insurance, training, travel and rent expenses.

#### **2022-2021 Comparison**

Operating expenses increased by \$2.2 million, or 2.4% from fiscal year 2021. Materials and supplies increased \$1.0 million, or 18.2%, due to rising supply and fuel costs. Personnel services increased \$581,000, or 1.5% from fiscal year 2021 due to previously vacant positions being filled, pay raises and approved incentive awards, which were partially offset by a decrease in actuarial adjustments to pension plan costs. Contractual services increased \$116,000 due to increases in information technology software and maintenance agreements. Purchased resources increased \$311,000 due to an increase in wholesale water costs associated with higher demand and a slight increase in the Authority's share of UOSA treatment costs.

#### **2021-2020 Comparison**

Operating expenses were relatively flat, up \$558,000, or 0.6% from fiscal year 2020. Contractual services increased \$1.8 million, or 18.4% due to increases in construction services, information technology software and maintenance agreements, cleaning services, wastewater sludge disposal services and engineering services. Purchased resources decreased \$799,000 due to lower wholesale water and sewer costs offset by increases in demand resulting in higher consumption. Expenses related to personnel services slightly decreased by \$364,000, or 0.9% from fiscal year 2020. The decline resulted from decreases in payroll due to vacant positions, decrease in employer contribution to retirement benefits, offset by increases in actuarial adjustments to pension plan costs.

#### **Non-Operating Expenses**

Non-operating expenses consist of interest expense, payments for UOSA debt service and purchased capacity costs. Interest expense reflects the interest paid or accrued on outstanding debt, plus or minus the amortization of bond premiums, discounts, and deferred amounts on refunding. Payments for UOSA debt service represent the Authority's share of the annual debt obligations of the joint venture, including both principal and interest. Purchased capacity is the Authority's purchase of rights to transmission main capacity from wholesale providers.

#### **2022-2021 Comparison**

Non-operating expenses were relatively flat in fiscal year 2022 as compared to fiscal year 2021. An increase in payments for UOSA debt service, based on amortization schedules, offset by lower interest expense resulting from decreased principal balances.

#### **2021-2020 Comparison**

Non-operating expenses were relatively flat, up \$153,000, or 1.1%, in fiscal year 2021 as compared to fiscal year 2020. The factors impacting the increase were a \$414,000 increase in payments for UOSA debt service, based on amortization schedules offset by a \$260,000 decrease in interest expense on the Authority's outstanding debt due to lower principal balances.

#### **Capital Assets and Debt Administration**

The Authority maintains investments in a broad range of capital assets, which include land, buildings, water and sanitary sewer lines, water storage facilities (tanks), water reclamation plants, pumping stations, various machinery and equipment, computers, advance capacity payments and vehicles.

At June 30, 2022, capital assets, net of accumulated depreciation and amortization, was \$1.10 billion, an increase of \$32.1 million or 3.0% over fiscal year 2021.

The following table summarizes the Authority's capital assets, net of accumulated depreciation and amortization, and the changes therein for the years ended June 30, 2022 and 2021.

#### **Capital Assets, Net of Accumulated Depreciation and Amortization**

	Increase						
		2022		2021*		(Decrease)	% Change
Lines and improvements	\$	689,940,016	\$	676,531,316	\$	13,408,700	2.0%
Equipment		92,585,054		98,076,844		(5,491,790)	(5.6)
Buildings		87,977,110		90,393,544		(2,416,434)	(2.7)
Construction in progress		74,110,233		42,290,845		31,819,388	75.2
Land		9,765,989		9,654,247		111,742	1.2
Vehicles		2,730,081		2,706,920		23,161	0.9
Right-to-use assets		163,788		257,198		(93,410)	(36.3)
Advance Capacity Payments		137,904,638		143,187,533		(5,282,895)	(3.7)
Total Capital Assets	\$	1,095,176,910	\$	1,063,098,446	\$	32,078,464	3.0%

<sup>\*</sup>The beginning balance of capital assets at June 30, 2021 was restated for implementation of GASB 87, Leases.

At June 30, 2021, capital assets, net of accumulated depreciation and amortization, was \$1.06 billion, an increase of \$7.6 million or 0.7% over fiscal year 2020.

The following table summarizes the Authority's capital assets, net of accumulated depreciation and amortization, and the changes therein for the years ended June 30, 2021 and 2020.

#### **Capital Assets, Net of Accumulated Depreciation and Amortization**

	Increase							
		2021		2020		(Decrease)	% Change	
Lines and improvements	\$	676,531,316	\$	666,013,565	\$	10,517,751	1.6%	
Equipment		98,076,844		97,489,684		587,160	0.6	
Buildings		90,393,544		88,891,943		1,501,601	1.7	
Construction in progress		42,290,845		41,673,879		616,966	1.5	
Land		9,654,247		9,597,373		56,874	0.6	
Vehicles		2,706,920		2,835,763		(128,843)	(4.5)	
Advance Capacity Payments		143,187,533		148,767,748		(5,580,216)	(3.8)	
Total Capital Assets	\$	1,062,841,249	\$	1,055,269,955	\$	7,571,294	0.7%	

Additional information on the Authority's capital assets can be found in Note 1(g), Summary of Significant Accounting Policies, and Note 3, Property, Plant and Equipment, to the accompanying basic financial statements.

#### **Capital Assets, Net of Accumulated Depreciation and Amortization**

Capital projects are planned and organized within the following functional project categories:

- Water Supply Booster pumping stations and water source projects.
- Water Storage Tank projects intended to maintain stable water system pressure, provide fire flow and reserve storage, and provide water during peak demands that exceed supply, transmission capacity or pumping capacity.

The Authority also proactively manages and funds efforts to repair, rehabilitate and upgrade its water storage tanks. These efforts are designed to preserve and extend the asset life of each water tank, and also to upgrade other components as required, including lighting, fencing, control valves, back-up generators, walkway and safety and security features, and SCADA systems.

- Water Transmission Water main projects (transmission and distribution mains).
- Sewage Pumping Stations (SPS) Pump station projects (pump sewage from a low point in one gravity sewer shed to another gravity sewer shed for conveyance to a water reclamation facility). These projects often involve installation of a bypass connection on the force main, which enables the Authority to continue handling the wastewater flows while maintenance is performed on a pump station.
- **Sewage Collection System** Sewer main projects (convey sewage from commercial and residential customers to sewage pumping stations or water reclamation facilities).

The Authority continues to proactively manage its wastewater collection system by funding a multi-year program to evaluate the condition of sewer mains and manholes, and by proactively performing rehabilitation and maintenance on those assets prior to their failure. In many instances, this approach extends asset life, reduces the frequency of failure events, and minimizes capital expenditures because cost-effective, trenchless rehabilitation methods can be used, as opposed to waiting for asset failure when costly, open-cut construction methods are required. These efforts also reduce infiltration and inflow of rain water from seeping into the wastewater collection system, thereby eliminating unnecessary costs for treatment and additional purchases of wastewater treatment capacity.

- Water Reclamation Facilities Construction projects and facility modifications at the H.L. Mooney Advanced Water Reclamation Facility (HLM AWRF).
- Information Technology Projects that involve financial and accounting software upgrades, SCADA upgrades and modifications, geographic information system (GIS) improvements and hydraulic modeling studies.
- **Regional Utility** Major expansion or upgrade projects to regional treatment facilities at which the Authority has purchased capacity rights.
- Miscellaneous Projects not directly related to other categories.

The major capital projects completed during fiscal years 2022 and 2021 or, under planning, design and/or construction in each of the functional project categories are detailed as follows:

#### Water Supply

- Construction began on a 30 inch water main along Route 1 from the Garfield Booster Pumping Station to Route 234 and a 16 inch water main from Route 234 to Graham Park Road continued in fiscal year 2022.
- The Bull Run Mountain Well System Upgrades design and easement acquisition was completed and project construction began in fiscal year 2022.
- Construction of the Manassas Southside BPS rehabilitation and upgrade continued in fiscal year 2022.
- Design of the Montclair/Four Seasons Water System Improvements continued in fiscal year 2022. Construction
  of the design-build project is scheduled to begin in fiscal year 2023.
- Design for the addition of three pressure reducing valves in the eastern water distribution system started in fiscal year 2022..
- Design of the Unity Reed pumping station and discharge main started in fiscal year 2022. Design will be completed in fiscal year 2023. Construction is anticipated to begin in fiscal year 2024.
- Construction to replace a water main along a portion of West Longivew Drive continued in fiscal year 2022.
- Construction of a segment of a new water transmission main along University Boulevard for the Dawkins Branch Water Main Extension project began in fiscal year 2022.

#### Water Storage

- Rehabilitation of the Interstate Drive water storage tank was completed in fiscal year 2022.
- Design of the new rechlorination system for the Dominion Valley Elevated Storage Tank was completed in fiscal year 2021. Construction was completed in fiscal year 2022.

#### Sewage Pumping Stations

- Design for the Koon's, Belmont and Spinnaker Court SPSs were started in fiscal year 2021 and construction is anticipated to begin in fiscal year 2023.
- Construction for Occoquan Forest and Nokesville SPS rehabilitations continued in fiscal year 2022.
- Design of the Heritage Hunt SPS force main was completed in fiscal year 2022 and construction is anticipated to begin in fiscal year 2023.

#### Sewage Collection System

- Construction of the Sudley Road sewer main replacement continued in fiscal year 2022. Completion is anticipated in fiscal year 2023.
- Sewer main rehabilitation efforts on Colby Drive, Rixlew Lane, and in the Town of Occoquan continued in fiscal year 2022. Completion is anticipated in fiscal year 2023.

#### Water Reclamation Facilities

- The sale of the property formerly occupied by the Occoquan Forest Wastewater Treatment Plant to Prince William County was completed in fiscal year 2021.
- Design-Build efforts for the HL Mooney Facility Wide Improvements project commenced in fiscal year 2022 and are anticipated to continue beyond fiscal year 2027. The scope of this project includes improvements to several areas of the plant, as well as headworks capacity improvements and refurbishment of facility freight elevators in the Control and Process, and Solids Handling buildings.

#### Information Technology & Data Management

- Buildout of the GIS vertical asset registry for water and wastewater facilities was completed in fiscal year 2021. The buildout of a vertical asset registry for the HLM AWRF is estimated for completion in fiscal year 2023. The project will provide an inventory of above ground facilities to track work performed on infrastructure assets within the CMMS Cityworks application.
- Upgrade of the GIS platform to improve security and functionality was completed in fiscal year 2021.
- Development and refinement of the Service Authority's Asset Management Analytics framework to include business risk exposure scores for sewer force mains and lift pump stations to provide data-driven approach to asset management continued in fiscal year 2022.
- Development and deployment of a GIS-based Asset Management Analytics (AMA) Web Application, which reports data from the Water and Sewer Model, Cityworks and AMA into a single interface, was completed in fiscal year 2021.
- Deployment of new analytics dashboards and functions to improve reporting, process transparency and visibility continued in fiscal year 2022.
- Configured and deployed a GIS web map which provides support to the Authority's annual fire hydrant flushing program, in fiscal year 2021.
- Design work for the SCADA software system upgrade was completed in fiscal year 2021. Installation of new SCADA equipment and software commenced in fiscal year 2022.
- Major software upgrades to five systems was completed in fiscal year 2021.
- Installation of Improved video conferencing technology in the Board Room and six conference rooms to enhance virtual and hybrid meeting capabilities was completed in fiscal year 2022.
- Improvements to increase responsiveness and availability of the Cityworks system by implementing the Google BigQuery data warehouse for Cityworks reports was completed in fiscal year 2022.
- Replacement of the Spittle Building data center battery backup solution with technology that includes its own generator to maintain systems availability during a power outage was completed in fiscal year 2022.

# FINANCIAL SECTION

- Implementation of additional security for email including server authentication and multi-factor authentication to protect users and reduce spam was completed in fiscal year 2022.
- Deployment of system integrations between Cityworks and SCADA, Solarwinds HelpDesk and Laboratory Information Management System (LIMS) were completed in fiscal year 2022.

In addition to the capital projects mentioned, residential and commercial development activity continues throughout the County. Cooperative efforts with developers have led to the design and developer-funded construction of major interceptor sewers, sewage pumping stations, water transmission lines and associated infrastructure. In fiscal years 2022 and 2021, developers installed and conveyed to the Authority for ownership and operation approximately 35 miles and 32 miles, respectively, of additional water mains, sanitary sewers, and related infrastructure representing approximately \$23.7 million and \$23.6 million, respectively, in total value.

In fiscal year 2022, 398 development plans representing 1,798 residential units and 9.1 million square feet of commercial development were reviewed, and over 30 miles of water and sewer mains were inspected. In fiscal year 2021, 435 development plans representing 778 residential units and 3.8 million square feet of commercial development were reviewed, and over 26 miles of water and sewer mains were inspected.

#### **Long-Term Debt**

At June 30, 2022, the Authority's outstanding long-term debt, net of deferred amounts, was \$88.0 million, compared to \$98.2 million at the end of fiscal year 2021.

#### **Outstanding Long-Term Debt**

					Increase		
	2022 2021		2021	(Decrease)		% Change	
VRA loans payable	\$ 40,842,435	\$	47,404,853	\$	(6,562,418)	(13.8)%	
Revenue bonds	47,124,938		50,766,312		(3,641,374)	(7.2)	
Total long-term debt	\$ 87,967,373	\$	98,171,165	\$	(10,203,792)	(10.4)%	

At June 30, 2021, the Authority's outstanding long-term debt, net of deferred amounts, was \$98.2 million, compared to \$108.3 million at the end of fiscal year 2020.

#### **Outstanding Long-Term Debt**

					Increase		
	2021		2020		(Decrease)	% Change	
VRA loans payable	\$ 47,404,853	\$	53,914,819	\$	(6,509,966)	(12.1)%	
Revenue bonds	50,766,312		54,348,671		(3,582,359)	(6.6)	
Total long-term debt	\$ 98,171,165	\$	108,263,490	\$	(10,092,325)	(9.3)%	

#### **VRA Loans**

The Authority has four outstanding financing agreements with VRA at June 30, 2022, with the proceeds of each being used to finance upgrades at the HLM AWRF in prior and future years.

#### **2022-2021 Comparison**

At June 30, 2022, approximately \$40.8 million of long-term debt was outstanding with the VRA. The net decrease in VRA loans of approximately \$6.6 million was due to scheduled principal payments.

#### **2021-2020 Comparison**

At June 30, 2021, approximately \$47.4 million of long-term debt was outstanding with the VRA. The net decrease in VRA loans of approximately \$6.5 million was due to scheduled principal payments.

#### **Revenue Bonds**

Revenue bonds are issued to fund capital projects or defease or refund older, higher interest debt in order to reduce the cost of borrowing.

#### **2022-2021 Comparison**

At June 30, 2022, the Authority had approximately \$47.1 million of outstanding revenue bonds, which were issued in 2013 and 2015. The 2015 bonds refunded the higher interest 2005 bonds effective July 1, 2015. The \$3.6 million decrease during fiscal year 2022 resulted from regularly scheduled debt service payments and the amortization of related premiums. In June 2022, the Authority made an advance payment from unrestricted funds toward fiscal year 2023 debt service in the amount of \$5.0 million.

#### **2021-2020 Comparison**

At June 30, 2021, the Authority had approximately \$50.8 million of outstanding revenue bonds, which were issued in 2013 and 2015. The 2015 bonds refunded the higher interest 2005 bonds effective July 1, 2015. The \$3.6 million decrease during fiscal year 2021 resulted from regularly scheduled debt service payments and the amortization of related premiums. In June 2021, the Authority made an advance payment from unrestricted funds toward fiscal year 2022 debt service in the amount of \$6.5 million.

#### **Compliance**

The Authority was in compliance with all bond and loan covenants during fiscal years 2022 and 2021. Detailed information regarding the Authority's long-term debt outstanding is presented in Notes 4, 6, 7, 8 and 9 to the accompanying basic financial statements. Revenue bond coverage calculations are disclosed in Tables 8 and 9 in the Statistical Section of the accompanying basic financial statements.

# **Economic Factors and Next Year's Budget and Rates**

The Authority is dedicated to excellence in providing safe, reliable water service to our customers and returning clean water to the environment. The operating and capital budgets are prepared in alignment with the Authority's mission and Board of Directors' vision to:

- Be a nationally recognized model for performance excellence
- Provide consistently high levels of quality, reliability, and customer satisfaction
- Make effective use of state-of-the-art technology
- Model fiscally and environmentally sound practices
- Set rates and fees that are both equitable and adequate

The Authority's strategic plan supports the vision and includes objectives and goals in the key areas of customer satisfaction, workforce excellence, financial viability, respected community partnerships, advanced and accessible technology, and agile, optimized and sustainable operations.

The Authority considered the following general economic and operational factors in the preparation of its fiscal year 2023 budget:

- Revenue is projected to increase by 0.3% to \$157.1 million. Revenue from User Charges is up based on FY22 consumption trends, 1.0% account growth, and a full year of collection charges. The Authority estimated certification of 1,500 new ERUs for fiscal year 2023 based on projected growth and pending certification plans. The budget includes no user rate or availability fee increases, however a rate study will be completed to ensure rates continue to meet the Authority's operating and maintenance needs and fulfill the Authority's bond covenants.
- Expenses are projected to be \$107.0 million which represents a \$9.7 million or 9.9% increase from the prior budget.
   The budget reflects increases to all expense categories primarily due to rising inflation, increase in wholesale rates, and recruiting and retention initiatives. People and talent expenses are budgeted to increase 8.8% in fiscal year 2023, which includes merit pay to recognize performance and retain staff.
- The Authority sets aside funds to maintain and replace infrastructure, support development consistent with the County's Comprehensive Plan and pay debt service. The Authority's current multi-year CIP program budget includes a maximum estimated cost of \$470.5 million in identified capital projects for fiscal year 2023 and beyond. The Authority prioritizes its CIP projects by weighing five criteria: (1) physical condition, (2) regulatory/environmental impacts, (3) service level/reliability, (4) capacity/technical obsolescence issues, and (5) operations and maintenance impacts. For fiscal year 2023, capital spending is budgeted at a maximum estimated cost of \$76.9 million. Major CIP projects scheduled for fiscal year 2023 include improvements and replacements to elevated water storage tanks, sewer mains, pumping stations and water lines, information technology and SCADA system improvements.

# **Contacting the Authority's Financial Management**

The ACFR is designed to provide the reader with a general overview of the Authority's financial position and demonstrate the Authority's accountability for revenues received and expenditures made. Questions concerning information provided in this report or requests for additional financial information should be directed to:

Astrid B. Nelson, CPA
Deputy General Manager/Chief Administrative Officer
Prince William County Service Authority
P.O. Box 2266
Woodbridge, VA 22195-2266
Telephone 703-335-7902
E-mail requests may be sent to: finance@pwcsa.org

Brian Sipes, CPA
Director of Finance
Prince William County Service Authority
P.O. Box 2266
Woodbridge, VA 22195-2266
Telephone 703-335-8920

# Financial Statements



# PRINCE WILLIAM COUNTY SERVICE AUTHORITY

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

June 30, 2022 and 2021

Assets and Deferred Outflows of Resources		2022	2021
Current assets:			
Cash and cash equivalents (notes 1c and 2)			
Unrestricted	\$	43,645,279	\$ 66,477,201
Restricted		16,686,813	18,095,741
Investments (notes 1d and 2)			
Unrestricted		131,728,369	151,800,655
Receivables			
User and development charges (net of allowance for uncollectibles of \$100,000 and \$100,000 at June 30, 2022 and 2021, respectively)		9,131,207	10,139,612
Unbilled water and sewer service (note 1k)		6,338,655	6,780,249
Interest		0,000,000	0,00,00
Unrestricted		915,167	1,158,327
Restricted		6,111	53
Lease Receivables (note 1w, and 4)		652,617	-
Other receivables		325,819	484,278
Materials and supplies inventory (note 1e)		8,456,354	6,345,458
Prepaid expenses (note 1f)		1,233,455	1,007,382
Total current assets		219,119,846	262,288,956
Non-current assets:			
Investments (notes 1d and 2)			
Unrestricted		167,800,956	150,719,732
Property, plant and equipment, net of accumulated		1 005 176 010	1 060 041 040
depreciation and amortization (notes 1g and 3)		1,095,176,910	1,062,841,249
Lease receivables (note 1w, and 4)		8,478,264	-
Net pension asset (notes 9 and 10)		6,265,900	40 500 000
Equity in Upper Occoquan Service Authority (notes 1h and 5)	_	40,619,329	48,539,080
Total non-current assets	_	1,318,341,359	1,262,100,061
Total assets	_	1,537,461,205	1,524,389,017
Deferred outflows of resources:			
Deferred charges on refunding (note 6)		1,638,229	1,833,498
Deferred pension outflows (notes 1n and 10)		3,786,474	5,133,462
Deferred OPEB outflows (note 10)		1,254,428	828,556
Deferred GLI OPEB outflows (notes 1o and 10)		489,032	581,654
Deferred HIC OPEB outflows (notes 1p and 10)	_	81,641	99,630
Total deferred outflows of resources	_	7,249,804	8,476,800
Total assets and deferred outflows of resources	\$	1,544,711,009	\$ 1,532,865,817

See accompanying notes to financial statements.

# **Statements of Net Position (Continued)**

June 30, 2022 and 2021

Liabilities, Deferred Inflows of Resources and Net Position		2022	2021
Current liabilities:			
Accounts payable and accrued expenses	\$	14,946,698	\$ 17,084,785
Virginia Resources Authority (VRA) loans payable (notes 7 and 8)		5,612,625	6,692,750
Customer deposits		3,337,481	3,204,149
Leases (note 1w, and 4)		93,907	-
Bonds payable (notes 6 and 8)		3,440,000	3,330,000
Retainage payable		1,852,997	380,437
Accrued interest payable			
Bonds payable (note 6)		780,842	841,189
VRA loans payable (note 7)		225,147	397,933
Compensated absences (notes 1i and 9)		1,180,296	1,070,400
Unearned revenue		31,164	30,071
Total current liabilities		31,501,157	33,031,714
Long-term liabilities:		- , , -	
VRA loans payable (net of current portion of \$5,612,625 and \$6,692,750			
at June 30, 2022 and 2021, respectively) (notes 7 and 8)		35,229,810	40,712,103
Bonds payable (net of current portion of \$3,440,000 and \$3,330,000		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,
at June 30, 2022 and 2021, respectively) (notes 6 and 8)		43,684,938	47,436,312
Compensated absences (notes 1i and 9)		3,963,843	3,759,389
Leases (note 1w, 9 and 10)		72,702	-
Net pension liability (notes 9 and 10)		· -	3,509,408
Other postemployment benefits liability (notes 9 and 10)		13,424,174	14,674,612
GLI other postemployment benefits liability (notes 9 and 10)		1,449,285	2,131,104
HIC other postemployment benefits liability (notes 9 and 10)		165,939	279,930
Total long-term liabilities		97,990,691	112,502,858
Total liabilities		129,491,848	145,534,572
Deferred inflows of resources:		127,121,010	
Deferred lease rental income (notes 1w and 4)		8,855,513	_
Deferred pension plan inflows (notes 1n and 10)		7,431,869	248,381
Deferred OPEB inflows (note 10)		1,818,301	160,258
Deferred GLI OPEB inflows (notes 1o and 10)		648,456	129,862
Deferred HIC OPEB inflows (notes 1p and 10)		93,184	11,412
Total deferred inflows of resources		18,847,323	549,913
Total liabilities and deferred inflows of resources		148,339,171	146,084,485
Net position:	_	140,339,171	140,004,403
Net investment in capital assets		1,000,621,917	966,503,582
Restricted for:		1,000,021,917	900,303,302
Debt service		14,263,022	15,675,823
Other purposes		14,203,022	13,073,023
		2 401 022	2 206 212
Customer deposits		2,401,022	2,386,313
Other nonmajor purposes		28,880	33,658
Unrestricted		379,056,997	402,181,956
Total net position		1,396,371,838	1,386,781,332
Total liabilities, deferred inflows of resources and net position	\$	1,544,711,009	\$ 1,532,865,817
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#### PRINCE WILLIAM COUNTY SERVICE AUTHORITY

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

Years Ended June 30, 2022 and 2021

reals crided Julie 30, 2022 and 2021		2022	2021
Operating revenues:			
Water and sewer user charges	\$	123,650,905	\$ 120,192,707
Development charges		1,497,025	1,548,490
Other		775,640	794,785
Total operating revenues		125,923,570	122,535,982
Operating expenses:			
Personnel services		39,568,806	38,988,019
Purchased resources (notes 1m and 5)		27,542,977	27,232,073
Contractual services		11,438,105	11,322,160
Materials and supplies		6,691,542	5,662,684
Utilities		4,878,155	5,073,423
Other		1,927,736	1,581,900
Total operating expenses		92,047,321	89,860,259
Operating income before depreciation and amortization		33,876,249	32,675,723
Depreciation and amortization (notes 1g and 3)	_	44,260,700	43,261,866
Operating loss	_	(10,384,451)	(10,586,143)
Non-operating income (expense):			
Availability fees (note 1I)		21,225,247	36,390,288
Investment (loss) income		(5,189,453)	722,348
Grant revenues (note 14)		1,483,020	1,502,167
Payments for UOSA debt service (note 5)		(11,467,146)	(11,099,831)
Equity interest in UOSA (note 5)		(7,919,751)	(4,835,657)
Interest expense		(2,511,491)	(2,891,220)
Purchased capacity (note 12)		(668,004)	(668,004)
Other		1,339,017	2,206,454
Total non-operating income (expense), net		(3,708,561)	21,326,545
Income (loss) before contributions from developers and others		(14,093,012)	10,740,402
Contributions from developers and others (note 13)		23,683,518	23,648,463
Change in net position		9,590,506	34,388,865
Net position, beginning of year		1,386,781,332	1,352,392,467
Net position, end of year	\$	1,396,371,838	\$ 1,386,781,332

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY

#### **Statements of Cash Flows**

Years Ended June 30, 2022 and 2021

	2022		2021
Cash flows from operating activities:			
Cash received from customers	\$ 126,528	3,082 \$	116,425,059
Cash payments to suppliers for goods and services	(54,829	9,836)	(50,976,894)
Cash payments to employees for services	(40,25	2,180)	(35,440,669)
Miscellaneous income from other sources	36	7,508	995,569
Cash received from operating leases	99	7,121	-
Cash from other operating revenues	934	1,099	587,831
Net cash provided by operating activities	33,74	1,793	31,590,896
Cash flows from non-capital financing activities:			
Interest paid for UOSA debt service	(4,12	9,156)	(4,894,915)
Principal paid for UOSA debt service	(7,33	7,990)	(6,204,916)
Net cash used in non-capital financing activities	(11,46	7,146)	(11,099,831)
Cash flows from capital and related financing activities:			
Acquisition and construction of capital assets	(54,204	1,390)	(26,354,445)
Receipts (payments) from sale of property and equipment	8	5,102	(645,850)
Principal paid on lease liabilities	(9:	3,410)	-
Interest on lease liabilities	(:	3,312)	-
Grants received	1,483	3,020	1,502,167
Interest paid on bonds payable	(1,66	5,251)	(1,740,356)
Principal paid on bonds payable	(3,330	0,000)	(3,215,000)
Issuance cost of VRA loan	(43	3,220)	-
Interest paid on VRA loans	(1,06	1,833)	(1,374,948)
Principal paid on VRA loans	(6,69)	2,748)	(6,509,966)
VRA #5 Loan Draw	130	),330	-
Receipt of developer charges	21,50	5,507	38,763,371
Payments for future capacity	(668	3,003)	(668,004)
Net cash used in capital and related financing activities	(44,55	7,208)	(243,031)
Cash flows from investing activities:			
Purchase of investment securities	(156,203	3,839)	(171,272,714)
Interest received on cash and cash equivalents	•	1,400	79,509
Proceeds from sales and maturities of investments	150,600	0,000	139,801,521
Interest received from investment securities	3,29	8,150	5,700,120
Net cash used in investing activities	(1,96	1,289)	(25,691,564)
Net change in cash and cash equivalents	(24,240	),850)	(5,443,530)
Cash and cash equivalents at beginning of year	84,572	•	90,016,472
Cash and cash equivalents at end of year	\$ 60,332	2,092 \$	84,572,942

See accompanying notes to financial statements.

# **Statements of Cash Flows (Continued)**

Years Ended June 30, 2022 and 2021

	2022	2021
Reconciliation of operating loss to net cash provided by operating activities:		
Operating (loss)	\$ (10,384,451)	\$ (10,586,143)
Adjustments to reconcile operating loss to net cash provided by operating activities:		
Depreciation and amortization expense	44,260,700	43,261,866
Other non-cash operating expenses	874,467	439,105
Pension expense	176,919	2,581,755
Other postemployment benefits expense	1,089,038	1,321,541
Miscellaneous income from other sources	367,508	995,569
Change in assets and liabilities:		
Decrease (increase) in water and sewer receivable	805,226	(2,141,088)
Decrease in unbilled water and sewer receivable	441,594	7,974
Decrease (increase) in other receivables	158,459	(206,954)
(Increase) in materials and supplies inventory	(2,110,896)	(962,671)
(Increase) decrease in prepaid expenses	(226,073)	154,901
Increase in accounts payable and accrued expenses	458,509	2,796,350
(Increase) in pension contributions	(1,421,751)	(1,375,238)
(Increase) in other post employment benefits contributions	(1,192,138)	(1,057,858)
Increase (decrease) in compensated absences	314,350	(455,189)
Increase (decrease) in customer deposits	133,332	(3,183,024)
Total adjustments	44,129,244	42,177,039
Net cash provided by operating activities	\$ 33,744,793	\$ 31,590,896
Supplemental schedule of non-cash investing, capital and financing activities:		
Capital contributions		
Estimated acquisition cost of plant and equipment received	\$ 23,683,518	\$ 23,648,463
Change in fair value of investments		
Decrease in fair value of investments	\$ (6,851,825)	\$ (4,328,347)
Equity interest in earnings of UOSA	\$ (7,919,751)	\$ (4,835,657)
Capital asset additions purchased on account	\$ 7,918,348	\$ 8,305,486

# NOTES TO FINANCIAL STATEMENTS

**Years Ended June 30, 2022 and 2021** 

# 1 Summary of Significant Accounting Policies

The Prince William County Service Authority (the Authority) was created by a resolution of the Board of County Supervisors (BOCS) of Prince William County, Virginia (the County) on January 11, 1983. The Authority is chartered by the State Corporation Commission and is an independent public body responsible for providing a comprehensive county-wide water and sewer system, completely within the geographical boundaries of the County. The management of the Authority is vested in a Board of eight members appointed by the County's BOCS. The Authority also maintains an interest in the Upper Occoquan Service Authority (UOSA), a regional joint venture, which is included in the Authority's financial statements under the equity method of accounting, as further discussed in Note 5.

The following is a summary of the Authority's significant accounting policies:

#### (a) Basis of Presentation and Accounting

The accounting policies of the Authority conform to accounting principles generally accepted in the United States of America as applicable to enterprise funds of governmental units. An enterprise fund is a proprietary type fund used to account for operations that are financed and operated in a manner similar to private business enterprises. The Authority's intent is that the costs of providing goods or services to customers on a continuing basis be financed or recovered primarily through user charges. Periodic determination of revenues earned, expenses incurred, and/ or changes in net position is appropriate for capital maintenance, management control and accountability.

The Authority has elected to apply all applicable Governmental Accounting Standards Board (GASB) pronouncements when they become effective, as the GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

The Authority follows the accrual basis of accounting. Under this basis of accounting, revenue is recognized when earned and expenses are recorded when incurred. Operating revenues and expenses consist of those revenues and expenses that result from the ongoing principal operations of the Authority. Operating revenues consist primarily of charges for water consumption and wastewater treatment. Non-operating revenues and expenses consist of those revenues and expenses that are related to financing and investing type activities, or result from non-exchange transactions and ancillary services.

When an expense is incurred for purposes in which both restricted and unrestricted net position are available, it is the Authority's policy to first apply restricted resources.

#### (b) Reporting Entity

To determine the appropriate reporting entity for the Authority, its relationship with the County was considered. Although the members of the Authority's Board of Directors are appointed by the BOCS, the County is not financially accountable for the Authority. In addition, there is no potential for the Authority to provide specific financial benefits to, or impose specific financial burdens on, the County, and the Authority is not fiscally dependent on the County. Accordingly, based on these criteria, the Authority is not included as a component unit in the County's financial statements.

#### (c) Cash and Cash Equivalents

The Authority considers all highly liquid investments with a maturity of three months or less from date of purchase to be cash equivalents.

#### (d) Investments

All investments are stated at fair value. Three estimates of fair value are obtained from independent financial sources, with the median value chosen as the stated fair value. Interest income from investments is recorded in the year earned.

#### (e) Materials and Supplies Inventory

Materials and supplies inventory, consisting of items held for consumption, are stated at weighted average cost using the moving average method. In addition, the Authority performs a manual count at the end of the fiscal year of fuel, chemicals and certain field supplies that are not yet used in operations, and values them at cost.

#### (f) Prepaid Expenses

Certain payments to vendors reflect costs applicable to future accounting periods. These costs are recorded as prepaid expenses in the accompanying Statements of Net Position and are expensed in the period they are used.

#### (g) Property, Plant and Equipment

The Authority capitalizes all property, plant and equipment with a cost greater than \$5,000 if the asset will have an estimated useful life of five years or more.

Purchased property, plant and equipment are stated at historical cost. Contributed assets received from developers and others are recorded at acquisition cost on the date of donation. The acquisition cost is based on the Authority's estimated cost to construct or purchase similar assets. See Note 13, Contributions from Developers and Others, for additional details on contributed assets.

Property, plant and equipment includes construction in progress, which represents costs associated with the construction of assets that will be used in the Authority's operations when completed. Expenditures for repairs and upgrades which materially add to the value or life of an asset are capitalized. Other maintenance and repair costs are expensed as incurred.

A capital asset is considered impaired when its service utility has declined significantly and unexpectedly. If determined to be permanently impaired, capital assets are reported at the lower of carrying or fair value. The Authority did not maintain any impaired capital assets at year end.

Depreciation and amortization for purchased, contributed and leased assets is recorded as depreciation and amortization expense on a straight-line basis over the following estimated useful lives:

Lines and improvements 50 years
Buildings 35 - 40 years
Equipment 5 - 15 years
Vehicles 5 - 10 years

Right-to-use asset 1+ years, depending on lease terms

Meters 15 years

Advance Capacity Payments are capitalized as intangible assets in accordance with the provisions of GASB Statement No. 51. These payments are made to wholesale water suppliers as part of multi-year capacity agreements, and are amortized over the useful life of such agreements. From their inception, these agreements are amortized over estimated useful lives from 40-50 years.

#### (h) Equity in Upper Occoquan Service Authority (UOSA)

As further explained in Note 5, Equity in UOSA, the Authority participates in a joint venture with three other local jurisdictions. The Authority accounts for its investment in the joint venture using the equity method of accounting.

#### (i) Compensated Absences

Accrued leave balances that are eligible for pay out upon employee separation are presented as a liability in the accompanying Statements of Net Position. The Authority has a traditional leave plan in which employees hired before January 1, 2012 accrue annual leave in varying amounts based on years of service, and sick leave at a rate of four hours bi-weekly. The Authority also has a Paid Time Off (PTO) plan, in which employees hired as of January 1, 2012 and employees who made an irrevocable election to convert to the PTO plan accrue hours in varying amounts based on years of service. At the time of separation from service, employees are compensated for accumulated annual leave up to 300 hours and up to 50% of accumulated sick leave hours based on years of service, or PTO leave up to 450 hours.

#### (j) Bond Premiums, Deferred Losses on Refundings and Issuance Costs

Bond premiums and deferred losses on refundings are deferred and amortized over the life of the bonds using a method which approximates the effective interest method. Deferred losses on refundings, net of amortization, are

presented as deferred outflows of resources on the accompanying Statements of Net Position. Deferred outflows of resources is a separate financial statement element which represents the consumption of net position that applies to a future period, and will not be recognized as an outflow of resources (expenditure) until then. Bond premiums, net of amortization, are presented as an increase to the face amount of bonds payable on the accompanying Statements of Net Position. Any balances for these items are presented in the schedules in Note 6, Bonds Payable and Note 8, Debt. Issuance costs are expensed in the year incurred.

#### (k) Revenue Recognition

Customers are charged for water consumption and wastewater treatment based on metered water usage. An estimated amount has been recorded for services rendered but not yet billed as of the close of the respective years presented. This unbilled receivable is calculated by prorating the billings sent to customers in July and August of the subsequent fiscal year.

#### (I) Availability Fees

All developers and customers making new connections to the Authority's water and/or wastewater treatment system are required to pay an availability fee prior to the installation of an Authority meter. Availability fees cover the cost of the customer's pro-rata share of water and/or wastewater treatment capacity as well as water transmission mains, sewer interceptors, storage tanks, reservoirs, pumping stations, infiltration and inflow, and engineering administration. Availability fees are not used to pay for operations, maintenance, repairs or capital improvements to benefit existing customers. The Authority classifies this revenue as non-operating income.

#### (m) Purchased Resources

Purchased resources consist of expenses relating to the purchase of clean water and the treatment of wastewater from wholesale providers under the terms and conditions of relevant agreements.

#### (n) Pensions

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

#### (o) Group Life Insurance

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

#### (p) Health Insurance Credit

The VRS 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 employees. The VRS 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 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.

#### (q) Other Postemployment Benefits (OPEB)

#### **Health Care Benefit Plan**

The Authority administers a single-employer defined post-employment health care benefit plan (the Plan). For purposes of measuring the total OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, an actuarial valuation was performed as of July 1, 2021, using updated actuarial assumptions. For this purpose, the Plan recognizes benefit payments when due and payable in accordance with the benefit terms. There are no investments as this is a pay-as-you-go plan and all cash is held in a cash account.

#### (r) Deferred Outflows and Deferred Inflows of Resources

In addition to assets, the statement of net position contains a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until then. The Authority currently reports deferred amounts on bond refundings, deferred outflows related to pensions (see note 10) and deferred outflows related to OPEB (see note 10) as deferred outflows of resources.

In addition to liabilities, the statement of net position contains a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period and so will not be recognized as an inflow of resources (revenue) until then. The Authority currently reports deferred inflows related to pensions and deferred inflows related to OPEB as deferred inflows of resources (see note 10), and deferred inflows related to leases as deferred inflows of resources (see note 4).

#### (s) Estimates

The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities and deferred inflows of resources, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### (t) New Accounting Pronouncements Adopted

In June 2017, the Government Accounting Standards Board (GFOA) issued Statement No. 87, Leases (GASB 87). GASB 87 increases the usefulness of governmental financial statements by requiring recognition of certain lease assets and liabilities for all leases, including those that were previously classified as operating leases and recognized as income by lessors and expenditures by lessees. It also serves to enhance comparability of financial statements among governments by requiring lessees and lessors to report leases under a single model. Statement 87 was effective for the Authority with its fiscal year ended June 30, 2022.

#### (u) New Accounting Pronouncements

Management has elected to disclose upcoming GASB pronouncements that may have an impact on the Authority.

GASB Statement No. 91, *Conduit Debt Obligations* (Statement 91), will improve the consistency and comparability of reporting a government's debt obligations and inform users of the potential impacts of any commitments issuers extend on the financial resources of issues and help users assess issuers' roles in conduit debt obligations. Statement 91 will be effective for the Authority beginning with its fiscal year ending June 30, 2023.

GASB Statement 96, Subscription-Based Information Technology Arrangements, (Statement 96), will improve financial reporting by establishing a definition for subscription-based information technology arrangements and providing uniform guidance for accounting and financial reporting for transactions that meet that definition, which will result in greater consistency and enhance the relevance and reliability of the financial statements. Statement 96 will be effective for the Authority beginning with its fiscal year ending June 30, 2023. The Authority has not yet determined the effect this GASB Statement will have on its financial statements.

GASB Statement 99, *Omnibus 2022*, (Statement 99), provides additional information on interpreting and applying GASB Statements 53, 87, 94, 96 and 34. Clarification of GASB 87, including clarifying the definition of a lease term

and providing additional explanation of what leases are included and excluded, as well as reiterating some of the specific guidance for variable payments and the updating of variable payments, was adopted by the Authority in conjunction with its adoption of GASB 87. The Authority has not yet determined the effect that the remainder of this GASB statement will have on its financial statements.

GASB Statement 100, Accounting Changes and Error Corrections, (Statement 100), will enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. Statement 100 will be effective for the Authority beginning with its fiscal year ending June 30, 2024.

GASB Statement 101, Compensated Absences, (Statement 101), will better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. Statement 101 will be effective for the Authority beginning with its fiscal year ending June 30, 2024. The Authority has not yet determined the effect this GASB Statement will have on its financial statements.

#### (v) Subsequent Events

The Authority has evaluated subsequent events through December 7, 2022, the date on which the financial statements were available to be issued.

#### (w)Leases

Lessee: The Authority is a lessee for noncancellable leases of office space and warehouse space and realizes a lease liability and an intangible right-to-use lease asset (lease asset) in its financial statements. At the commencement of a lease, the Authority initially measures the lease liability at the present value of payments expected to be made during the lease term. Subsequently, the lease liability is reduced by the principal portion of lease payments made. The lease asset is initially measured as the initial amount of the lease liability, adjusted for lease payments made at or before the lease commencement date, plus certain initial direct costs. Subsequently, the lease asset is amortized on a straight-line basis over its useful life.

Key estimates and judgments related to leases include how the Authority determines (1) the discount rate it uses to discount the expected lease payments to present value, (2) lease term, and (3) lease payments.

- The Authority uses the interest rate charged by the lessor as the discount rate. When the interest rate charged by the lessor is not provided, the Authority generally uses its estimated incremental borrowing rate as the discount rate for leases.
- The lease term includes the noncancellable period of the lease. Lease payments included in the measurement of the lease liability are composed of fixed payments and purchase option prices that the Authority is reasonably certain to exercise. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

The Authority monitors changes in circumstances that would require a remeasurement of its leases and will remeasure the lease asset and liability if certain changes occur that are expected to significantly affect the amount of the lease liability.

Lease assets are reported with other capital assets and lease liabilities are reported with long-term debt on the statement of net position.

Payments due under the Authority's lease contracts for office space and warehouse space include variable payments, which include payments for the Authority's proportionate share of the leased space's property taxes, insurance, and common area maintenance.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- o amounts expected to be payable by the Authority under residual value guarantees
- o the exercise price of a purchase option if the group is reasonably certain to exercise that option, and
- o payments of penalties for terminating the lease, if the lease term reflects the Authority exercising that option.

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Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability. Extension and termination options are included in a number of the Authority's leases. These are used to maximize operational flexibility in terms of managing the assets used in the Authority's operations.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

Variable payments that depend on an index or a rate (such as the Consumer Price Index or a market interest rate), are initially measured using the index or rate as of the commencement of the lease term.

Lessor: The Authority leases out space on top of its water towers to cellular service providers who place their cellular communications equipment on them. The Authority also leases a portion of land to a cellular service provider where they have placed a cellular tower. The Authority recognizes a lease receivable and a deferred inflow of resources in the financial statements for these leases.

At the commencement of a lease, the Authority initially measures the lease receivable at the present value of payments expected to be received during the lease term. Subsequently, the lease receivable is reduced by the principal portion of lease payments received. The deferred inflow of resources is initially measured as the initial amount of the lease receivable, adjusted for lease payments received at or before the lease commencement date. Subsequently, the deferred inflow of resources is recognized as revenue over the life of the lease term.

Key estimates and judgments include how the Authority determines (1) the discount rate it uses to discount the expected lease receipts to present value, (2) lease term, and (3) lease receipts.

- The Authority uses its estimated incremental borrowing rate as the discount rate for leases.
- The lease term includes the noncancellable period of the lease. Lease receipts included in the measurement of the lease receivable are composed of fixed payments from the lessee.

The Authority monitors changes in circumstances that would require a remeasurement of its leases, and will remeasure the lease receivable and deferred inflows of resources if certain changes occur that are expected to significantly affect the amount of the lease receivable.

Detailed balances and information for Leases: Lessee and Lessor are presented in Note 4.

#### 2 Cash and Investments

#### **Cash and Cash Equivalents**

At June 30, 2022 and 2021, all cash of the Authority is maintained in accounts collateralized in accordance with the Virginia Security for Public Deposits Act (the Act), Section 2.2-4400 et. seq. of the *Code of Virginia*, or is covered by federal depository insurance.

Under the Act, banks holding public deposits in excess of the amounts insured by the Federal Deposit Insurance Corporation (FDIC) must pledge collateral in the amount of 50% of excess deposits to a collateral pool in the name of the State Treasury Board. Savings and loan institutions are required to collateralize 100% of deposits in excess of FDIC limits. Since the State Treasurer has the ability to make additional assessments of other solvent public depositories on behalf of the collateral pool, any deposit qualifying under the Act is considered entirely insured. The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying local governments of compliance by banks and savings and loans.

The Authority also invests in an externally managed investment pool, the Virginia Local Government Investment Pool (LGIP) and the LGIP Extended Maturity (LGIP EM), which are not registered with the Securities and Exchange Commission (SEC). Pursuant to Sec. 2.2-4600 through 2.2-4606 of the *Code of Virginia*, the Virginia General Assembly created the LGIP and authorized the Treasury Board to administer the LGIP and LGIP EM. As permitted by law, the Treasury Board has delegated certain administrative functions to the State Treasurer. The Treasury Board reviews the LGIP investment portfolio on a monthly basis, and investments in the LGIP are stated at amortized cost per GASB Statement No. 79 requirements, while the LGIP EM are stated at fair value per GASB Statement No. 72 requirements.

The LGIP is managed similar to a money market fund and in compliance with the definition of "2a-7 like pools" in accordance with GASB Statement No. 31 and is managed to meet the portfolio maturity, quality, diversification and liquidity requirements set forth in GASB Statement No. 79.

Unrestricted cash and cash equivalents consist of bank deposits, petty cash funds, LGIP investments and other money market fund investments. Restricted cash and cash equivalents consist of customer deposits, employee withholdings for benefit programs, escrows and retainage held on contracts, and money market funds held by a Trustee for debt service.

At June 30, 2022 and 2021, the Authority had the following cash and cash equivalents:

	2022		2021
Unrestricted Cash and Cash Equivalents			
Cash	\$	8,251,527	\$ 14,739,049
Investments classified as cash equivalents		35,393,752	51,738,152
Total unrestricted cash and cash equivalents		43,645,279	66,477,201
Restricted Cash and Cash Equivalents			
Money market funds held by trustee		14,256,910	15,675,770
Customer deposits		2,401,022	2,386,313
Other funds		28,881	33,658
Total restricted cash and cash equivalents		16,686,813	18,095,741
Total cash and cash equivalents	\$	60,332,092	\$ 84,572,942

#### **Investments**

The Code of Virginia Sec. 2.2-4501 et seq. authorizes the Authority to invest in obligations of the United States or agencies thereof; obligations of the Commonwealth of Virginia and political subdivisions thereof; obligations of other states and their political subdivisions; obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, and the African Development Bank; "prime quality" commercial paper; negotiable certificates of deposits, bank notes, and corporate bonds rated AA or better by Standard & Poor's Rating Services (S&P), and Aa or better by Moody's Investors Services, Inc., and a maturity of no more than five years; bankers' acceptances; overnight term and open repurchase agreements; money market mutual funds; and the LGIP. The Authority's investment policy follows state law except where the Authority further limits allowable investments by excluding certain treasury strips and the International, Asian, and African Development Banks. Additionally, the investment policy establishes upper limits on the percentage of the total portfolio that may be invested in certain securities.

The Authority's investments are subject to interest rate, credit, concentration of credit, and custodial credit risk as described herein.

Interest rate risk: Interest rate risk is the risk the fair value of the securities in the portfolio will decline due to rising interest rates. As a means of limiting this exposure, the Authority's investment guidelines restrict average duration to 24 months and the maturity of any single investment to five years. Interest rate risk is also contained by avoiding mortgage-backed and callable securities. The risk of loss of fair value from rising interest rates is greater for those types of securities because the expected maturity of such securities increase as rates rise, compounding the impact on fair value. By comparison, the average maturity terms of US Treasury notes, non-callable US Agency securities and the LGIP are generally not affected by periods of rising interest rates.

The Authority's investments with the LGIP and LGIP EM are included in the accompanying Statements of Net Position as cash and cash equivalents. At June 30, 2022, the average maturity of the underlying LGIP and LGIP EM investments was 37 days, or 0.10 years and 306 days, or .85 years, respectively.

At June 30, 2022 and 2021, the Authority had the following investments and maturities:

	2	2022	2021				
Investment Type	Fair Value	Weighted Average Maturity (Years)	Fair Value	Weighted Average Maturity (Years)			
Unrestricted investments							
US Agencies (FHLB,FFCB)	\$ 174,870,387	1.08	\$ 190,198,935	1.12			
US Treasuries	123,132,389	1.08	108,227,705	1.04			
Virginia State and Local	1,526,549	1.94	4,093,747	1.20			
Total unrestricted investments	299,529,325		302,520,387				
Total investments	\$ 299,529,325	1.08	\$ 302,520,387	1.09			

**Credit risk:** Credit risk is the risk of loss due to the failure of the security issuer or backer to repay its obligations, and may also apply where there is loss of fair value of the investment due to a deterioration of an issuer's credit rating. The Authority's Investment Policy and Guidelines seek to diversify the Authority's portfolio by limiting the types of investments that can be purchased as well as the percentage of the portfolio that may be invested in any one type of instrument.

At June 30, 2022 and 2021, the Authority's investments were rated as follows:

			Credit Exposure as a % of Total Investments		
Investment Type	S&P Rating	Moody's Rating	2022	2021	
US Agencies	AA+	Aaa	50.0%	51.4%	
US Treasuries*	AA+	Aaa	35.3	29.3	
LGIP-EM***	AAAm	N/A	0.3	7.1	
LGIP ***	AAAm	N/A	9.9	6.9	
Mutual Funds***	AA+	Aaa	4.1	4.2	
Virginia State and Local**	AA+	Aaa	0.4	1.1	
Total Investments			100.0%	100.0%	

- \* Backed by the full faith and credit of the US government.
- \*\* Ratings vary by security.

**Concentration of credit risk:** Concentration of credit risk is the risk of loss attributed to the magnitude of investments held from a single issuer. The Authority's guidelines place limits on the amounts the Authority may invest in certain issuers, however, the Authority seeks to maintain at least 15% of the portfolio in US Treasuries and the balance of its investments in other authorized notes, bonds, securities and deposit accounts.

The Authority's investment portfolio as of June 30, 2022 and 2021 is concentrated in securities issued by the US Treasury, the Federal Farm Credit Bank (FFCB), the Federal Home Loan Bank (FHLB) and prime quality commercial paper of US corporations. The obligations of each of these issuers comprise more than 5% of the Authority's total investments.

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. All of the Authority's investments are valued using Level 1 inputs.

The table below details the fair value and percent of total investments for each issuer representing 5% or more of the Authority's total investments as of June 30, 2022 and 2021:

Issuers Over 5% of Total Investments		Fair Value of Inv (Level	% of Total Investments		
(Restricted & Unrestricted)		2022	2021	2022	2021
US Treasuries	\$	123,132,389 \$	108,227,705	41.1%	35.8%
FFCB		94,492,934	111,689,756	31.6	36.8
FHLB		80,377,453	78,509,179	26.8	26.0
Others below 5%		1,526,549	4,093,747	0.5	1.4
Commercial Paper		0.4	-	-	
Total Investments	\$	299,529,325 \$	302,520,387	100.0%	100.0%

**Custodial credit risk:** Custodial credit risk is the risk that the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of an outside custodial party. All of the securities purchased by the Authority are held in safekeeping by a third party custodial bank or institution and are insured in the Authority's name, and therefore, the Authority is not exposed to custodial credit risk.

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<sup>\*\*\*</sup> Reflected on the accompanying financial statements as cash equivalents.

# 3 Property, Plant and Equipment

Changes in property, plant and equipment are as follows for the year ended June 30, 2022:

	Balance			Transfers/Other	Balance
	June 30, 2021*	Additions	Reductions	Adjustments	June 30, 2022
Capital assets not being					
depreciated/amortized:					
Construction in progress	\$ 42,290,845	\$ 49,317,231	\$ (124,763)	\$ (17,373,080)	\$ 74,110,233
Land	9,654,247	-		111,742	9,765,989
Total capital assets not being					
depreciated/amortized	51,945,092	49,317,231	(124,763)	(17,261,338)	83,876,222
Other capital assets:					
Lines and improvements	977,201,560	21,866,112	-	11,147,789	1,010,215,461
Equipment	281,849,779	2,502,956	(537,647)	6,112,172	289,927,260
Buildings	158,527,210	1,041,121	(167,508)	1,377	159,402,200
Vehicles	9,437,892	1,020,592	(221,241)	-	10,237,243
Advance capacity payments	208,836,593	761,514	-	-	209,598,107
Right-to-use asset, building	257,198	-	-	-	257,198
Total other capital assets	1,636,110,232	27,192,296	(926,396)	17,261,338	1,679,637,470
Total capital assets before accumulated depreciation					
and amortization	1,688,055,324	76,509,527	(1,051,159)	-	1,763,513,692
Depreciation/amortization for:					
Lines and improvements	(300,670,245)	(19,605,200)	-	-	(320,275,445)
Equipment	(183,772,935)	(14,088,878)	519,607	-	(197,342,206)
Buildings	(68,133,666)	(3,431,372)	139,948	-	(71,425,090)
Vehicles	(6,730,972)	(997,431)	221,241	-	(7,507,162)
Advance capacity payments	(65,649,060)	(6,044,409)	-	-	(71,693,469)
Right-to-use asset, building	-	(93,410)	-	-	(93,410)
Total accumulated depreciation and amortization	(624,956,878)	(44,260,700)	880,796	-	(668,336,782)
Total property, plant and equipment, net of accumulated					
depreciation and amortization	\$ 1,063,098,446	\$ 32,248,827	\$ (170,363)	-	\$ 1,095,176,910

 $<sup>{\</sup>rm *Beginning}$  balance was restated for implementation of GASB 87, Leases.

Changes in property, plant and equipment are as follows for the year ended June 30, 2021:

	Balance June 30, 2020	Additions	Reductions	Transfers/Other Adjustments	Balance June 30, 2021
Capital assets not being depreciated/amortized:					
Construction in progress	\$ 41,673,879	\$ 24,467,730	\$ (1,859,484)	\$ (21,991,280)	\$ 42,290,845
Land	9,597,373	-	(22,893)	79,767	9,654,247
Total capital assets not being depreciated/amortized	51,271,252	24,467,730	(1,882,377)	(21,911,513)	51,945,092
Other capital assets:					
Lines and improvements	947,717,939	21,065,812	(8,520)	8,426,329	977,201,560
Equipment	267,347,001	5,105,140	(227,224)	9,624,862	281,849,779
Buildings	153,612,959	1,055,341	(1,412)	3,860,322	158,527,210
Vehicles	9,185,987	776,729	(524,824)	-	9,437,892
Advance capacity payments	208,571,194	265,399	-	-	208,836,593
Total other capital assets	1,586,435,080	28,268,421	(761,980)	21,911,513	1,635,853,034
Total capital assets before accumulated depreciation and amortization	1,637,706,332	52,736,151	(2,644,357)	-	1,687,798,126
Depreciation/amortization for:					
Lines and improvements	(281,704,374)	(18,966,196)	325	-	(300,670,245)
Equipment	(169,857,317)	(14,130,493)	214,875	-	(183,772,935)
Buildings	(64,721,016)	(3,413,991)	1,341	-	(68,133,666)
Vehicles	(6,350,224)	(905,573)	524,825	-	(6,730,972)
Advance capacity payments	(59,803,446)	(5,845,614)	-	-	(65,649,060)
Total accumulated depreciation and amortization	(582,436,377)	(43,261,866)	741,366		(624,956,878)
Total property, plant and equipment, net of accumulated depreciation and amortization	\$ 1,055,269,955	\$ 9,474,285	\$ (1,902,991)	\$ -	\$ 1,062,841,249

<sup>\*</sup>It was deemed not practical to restate the earliest period presented for leases, which was July 1, 2020.

#### 4 Leases

#### (a) Lease Payable

This note provides information for leases where the Authority is a lessee. For leases where the Authority is a lessor, see note 4(b): Lease Receivable.

The Authority has entered into various lease agreements as lessee for office and warehouse space. Most leases have initial terms of 5 years, and contain one or more renewals at our option, generally for 5-year periods. We have generally included these renewal periods in the lease term when it is reasonably certain that we will exercise the renewal option. The Authority's leases generally include termination options for the lessee to the lease or restrictive financial or other covenants, which are reasonably certain to not be exercised. Certain real estate leases require additional payments for common area maintenance, real estate taxes and insurance, which are expensed as incurred as variable lease payments. For office and warehouse space leases that include variable payments, those include payments for the Authority's proportionate share of the leased property's property taxes, insurance, and common area maintenance. The Authority's lease arrangements do not contain any material residual value guarantees. As the interest rates implicit in the Authority's leases are not readily determinable, the incremental borrowing rate is utilized to discount the lease payments.

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The beginning balance of Other capital assets (note 3) at June 30, 2021 was restated for implementation of GASB 87, Leases. It was deemed not practical to restate the earliest period presented, which was July 1, 2020.

The statement of net position shows the following amounts relating to leases:

Right-to-use assets	Principal	Total				
Buildings	\$ 163,788	\$ 163,788				
Buildings, net	\$ 163,788	\$ 163,788				

Lease payable	Principal	Total		
Current	\$ 93,907	\$ 93,907		
Non-current	72,702	72,702		
	\$ 166,609	\$ 166,609		

The future principal and interest lease payments as of June 30, 2022, were as follows:

Years ending June 30,	Principal	Interest			
2023	\$ 93,907	\$	2,109		
2024	72,702		518		
Total	\$ 166,609	\$	2,627		

#### (b) Lease Receivable

As a lessor, the Authority leases out certain space atop its water towers to cellular service providers who place their cellular communications equipment on them. The Authority also leases a portion of land to a cellular service provider where a cellular tower has been placed. These leases generally have initial terms of up to 5 years, and contain one or more renewals at the tenant's option, generally for 5-year periods. These renewal periods have been generally included in the lease term when it is reasonably certain that the renewal option will be exercised. The Authority's lease arrangements do not contain any material residual value guarantees. As the interest rate implicit in the Authority's leases is not readily determinable, the incremental borrowing rate is used to discount the lease payments.

Minimum lease payments receivable on leases of investment properties are as follows:

Years ending June 30,	Principal	Interest
2023	\$ 652,617	\$ 248,220
2024	678,190	230,813
2025	680,252	211,215
2026	629,371	192,673
2027	665,472	174,591
2028-2032	3,865,630	558,380
2033-2037	1,959,349	77,046
Total	\$ 9,130,881	\$ 1,692,939

The total amount of deferred inflows of resources relating to leases recognized in the current fiscal year are as follows:

	Principal	Total			
Total	\$ 1,267,060	Ś	1.267.060		

# 5 Equity in Upper Occoquan Service Authority

UOSA was created under the provisions of the Virginia Water and Sewer Authorities Act to be the single regional entity to construct, finance and operate the regional sewage treatment facility mandated by the Occoquan policy for the upper portion of the Occoquan Watershed. UOSA is a joint venture formed on March 3, 1971 by a concurrent resolution of the governing bodies of Fairfax and Prince William Counties and the Cities of Manassas and Manassas Park. The Prince William County BOCS assigned all rights and obligations of its allocated capacity to the Authority in 1983.

During fiscal years 1989, 1995, and 2005, UOSA's capacity was increased and each jurisdiction's percentage was adjusted accordingly. The Authority's equity interest in UOSA reported on the accompanying Statements of Net Position as of June 30, 2022 and 2021 is calculated based on its percentage share of capacity in effect for UOSA's fiscal years ended June 30, 2021 and 2020, respectively. The equity interest in UOSA is calculated one year in arrears due to the timing of UOSA's published financial statements.

In January 2008, and again in March 2011, the Authority made purchases totaling an additional 4 MGD of existing plant capacity at UOSA from Fairfax County, at a combined cost of \$73,517,586 for both transactions. With these purchases, the Authority's effective share of the total Permitted UOSA Plant Capacity of 54 MGD, as defined in the transaction agreements, is 36.66%, or approximately 19.8 MGD.

For UOSA's fiscal years ended June 30, 2022, 2021 and 2020, capacity allocation by jurisdiction was as follows:

	Percentage of	Percentage of Total Allocated Capacity					
Jurisdiction	2022	2021	2020				
Fairfax County	43.70%	43.70%	43.70%				
Prince William County	36.66	36.66	36.66				
City of Manassas	14.24	14.24	14.24				
City of Manassas Park	5.40	5.40	5.40				
Total	100.00%	100.00%	100.00%				

The governing body of UOSA is an eight member Board of Directors consisting of two members from each participating jurisdiction appointed to four-year terms. The UOSA Board of Directors adopts an annual operating budget based on projected wastewater flows. The Authority's General Manager currently serves as a member of the UOSA Board of Directors.

Summary financial information of UOSA for the years ended June 30, 2021 and 2020 (the dates of the most recent available audited financial statements) are presented below. Complete financial statements may be obtained from UOSA at Upper Occoquan Service Authority, 14631 Compton Road, Centreville, Virginia 20121-2506, or from their website at <a href="https://www.uosa.org">www.uosa.org</a>.

	2021			2020			
	UOSA	Autl	nority's Share		UOSA	Autl	nority's Share
Total assets	\$ 545,139,317			\$	579,854,777		
Deferred outflows of resources	30,108,454				17,674,213		
Total assets and deferred outflows of resources	575,247,771				597,528,990		
Total liabilities	546,755,430				554,186,450		
Deferred inflows of resources	1,214,477				2,274,841		
Total liabilities and deferred inflows of resources	 547,969,907				556,461,291		
Total net position	\$ 27,277,864	\$	4,216,930	\$	41,067,699	\$	9,272,463
Total revenues	\$ 29,368,114			\$	35,195,717		
Total expenses	(64,265,278)				(60,279,520)		
Capital contributions	21,107,329				19,301,263		
Cumulative effect of change in accounting principle	 -				-		
Change in net position	\$ (13,789,835)	\$	(5,055,533)	\$	(5,782,540)	\$	(2,119,954)
Prepaid capacity amortization			(2,864,218)				(2,715,703)
Change in equity interest in UOSA		\$	(7,919,751)			\$	(4,835,657)

NOTES TO FINANCIAL STATEMENTS FINANCIAL SECTION

The equity interest in UOSA is a function of UOSA's annual performance. The Authority's equity interest is adjusted annually based on the Authority's percentage of total capacity for the fiscal year multiplied by the change in UOSA's net position for the latest audited fiscal year. The Authority's percentage of total capacity changes as capacity purchases are made by the Authority or other jurisdictions, therefore the Authority's cumulative share of UOSA's net position is reported at an overall effective share. Prepaid capacity amortization represents the amortization associated with UOSA plant capacity rights that the Authority purchased from Fairfax County. The Authority amortizes these capacity rights over estimated useful lives from 40-50 years. This amortization is reflected as a portion of the equity interest in UOSA.

The Authority made payments to UOSA during fiscal years 2022 and 2021 of approximately \$13.9 million and \$13.9 million, respectively, to pay its share of operation and maintenance expenses and reserve maintenance charges, which represents the Authority's pro-rata share of the participating jurisdictions' metered wastewater flows each year. The Authority records these payments for services from UOSA in the accompanying financial statements as purchased resources expense. The Authority also made payments to UOSA of approximately \$11.5 million and \$11.1 million, respectively, for each of the years ended June 30, 2022 and June 30, 2021, to fund its share of UOSA's debt service. The Authority's share of debt service payments are recorded as non-operating expenses in the accompanying financial statements. Each jurisdiction is required to pay its share of debt service based on its percentage of total allocated capacity or as otherwise identified for specific projects within the UOSA Service Agreement. In fiscal years 2022 and 2021, the Authority's 36.66% share of UOSA's change in net position was \$(5,055,533) and \$(2,119,954), respectively.

UOSA's annual debt service for current and future years is funded by each of the participating jurisdictions based on their allocated capacity with certain modifications. As of June 30, 2022, the Authority's future debt service requirements for principal and interest to UOSA, net of UOSA accumulated debt service reserves, are as follows:

Years Ending	Total
June 30,	Payment
2023	\$ 11,900,500
2024	11,900,207
2025	11,904,141
2026	12,183,537
2027	12,161,826
2028-2032	49,627,356
2033-2037	40,879,479
2038-2042	29,236,335
2043-2047	8,395,282
2048-2052	3,963,564
Total	\$ 192,152,227

# 6 Bonds Payable

Bonds payable as of June 30, 2022 consist of the following:

- (a) Series 2013 water and sewer system refunding revenue bonds were issued to defease \$44,140,000 of the Series 2005 bonds. At June 30, 2022, \$34,370,000 remained outstanding. Interest rates range from 3.0% to 5.0% annually on the remaining maturity dates from July 1, 2022 to July 1, 2035.
- (b) Series 2015 water and sewer system refunding revenue bonds were issued in April 2015 to refund the Series 2005 bonds. At June 30, 2022, \$11,940,000 remained outstanding. The interest rate on the bonds is 2.11% with maturity dates from July 1, 2022 to July 1, 2029.

For each of the outstanding bond series, interest is payable semi-annually on January 1 and July 1, and principal payments are made annually on July 1. In June 2022 and 2021, advance payments in the amount of \$5,011,000 and \$6,500,000, respectively, were made to the Trustee toward debt service for each of the subsequent fiscal years.

During fiscal years 2022 and 2021, the Authority continued to be in compliance with all covenants associated with the outstanding bond indentures. See Statistical Section Tables 7, 8 and 9, on pages 104 and 105 for debt compliance information. For the year ended June 30, 2022, pledged revenues totaled approximately \$143.3 million, and the required debt service payments represented 5.5% of the pledged revenues. The pledge of revenues remains in effect until the debt service requirements are satisfied in fiscal year 2036.

At June 30, 2022, total fur	ture debt service requiren	nents for bond principal a	and interest are approximately
\$55.5 million, as follows:			

	 2013 Sei	ies	2015 Series Tota		2015 Series Total			
Years ending June 30,	Principal	Interest		Principal		Interest	Principal	Interest
2023	\$ 1,830,000 \$	1,218,250	\$	1,610,000	\$	217,963	\$ 3,440,000 \$	1,436,213
2024	1,925,000	1,122,000		1,650,000		183,148	3,575,000	1,305,148
2025	2,020,000	1,021,000		1,685,000		147,595	3,705,000	1,168,595
2026	2,125,000	914,750		1,340,000		119,321	3,465,000	1,034,071
2027	2,230,000	825,550		1,370,000		90,413	3,600,000	915,963
2028-2032	12,550,000	2,688,700		4,285,000		91,574	16,835,000	2,780,274
2033-2036	 11,690,000	539,250		-		-	11,690,000	539,250
Total	\$ 34,370,000 \$	8,329,500	\$	11,940,000	\$	850,014	\$ 46,310,000 \$	9,179,514

Debt service requirements for future principal payments are presented in the accompanying Statements of Net Position, inclusive of the following amounts:

	June 30, 2022			e 30, 2021
Unamortized Bond Premiums	\$	814,938	\$	1,126,312

Deferred losses on refunding are presented in the accompanying Statements of Net Position, as follows:

	June 30, 2022	June 30, 2021
Deferred Amounts on 2015 Refunding	\$ 27,737	\$ 35,957
Deferred Amounts on 2013 Refunding	1,610,492	1,797,541
Total	\$ 1,638,229	\$ 1,833,498

# 7 Virginia Resources Authority Loans Payable

VRA loans were issued under the Virginia Water Facilities Revolving Fund (VWFRF) program and used for the purpose of construction for expansion and improvements at the HLM AWRF. Each loan is secured by a pledge of revenues from the Authority's water and wastewater system, with interest and principal payable on a semi-annual basis. All balances owed to VRA under the financing agreements are deemed to be parity indebtedness under the terms of the Local Master Indenture.

At June 30, 2022, VRA loans payable consist of the following:

Loans to finance improvements for biological nutrient removal and related expenses:

(a) June 2004 loan - The outstanding loan balance at June 30, 2022 was \$2,315,589, with interest payable at 1.95% (reduced from 3.10% effective December 1, 2016) per annum, and principal due through June 2025.

Loans to finance the expansion and upgrade of the HLM AWRF:

- (b) June 2007 loan The outstanding loan balance at June 30, 2022 was \$18,898,400, with interest payable at 2.52% (reduced from 2.77% effective September 1, 2014) per annum, and principal due through March 2029.
- (c) June 2009 loan The outstanding loan balance at June 30, 2022 was \$19,498,116, with interest payable at 2.72% (reduced from 3.55% effective September 1, 2014) per annum, and principal due through March 2030.
- (d) March 2022 Ioan The outstanding Ioan balance at June 30, 2022 was \$130,330. In February 2022 the Authority closed on a \$100 million Ioan with VRA to finance an upgrade of the HLM AWRF. Beginning March 2022, this Ioan will be drawn against for a 5-year period to fund the plant upgrades as they are done. During this period the outstanding balance will accrue interest at 1.00% and interest-only payments will be paid bi-annually by the Authority beginning March 2024. At the end of the 5-year draw period, beginning March 2027 the Authority will pay per an amortization schedule on the outstanding principal balance of up to \$100 million, with interest payable at 1.00% per annum, and principal due through March 2044.

At June 30, 2022, total future VRA debt service requirements for principal and interest are approximately \$43.6 million, as follows:

		2004 L	oar	1		2007 L	.oa	ın		2009 L	.oa	ın		2022 Loan		Tota	ı	
Years endin	g																	
June 30,	Р	rincipal	In	terest	ı	Principal	I	nterest	P	Principal	ı	nterest	Pr	rincipal Interest		Principal	Int	terest
2023	\$	756,934	\$	41,481	\$	2,568,521	\$	301,272	\$	2,287,170	\$	340,720	\$	- \$	- :	\$ 5,612,625	\$	683,473
2024		771,766		26,649		2,611,076		258,717		2,328,524		299,366		-	-	5,711,366		584,732
2025		786,889		11,527		2,654,337		215,456		2,370,627		257,264		-	-	5,811,853		484,247
2026		-		-		2,698,314		171,479		2,413,491		214,400		-	-	5,111,805		385,879
2027		-		-		2,743,020		126,773		2,457,128		170,762		-	-	5,200,148		297,535
2028-2044		-		-		5,623,132		116,455		7,641,176		242,494		130,330	-	13,394,638		358,949
Total	\$	2,315,589	\$	79,657	\$	18,898,400	\$	1,190,152	\$	19,498,116	\$	1,525,006	\$	130,330 \$	- :	\$ 40,842,435	\$ 2	,794,815

#### 8 Debt

Change in long-term debt obligations for the year ended June 30, 2022, are as follows:

	Balance June 30, 2020	FY 2021 Additions		FY 2021 eductions	Balance ne 30, 2021	FY 2022 Additions	F	FY 2022 Reductions	Balance ne 30, 2022	 ie Within One Year
Bonds Payable:										
Revenue Bonds	\$ 52,855,000	) \$	- \$	(3,215,000)	\$ 49,640,000	\$ -	\$	(3,330,000)	\$ 46,310,000	\$ 3,440,000
Deferred Amount	s:									
Issuance Premiums	1,493,671		-	(367,359)	1,126,312	-		(311,374)	814,938	_
Total Bonds Payable	54,348,671		-	(3,582,359)	50,766,312	-		(3,641,374)	47,124,938	3,440,000
VRA Loans Payable	53,914,819	)	-	(6,509,966)	47,404,853	130,330		(6,692,748)	40,842,435	5,612,625
Total Debt	\$ 108,263,490	\$	- \$	(10,092,325)	\$ 98,171,165	\$ 130,330	\$	(10,334,122)	\$ 87,967,373	\$ 9,052,625

From time to time, the Authority may incur debt through bond issuances via the capital markets, and financing agreements (loans) with VRA. The proceeds of all borrowings from these sources are used to finance the acquisition or development of capital assets, or to retire prior debt related to capital assets. Accordingly, all amounts reported as Bonds Payable and VRA Loans Payable (see Notes 6 and 7) are included in the calculation of net investment in capital assets on the accompanying Statements of Net Position.

The Authority's outstanding notes from direct borrowings of \$40.8 million contain a certain provision that in the event of default, outstanding amounts become immediately due if the Authority is unable to make a payment.

The Authority's outstanding notes from direct borrowings are secured with collateral of the underlying investments. These borrowings contain (1) a provision that in the event of default, the timing of repayment of not less than twenty-five percent in aggregate principal amount of the outstanding amounts become immediately due if pledged revenues during the year are less than 120 percent of debt service coverage due in the following year and (2) by notice to the Authority, declare the entire principal and interest due and payable immediately. The Authority's outstanding notes from direct borrowings contain a subjective acceleration clause that allows the lender to accelerate payment of the entire principal amount to become immediately due if the lender determines that a material adverse change has occurred.

# 9 Long-Term Liabilities

Long-Term liabilities activity for the years ended June 30, 2022 and 2021 are as follows:

	J	Balance une 30, 2020	FY 2021 Additions	FY 2021 Reductions	J	Balance une 30, 2021	FY 2022 Additions	FY 2022 Reductions	J	Balance une 30, 2022	_	ue Within One Year
Compensated Absences	\$	5,284,978	\$ 679,170	\$ (1,134,359)	\$	4,829,789 \$	775,272	\$ (460,922)	\$	5,144,139	\$	1,180,296
Lease Payable*		-	257,198	-		257,198	-	(90,589)		166,609		93,907
Other Post Employment Benefits Liability		14,470,342	1,036,765	(832,495)		14,674,612	1,034,427	(2,284,865)		13,424,174		-
GLI Other Post Employment Benefits Liability		2,162,474	98,576	(129,946)		2,131,104	-	(681,819)		1,449,285		-
HIC Other Post Employment Benefits Liability		262,294	45,979	(28,343)		279,930	3,762	(117,753)		165,939		-
Net Pension Liability (asset)		2,043,180	5,742,201	(4,275,973)		3,509,408	5,863,603	(15,638,911)		(6,265,900)		
Total Long-term Liabilities	\$	24,223,268	\$ 7,859,889	\$ (6,401,116)	\$	25,682,041 \$	7,677,064	\$ (19,274,859)	\$	14,084,246	\$	1,274,203

<sup>\*</sup>The balance of Lease Payable at June 30, 2021 was restated for implementation of GASB 87, Leases. It was deemed not practical to restate the earliest period presented, which was July 1, 2020.

# 10 Pension Plan and Other Postemployment Benefits

#### I. Virginia Retirement System (VRS)

#### (a) Plan Description

The Authority contributes to an agent multiple-employer pension plan administered by the Virginia Retirement System, which acts as a common investment and administrative agent for political subdivisions in the Commonwealth of Virginia.

All full-time, permanent employees of the Authority are automatically covered by the VRS Retirement Plan upon employment. Employees earn one month of service credit for each month they are employed and for which they and the Authority pay contributions to VRS. Employees are eligible to purchase prior service based on specific criteria as defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave and previously refunded service.

VRS administers three different benefit structures for covered employees – Plan 1, Plan 2, and Hybrid. The specific information for each plan and the eligibility for covered groups within each plan are set out 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 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.

	Retirement Plan Provisions	
Plan 1	Plan 2	Hybrid Retirement Plan
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  • 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
Hybrid Opt-In Election	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.	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 1 members who opted in was July 1, 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.	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.	Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.	
Retirement Contribution	Retirement Contributions	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.	Same as Plan 1.	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 retriement benefit. It also may count toward eligibility for the health insurance credit.  It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.  Defined Benefit Component:  Under the defined benefit component of the plan, service credit of the plan, service credit for prior service service the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the member has purchased or additional service credit in the		Retirement Plan Provisions	
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.  Same as Plan 1.  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 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 credit to employer offers 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	Plan 1	Plan 2	Hybrid Retirement 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.  Same as Plan 1.  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, if the employer offers the health insurance credit.  Defined Contributions 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 each month they are employer credit for each month they are employer eredit for each month they are employer eredit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered position. It also may include credit for each month they are employed in a covered			
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 in ember 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.  Member's earn 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, if the employer offers the health insurance credit.  Defined Contributions Component:  Under the defined benefit component of the plan, service credit includes active service. Members earn service credit for prior service credit for prior are employed in a covered position. It also may include credit for prior service the member has purchased or additional service credit is one of the factors used to determine their eligibility for retirement and to calculate their retirement, if the employer offers the health insurance credit in retirement, if the employer offers the health insurance credit in retirement, if the employer offers the health insurance credit in retirement, if the employer offers the health insurance credit is used to determine vesting for the employer			
	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		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

	Retirement Plan Provisions	
Plan 1	Plan 2	Hybrid Retirement Plan
Vesting	Vesting	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. 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.	Same as Plan 1.	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 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 four or more years, a member is 75% vested and may withdraw 75% 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 factor is applied to the Basic Benefit if the member retires with a reduced retirement 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.  Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.  Service Retirement Multiplier The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier or non- hazardous duty members is 1.70%.  Service Retirement Multiplier The retirement benefit. The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier is 1.70%.  Service Retirement Multiplier The retirement payment is 1.00%.  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.  Defined Contribution Component:  Not applicable.
The Basic Benefit is determined using the average final compensation, service credit and plan multiplier.  An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement 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.  Average Final Compensation  A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.  Service Retirement Multiplier  The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non- hazardous duty members is 1.70%.  See definition under Plan 1.  Defined Benefit Component:  See definition under Plan 1.  Defined Contribution Component:  The benefit is based on 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 60 consecutive months of highest compensation as a covered employee.  Service Retirement Multiplier  The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members the retirement multiplier for non-hazardous duty members the retirement multiplier for non-hazardous duty members the retirement multiplier is 1.65% for service cardited in the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement therefit for service credited in those plans.  Defined Contribution Component:  The benefit is based on contributions made by the member shade by the member shade by the member shade by the employer, plus net investment earnings on those contributions ande by the employer, plus net investment earnings on those contributions.  Average Final Compensation  A member's average final compensation  A member's average final compen

	Retirement Plan Provisions	
Plan 1	Plan 2	Hybrid Retirement Plan
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 credit or at age 50 with at least 30 years of service credit.	Earliest Unreduced Retirement Eligibility Normal Social Security retirement age with at least five years (60 months) of service credit or when their age and service equal 90.	Earliest Unreduced Retirement Eligibility  Defined Benefit Component:  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.

	Retirement Plan Provisions	
Plan 1	Plan 2	Hybrid Retirement Plan
Cost-of-Living Adjustment (COLA) in Retirement	Cost-of-Living Adjustment (COLA) in Retirement	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%.	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%.	Defined Benefit Component: Same as Plan 2 Defined Contribution Component: Not applicable
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.	Eligibility: Same as Plan 1.	Eligibility: Same as Plan 1 and Plan 2.
For members who retire with a reduced benefit and who have less than 20 years of service credit, the COLA will 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:	Exceptions to COLA Effective Dates: Same as Plan 1	Exceptions to COLA Effective Dates: Same as Plan 1 and Plan 2.
• The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.		
<ul> <li>The member retires on disability.</li> <li>The member retires directly from short-term or long-term disability.</li> </ul>		
• 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.		

	Retirement Plan Provisions	
Plan 1	Plan 2	Hybrid Retirement Plan
Disability Coverage	Disability Coverage	Disability Coverage
Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased or granted.	Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.	Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members.  Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for
		non-work-related disability benefits.
Purchase of Prior Service	Purchase of Prior Service	Purchase of Prior Service
Members may be eligible to purchase service from previous public	Same as Plan 1.	<u>Defined Benefit Component:</u>
employment, active duty military service, an eligible period of leave		Same as Plan 1, with the following exception:
or VRS refunded service as service credit in their plan. Prior service credit		• Hybrid Retirement Plan members are ineligible for ported service.
counts toward vesting, eligibility for		Defined Contribution Component:
retirement and the health insurance credit. Only active members are eligible to purchase prior service.		Not applicable.
Members also may be eligible to purchase periods of leave without pay.		

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

As of the June 30, 2020 actuarial valuation, the following employees were covered by the benefit terms of the VRS Retirement Plan:

	Number
Active members	321
Inactive members or their beneficiaries currently receiving benefits	143
Inactive members:	
Vested	28
Non-vested	70
Active elsewhere in VRS	35
Total inactive members	133
Total covered employees	597

#### **Contributions**

The contribution requirement for active employees is governed by Section 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% of their annual base compensation toward their retirement. Prior to July 1, 2012, all or part of the 5% member contribution may have been assumed by the employer. Beginning July 1, 2012 new employees were required to pay the 5% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5% member contribution. This could be phased in over a period of up to 5 years and the employer was required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The Authority's contractually required contribution rate for fiscal year 2022 was 6.5% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2020. This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by an employee during the year, with an additional amount to finance any unfunded accrued liability. The total of employer and employee contributions to VRS were approximately \$2.7 million and \$2.6 million for each of the years ended June 30, 2022 and June 30, 2021, respectively.

#### (b) Net Pension Liability

The Authority's net pension liability (NPL) was measured as of June 30, 2021. The TPL used to calculate the NPL was determined by an actuarial valuation performed as of June 30, 2020, using updated actuarial assumptions applied to all periods included in the measurement and date of June 30, 2021.

#### **Actuarial Assumptions**

The TPL was based on an actuarial valuation as of June 30, 2020, 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, 2021.

Inflation 2.5%

Salary increases,

including inflation 3.5% - 5.35%

Investment rate of return 6.75%, net of plan investment expense, including inflation

Mortality Rates • Pre-retirement	15% of pre-retirement deaths are assumed to be service related. Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years.
Post-retirement	Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
Post-disablement	Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
Beneficiaries and Survivors	Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
Mortality Improvement	Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016 through June 30, 2020, as well as the investment rate of return of 6.75% adopted by the Board of Trustees of the VRS at its October 10, 2019 meeting.

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

The long-term expected rate of return on VRS investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of 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 estimates 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 Real Rate of Return	Weighted Average Long-Term Expected Rate of Return*
Public Equity	34.00%	5.00%	1.70%
Fixed Income	15.00	0.57	0.09
Credit Strategies	14.00	4.49	0.63
Real Assets	14.00	4.76	0.67
Private Equity	14.00	9.94	1.39
MAPS - Multi-Asset Public Strategies	6.00	3.29	0.20
PIP - Private Investment Partnership	3.00	6.84	0.21
Total	100.00%		4.89
Inflation			2.50
Expected arithmetic nominal return*			7.39%

<sup>\*</sup> The above allocation provides a one-year return of 7.39%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.94%, including expected inflation of 2.50%. On October 10, 2019, the VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of the VRS fund asset allocation at that time, providing a median return of 7.11%, including expected inflation of 2.50%.

#### **Discount Rate**

The discount rate used to measure the TPL 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.

From July 1, 2021 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the plan's fiduciary net position is 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 TPL.

#### (c) Changes in the Net Pension Liability (Asset)

Increase (Decrease)			
Total Pension Liability	Plan Fiduciary Net Pension	Net Pension Liability (Asset)	
\$ 53,297,611	\$ 49,788,203	\$ 3,509,408	
2,329,050	-	2,329,050	
3,534,553	-	3,534,553	
1,309,374	-	1,309,374	
(560,692)	-	(560,692)	
-	1,375,238	(1,375,238)	
-	1,179,892	(1,179,892)	
-	13,864,083	(13,864,083)	
(1.06772.4)	(1.067704)		
(1,867,734)	,		
-	, ,		
	1,320	(1,320)	
4,744,551	14,519,859	(9,775,308)	
\$ 58,042,162	\$ 64,308,062	\$ (6,265,900)	
	Liability \$ 53,297,611  2,329,050 3,534,553 1,309,374  (560,692) (1,867,734) - 4,744,551	Total Pension Liability         Plan Fiduciary Net Pension           \$ 53,297,611         \$ 49,788,203           2,329,050         -           3,534,553         -           1,309,374         -           (560,692)         -           1,179,892         13,864,083           (1,867,734)         (1,867,734)           (32,940)         -           4,744,551         14,519,859	

#### Sensitivity of the Net Position Liability (Asset) to Changes in the Discount Rate

The following presents the Authority's NPA, using the current discount rate as well as what the Authority's NPA would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate.

	1% Decrease	Current Discount	1% Increase
	(5.75%)	Rate (6.75%)	(7.75%)
Net pension liability (asset)	\$ 2,320,077	\$ (6,265,900)	\$ (13,253,410)

### (d) Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2022, the Authority recognized pension expense of \$176,919. At June 30, 2022 the Authority also 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	
\$	769,771	\$	(417,018)
	1,594,952		(38,823)
	-		(6,976,028)
	1,421,751		
\$	3,786,474	\$	(7,431,869)
	of	of Resources \$ 769,771 1,594,952 - 1,421,751	of Resources of \$ 769,771 \$ 1,594,952 - 1,421,751

<sup>\*</sup> Deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the NPA in the year ending June 30, 2023.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Years Ending June 30,	Amount
2023	\$ (742,195)
2024	(818,716)
2025	(1,409,984)
2026	(2,096,251)
Total	\$ (5,067,146)

Information about the VRS Retirement Plan is also available in the separately issued VRS 2021 *Comprehensive Annual Financial Report* (Annual Report). A copy of the 2021 VRS Annual Report may be downloaded from the VRS website at <a href="mailto:varetire.org/Pdf/Publications/2020-annual-report.pdf">varetire.org/Pdf/Publications/2020-annual-report.pdf</a>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

#### II. Other Postemployment Benefits (OPEB) - Health Benefits

#### (a) Plan Description

The Authority provides post-retirement health, dental, and vision benefits to retirees who have ten or more years of service with the Authority. These benefits are provided for in a single-employer defined benefit healthcare plan administered by the Authority. For health and dental insurance coverage, retirees pay 100% of their monthly health insurance premium less a contribution by the Authority based on their number of years of service. For vision and supplemental dental coverage, retirees pay 100% of their monthly premiums, with no contribution made by the Authority. None of the assets in the Plan are accumulated in a trust and therefore do not meet trust accounting requirements per paragraph 4 of GASB Statement No. 75.

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

As of the July 1, 2021 actuarial valuation, the following employees were covered by the benefit terms:

	Number
Active members	312
Inactive members or their beneficiaries	
currently receiving benefits	69
Total covered employees	381

68

#### (b) Total OPEB Liability (TOL)

The Authority's OPEB liability was measured as of June 30, 2022, and the total OPEB Liability was determined by an actuarial valuation as of July 1, 2021.

#### **Actuarial Assumptions**

The total OPEB liability in the July 1, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation 2.5%

Salary increases,

including inflation 2.5% - 5.35%

Discount rate\* 2.16% as of June 30, 2021

3.54% as of June 30, 2022

Age related claims cost\*\*

Healthcare trend costs 3.1% for fiscal 2021, 5.4% for fiscal 2022, 5.1% for fiscal 2023, then grading to

an ultimate rate of 3.9% for 2073.

**Mortality Rates** 

• Pre-retirement RP-2014 Employee Rates to age 80, Healthy Annuitant at ages 81 and older

projected with scale BB to 2020; males setback 1 year, 85% of rates; females

setback 1 year; 25% of deaths are assumed to be service-related.

• 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 setback 1 year with 1.5% increase compounded from ages 70 to 85.

Post-disablement
 RP-2014 Disabled Mortality Rates projected with Scale BB to 2020; males 115%

of rates; females 130% of rates.

The actuarial assumptions used in the July 1, 2021 valuation were based on the results of an experience study for the period July 1, 2012 through June 30, 2016.

#### (c) Changes in the Total OPEB Liability

	Total OPEB Liabilit			
Balance at June 30, 2021	\$	14,674,612		
Changes for the Year:				
Service cost		712,861		
Interest		321,566		
Effect of economic/demographic				
gains or losses		702,031		
Effect of assumption changes				
or other inputs		(1,981,127)		
Benefit payments		(1,005,769)		
Net changes		(1,250,438)		
Balance at June 30, 2022	\$	13,424,174		

<sup>\*</sup> Discount rates used to measure TOL were based on the the Bond Buyer General Obligation 20-Bond Municipal Index as of June 30, 2021.

<sup>\*\*</sup> Age-related claims cost assumptions for medical and dental are based on long-term healthcare trend rates generated by the Getzen Trend Model. Inputs to the model are consistent with other assumptions used in the valuation. The healthcare trend assumptions include the impact of the Further Consolidated Appropriations Act, 2020.

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

The following presents the Authority's Total OPEB Liability, calculated using the current discount rate. It also presents what the Authority's Total OPEB Liability would be if it were calculated using a discount rate one percentage point lower or one percentage point higher than the current rate.

	1% Decrease	Current Discount	1% Increase
	(2.54%)	Rate (3.54%)	(4.54%)
Total OPEB liability	\$ 14,470,141	\$ 13,424,174	\$ 12,459,404

#### Sensitivity of the total OPEB liability to changes in the healthcare cost trend rate

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

	1% Decrease	Current Trend	1% Increase
	(4.40%)	Rate (5.40%)	(6.40%)
Total OPEB liability	\$ 12,000,301	\$ 13,424,174	\$ 15,117,633

## (d) OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the fiscal year ended June 30, 2022, the Authority recognized OPEB expense of \$987,502. At June 30, 2022, the Authority reported deferred inflows and deferred outflows of resources related to OPEB from the following sources:

	Deferred Inflows of Resources		Deferred Outflows of Resources	
Differences between expected and actual experience	\$	-	\$	966,209
Changes of assumptions or inputs	(1,818,301)			288,219
Total	\$ (1,8	318,301)	\$	1,254,428

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

Years Ending June 30,	Amount
2023	\$ (46,925)
2024	(46,925)
2025	(48,474)
2026	(55,330)
2027	(138,431)
Thereafter	(227,788)
Total	\$ (563,873)

#### III. Other Postemployment Benefits (OPEB) - Group Life Insurance (GLI)

#### (a) Plan Description

The Authority provides all full-time salaried permanent employees automatic coverage by VRS Group Life Insurance Program upon employment. The Group Life Insurance Program is a multiple employer, cost-sharing defined benefit plan that provides a basic group life insurance benefit for employees and participating employers. The Authority pays 100% of the monthly premiums, with no contributions made by the employees. None of the assets in the Plan are accumulated in a trust and therefore do not meet trust accounting requirements per paragraph 4 of GASB Statement No. 75.

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Members are also eligible to elect additional coverage for themselves as well as spouse and/or dependent children through the Optional Group Life Insurance Program. Employees pay 100% of their monthly insurance premium, with no contribution made by the Authority. Premiums are deducted from members' paychecks and paid by the Authority directly to the insurer; therefore they are not part of the GLI OPEB program.

The benefits payable under the GLI Program have several components:

- Natural death benefit Employee's covered compensation rounded to the next highest thousand and then doubled.
- Accidental death benefit Double the natural death benefit
- Other benefit provisions The program provides additional benefits provided under specific circumstances, including:
  - Accidental dismemberment benefit
  - Safety belt benefit
  - Repatriation benefit
  - Felonious assault benefit
  - Accelerated death benefit option

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

All full-time salaried permanent employees, employed after the program was established on July 1, 1960, that elect to participate are eligible for the GLI Program.

#### **Reduction in Benefit Amounts**

The benefit amounts provided to members covered under the GLI 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 GLI Program. The minimum benefit was set at \$8,000 by statute in 2015. This amount will be increased annually based on the VRS Plan 2 cost-of-living adjustment calculation. The minimum benefit adjustment for the COLA was \$8,722 as of June 30, 2022.

#### **Contributions**

The contribution requirement for the GLI Program are governed by Section 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 GLI Program was 1.34% of covered employee compensation. This was allocated into an employee and employer component using a 60/40 split. The employee component was 0.80% (1.34% x 60%) and the employer component was 0.54% (1.34% x 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. The Authority has elected to pay all of the employee contributions in addition to the employer contributions.

The Authority's contractually required contribution for the fiscal year 2022 was 0.54% of covered employee compensation, based on an actuarial valuation as of June 30, 2020. This 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. The total employer and employee contributions paid by the Authority to VRS were approximately \$146,700 and \$137,800 for the years ended June 30, 2022 and June 30, 2021, respectively.

#### (b) Net GLI OPEB Liability

The Authority's total GLI OPEB Liability was determined by an actuarial valuation as of June 30, 2020, and the net GLI OPEB Liability was measured as of June 30, 2021.

#### **Actuarial Assumptions**

The total GLI OPEB liability in the June 30, 2020 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation 2.5%

Salary increases, 3.5% - 5.35%

including inflation

Investment rate of return 6.75%, net of plan investment expense, including inflation

**Mortality Rates** 

Pre-retirement
 Pub-2010 Amount Weighted Safety Employee Rates projected

generatinoally; males set forward 2 years; 105% of rates for females set

forward 3 years.

Post-retirement
 Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected

generationally; 95% of rates for males set forward 2 years; 95% of rates

for females set forward 1 year.

Post-Disablement
 Pub-2010 Amount Weighted General Disabled Rates projected

generationally; 110% of rates for males set forward 3 years; 110% of rates

for females set forward 2 years.

• Beneficiaries and Survivors Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected

generationally.

Mortality Improvement Scale
 Rates projected generationally with Modified MP-2020 Improvement Scale

that is 75% of the MP-2020 rates.

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an experience study for the period July 1, 2016 through June 30, 2020, as well as the investment rate of return of 6.75% adopted by the Board of Trustees at its October 10, 2019 meeting, except 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:

- Update Mortality Rates to PUB2010 public sector mortality tables.
- Adjusted Retirement Rates; Plan 1 adjusted to better fit experience; set separate rates for Plan 2/Hybrid based on experience, changed final retirement age from 75 to 80 for all.
- Adjusted Withdrawal Rates to better fit experience at each age and service decrement through 9 years of service.

#### **Discount Rate**

The discount rate used to measure the GLI OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2021, the employer rate contributed by the Authority will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly.

From July 1, 2021 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the plan's fiduciary net position is 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.

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

The long-term expected rate of return on VRS investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of 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 estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

		Arithmetic	Weighted Average
	Target	Long-Term Expected	Long-Term Expected
Asset Class (Strategy)	Allocation	Real Rate of Return	Rate of Return*
Public Equity	34.00%	5.00%	1.70%
Fixed Income	15.00	0.57	0.09
Credit Strategies	14.00	4.49	0.63
Real Assets	14.00	4.76	0.67
Private Equity	14.00	9.94	1.39
MAPS - Multi-Asset Public Strategies	6.00	3.29	0.20
PIP - Private Investment Partnership	3.00	6.84	0.21
Total	100.00%		4.89
Inflation			2.50
Expected arithmetic nominal return*			7.39%

<sup>\*</sup> The above allocation provides a one-year return of 7.39%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.94%, including expected inflation of 2.50%. On October 10, 2019, 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.

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

The following presents the collective net GLI OPEB Liability of the participating employers in the VRS GLI OPEB Plan using the current discount rate, as well as what the collective net GLI OPEB Liability of the participating employers would be if they were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	 1% Decrease (5.75%)		Current Discount Rate (6.75%)		1% Increase (7.75%)	
Net GLI OPEB liability	\$ 2,117,458	\$	1,449,285	\$	909,705	-

#### **VRS Net GLI OPEB Liability**

The net OPEB liability (NOL) for the GLI 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, 2021, NOL amounts for the GLI Program are as follows:

Total GLI OPEB Liability	\$ 3,577,346
Plan Fiduciary Net Position	 2,413,074
Employers' Net GLI OPEB Liability	\$ 1,164,272
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability	67.45%

The total GLI OPEB liability is calculated by the VRS 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.

## (c) 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, 2022 and 2021, the Authority reported a liability of \$1,449,285 and \$2,131,104, respectively, for its proportionate share of the Net GLI OPEB liability. The Net GLI OPEB Liability was measured as of June 30, 2021 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Program for the year ended June 30, 2021 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2021, the participating employer's proportion was 0.124% as compared to 0.133% at June 30, 2020.

For the year ended June 30, 2022, the Authority recognized GLI OPEB expense of \$77,482. Since there was a change in the proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2022, the Authority 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	
Differences between expected and actual experience	\$	165,296	\$	(11,043)
Net difference between projected and actual earnings on plan investments		-		(345,913)
Changes of assumptions		79,899		(198,293)
Changes in proportion		97,157		(93,207)
Employer contributions subsequent to				
the measurement date*		146,680		<u> </u>
Total	\$	489,032	\$	(648,456)

<sup>\*</sup> 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, 2023.

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:

Years Ending June 30,	Amount
2022	\$ (53,290)
2023	(41,531)
2024	(57,032)
2025	(123,411)
2026	(30,840)
Total	\$ (306,104)

Information contained in the VRS GLI OPEB Program Notes to the Schedule of Employer Allocations and Schedule of GLI OPEB Program Amounts by Employer (Schedules) was extracted from the audited financial statements of the System for the fiscal year ended June 30, 2021. Additional financial information supporting the preparation of the VRS GLI OPEB Program Schedules (including the financial statements and the unmodified audit opinion thereon, and required supplementary information) is presented in the separately issued VRS 2021 Comprehensive Annual Financial Report (Annual Report). A copy of the 2021 VRS Annual Report is publicly available through the About VRS link on the VRS website at www.varetire.org, or a copy may be obtained by submitting a request to the VRS Chief Financial Officer, P.O. Box 2500, Richmond, VA 23218-2500.

#### IV. Other Postemployment Benefits (OPEB) - VRS Health Insurance Credit (HIC)

#### (a) Plan Description

To assist retirees with the cost of health insurance coverage, the VRS administers a health insurance credit program. The Authority's Health Insurance Credit Program is a multi-employer, agent defined benefit plan that provides a credit toward the cost of health insurance coverage for retired employees. Retirees that have a minimum of fifteen years of service and are enrolled in a qualified health insurance plan may receive a monthly credit of \$1.50 per year of service credit. 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 health insurance credit is funded by the Authority on behalf of its VRS eligible employees.

The 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.

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

All full-time salaried permanent employees, employed after the program was established on July 1, 1993, who are covered under the VRS pension plan are automatically eligible for the Retiree Health Insurance Credit Program and enrolled at employment. Those who retire with at least 15 years of service credit are eligible to elect the benefit.

As of the June 30, 2020 actuarial valuation, the following employees were covered by the benefit terms of the HIC OPEB plan:

	Number
Active members	321
Inactive members or their beneficiaries currently receiving benefits	90
Total covered employees	411

#### **HIC 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.

#### **Contributions**

The contribution requirement for active employees is governed by Section 51.1-1402(E) of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to state agencies and school divisions by the Virginia General Assembly. The Authority's contractually required employer contribution rate for the Health Insurance Credit Program for the years ended June 30, 2022 and June 30, 2021, was 0.14% of covered employee compensation, based on an actuarial valuation as of June 30, 2020. This rate was expected to finance the costs of benefits earned during the year, with an additional amount to finance any unfunded accrued liability. The total employer contributions paid by the Authority to VRS were approximately \$38,000 and \$36,000 for the years ended June 30, 2022 and June 30, 2021, respectively.

#### (b) Net HIC OPEB Liability

The Authority's net HIC OPEB liability was measured as of June 30, 2021. The total HIC OPEB liability was determined by an actuarial valuation as of June 30, 2020, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date as of June 30, 2020.

#### **Actuarial Assumptions**

The total HIC OPEB liability was based on an actuarial valuation as of June 30, 2020, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods and rolled forward to the measurement date of June 30, 2021.

Inflation 2.5%

Salary increases, 3.5% - 5.35%

including inflation

Investment rate of return 6.75%, net of plan investment expense, including inflation

Mortality Rates 15% of pre-retirement deaths are assumed to be service related.

Pre-retirement
 Pub-2010 Amount Weighted Safety Employee Rates projected

generationally; 95% of rates for males; 105% of rates for females set

forward 2 years.

Post-retirement
 Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected

generationally; 110% of rates for males; 105% of rates for females set

forward 3 years.

Post-disablement
 Pub-2010 Amount Weighted General Disabled Rates projected

generationally; 95% of rates for males set back 3 years; 90% of rates for

females set back 3 years.

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period July 1, 2016 through June 30, 2020, except the change in discount rate, which was based on VRS Board action effective July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

- Updated mortality table to PUB2020 public sector mortality tables.
- Adjusted retirement rates to better fit experience; changed final retirement age from 75 to 80
- Adjusted withdrawal rates to better fit experience at each year age and service year

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

The long-term expected rate of return on VRS investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of 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 estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Long-Term Expected Real 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%

<sup>\*</sup> 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 for 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, 2020, 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, 2020 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.

#### (c) Changes in the Net HIC OPEB Liability

	Increase (Decrease)					
	HIC O	Total PEB Liability		n Fiduciary t Position	HIC O	Net PEB Liability
Balances at June 30, 2020	\$	681,821	\$	401,891	\$	279,930
Changes for the Year:						
Service cost		18,094		-		18,094
Interest		45,533		-		45,533
Changes of assumptions		5,247		-		5,247
Difference between expected and actual experience		(39,227)		-		(39,227)
Contributions - employer		-		35,981		(35,981)
Net investment income		-		109,011		(109,011)
Benefit payments, including refunds of employee contributions		(14,534)		(14,534)		-
Administrative expense		-		(1,354)		1,354
Net changes		15,113		129,104		(113,991)
Balances at June 30, 2021	\$	696,934	\$	530,995	\$	165,939

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

The following presents the Authority's net HIC OPEB Liability, using the current discount rate, as well as what the collective net HIC OPEB Liability would be if they were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	· · ·	Decrease 5.75%)	 t Discount (6.75%)	 Increase 7.75%)
Net HIC OPEB liability	\$	235,353	\$ 165,939	\$ 106,949

# (d) HIC OPEB Liabilities, HIC OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the Health Insurance Credit Program OPEB

For the year ended June 30, 2022, the Authority recognized Health Insurance Credit Program OPEB expense \$24,054.

At June 30, 2022, the Authority reported deferred outflows of resources and deferred inflows of resources related to the HIC OPEB from the following sources:

	Deferred Outflows of Resources		 red Inflows Resources
Differences between expected and actual experience	\$	31,009	\$ (32,996)
Net difference between projected and actual earnings on plan investments		12,348	(53,172)
Changes of assumptions		-	(7,016)
Employer contributions subsequent to			
the measurement date*		38,284	
Total	\$	81,641	\$ (93,184)

<sup>\*</sup> 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 HIC OPEB Liability in the year ending June 30, 2023.

NOTES TO FINANCIAL STATEMENTS FINANCIAL SECTION

The \$38,284 reported as deferred outflows of resources related to the 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, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIC OPEB will be recognized in the HIC OPEB expense in future reporting periods as follows:

Years Ending June 30,	Amount
2022	\$ (10,450)
2023	(10,226)
2024	(8,007)
2025	(17,026)
2026	(4,118)
Total	\$ (49,827)

Additional financial information supporting the preparation of the VRS Political Subdivision Plan Schedules (including the financial statements and the unmodified audit opinion thereon, and required supplementary information) is presented in the separately issued VRS 2021 Comprehensive Annual Financial Report (Annual Report). A copy of the 2021 VRS Annual Report is publicly available through the About VRS link on the VRS website at www.varetire.org, or a copy may be obtained by submitting a request to the VRS Chief Financial Officer, P.O. Box 2500, Richmond, VA 23218-2500.

#### V. Summary of Other Post Employment Benefits (OPEB)

2022         2021           Deferred outflows of resources         Health Benefits         \$ 1,254,428         \$ 828,556           Group Life Insurance         489,032         581,654           VRS Health Insurance Credit         81,641         99,630           Total deferred outflows of resources         \$ 1,825,101         \$ 1,509,840           Net OPEB liability         Health Benefits         \$ 13,424,174         \$ 14,674,612           Group Life Insurance         1,449,285         2,131,104           VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202           Total pension expense         \$ 1,089,038			Years End	ding Jun	e 30,
Health Benefits   \$ 1,254,428   \$ 828,556			2022		2021
Group Life Insurance         489,032         581,654           VRS Health Insurance Credit         81,641         99,630           Total deferred outflows of resources         \$ 1,825,101         \$ 1,509,840           Net OPEB liability         Health Benefits         \$ 13,424,174         \$ 14,674,612           Group Life Insurance         1,449,285         2,131,104           VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense         Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Deferred outflows of resources				
VRS Health Insurance Credit         81,641         99,630           Total deferred outflows of resources         \$ 1,825,101         \$ 1,509,840           Net OPEB liability         Health Benefits         \$ 13,424,174         \$ 14,674,612           Group Life Insurance         1,449,285         2,131,104           VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Health Benefits	\$	1,254,428	\$	828,556
Total deferred outflows of resources         \$ 1,825,101         \$ 1,509,840           Net OPEB liability         \$ 13,424,174         \$ 14,674,612           Group Life Insurance         1,449,285         2,131,104           VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Group Life Insurance		489,032		581,654
Net OPEB liability         Health Benefits       \$ 13,424,174       \$ 14,674,612         Group Life Insurance       1,449,285       2,131,104         VRS Health Insurance Credit       165,939       279,930         Total net OPEB liability       \$ 15,039,398       \$ 17,085,646         Deferred inflows of resources         Health Benefits       \$ 1,818,301       \$ 160,258         Group Life Insurance       648,456       129,862         VRS Health Insurance Credit       93,184       11,412         Total deferred inflows of resources       \$ 2,559,941       \$ 301,532         Pension expense         Health Benefits       \$ 987,502       \$ 1,165,058         Group Life Insurance       77,482       110,281         VRS Health Insurance Credit       24,054       46,202	VRS Health Insurance Credit		81,641		99,630
Health Benefits         \$ 13,424,174         \$ 14,674,612           Group Life Insurance         1,449,285         2,131,104           VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Total deferred outflows of resources	\$	1,825,101	\$	1,509,840
Group Life Insurance         1,449,285         2,131,104           VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Net OPEB liability				
VRS Health Insurance Credit         165,939         279,930           Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         \$ 1,818,301         \$ 160,258           Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Health Benefits	\$	13,424,174	\$	14,674,612
Total net OPEB liability         \$ 15,039,398         \$ 17,085,646           Deferred inflows of resources         \$ 1,818,301         \$ 160,258           Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Group Life Insurance		1,449,285		2,131,104
Deferred inflows of resources  Health Benefits \$ 1,818,301 \$ 160,258  Group Life Insurance 648,456 129,862  VRS Health Insurance Credit 93,184 11,412  Total deferred inflows of resources \$ 2,559,941 \$ 301,532  Pension expense  Health Benefits \$ 987,502 \$ 1,165,058  Group Life Insurance 77,482 110,281  VRS Health Insurance Credit 24,054 46,202	VRS Health Insurance Credit		165,939		279,930
Health Benefits         \$ 1,818,301         \$ 160,258           Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Total net OPEB liability	\$	15,039,398	\$	17,085,646
Group Life Insurance         648,456         129,862           VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Deferred inflows of resources				
VRS Health Insurance Credit         93,184         11,412           Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense           Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Health Benefits	\$	1,818,301	\$	160,258
Total deferred inflows of resources         \$ 2,559,941         \$ 301,532           Pension expense         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Group Life Insurance		648,456		129,862
Pension expense       \$ 987,502       \$ 1,165,058         Health Benefits       \$ 987,502       \$ 1,165,058         Group Life Insurance       77,482       110,281         VRS Health Insurance Credit       24,054       46,202	VRS Health Insurance Credit		93,184		11,412
Health Benefits         \$ 987,502         \$ 1,165,058           Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Total deferred inflows of resources	\$	2,559,941	\$	301,532
Group Life Insurance         77,482         110,281           VRS Health Insurance Credit         24,054         46,202	Pension expense				
VRS Health Insurance Credit 24,054 46,202	Health Benefits	\$	987,502	\$	1,165,058
	Group Life Insurance		77,482		110,281
Total pension expense \$ 1.089.038 \$ 1.321.541	VRS Health Insurance Credit	_	24,054		46,202
* 1,000,000 V 1,021,011	Total pension expense	\$	1,089,038	\$	1,321,541

#### 11 Risk Management

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. These risks are covered by insurance purchased from Virginia Risk Sharing Association (VRSA), a group insurance pool in the Commonwealth of Virginia. There have been no significant reductions in insurance coverage from the prior year, and settled claims have not exceeded insurance coverage for each of the fiscal years ended June 30, 2022, 2021, and 2020.

The Authority provides health benefits to employees under a self-insurance plan. Under an excess claims insurance policy, the Authority's liability is limited, on a calendar year basis, to aggregate claims per participant of \$110,000. A year end accrual of potential outstanding claims as of the last day of the fiscal year was estimated at three times the average monthly claim. As reflected in the table below, the liability for claims incurred but not reported as of June 30, 2022, 2021, and 2020 was estimated to be \$1,260,807, \$1,206,878, and \$1,263,038 respectively, and is included in accounts payable and accrued expenses on the accompanying Statements of Net Position.

	2022	2021	2020
Estimated outstanding claims liability at beginning of fiscal year	\$ 1,206,878	\$ 1,263,038	\$ 1,292,165
Employee and Employer portion of premiums withheld	4,808,217	4,375,117	5,035,450
Payments to Third Party Administrator	 (4,754,288)	(4,431,277)	(5,064,577)
Estimated outstanding claims liability at end of fiscal year	\$ 1,260,807	\$ 1,206,878	\$ 1,263,038

For fiscal year 2023, the Authority estimates its share of claims to be approximately \$5.3 million. This estimate represents the Authority's best estimate; however, actual claims and judgments may vary from year to year.

Additionally, the Authority maintains its longstanding commitment of staffing and budget resources to both a regulatory affairs program and a safety loss and control program. The goal of these programs is to proactively manage and maintain its operations and work sites in the safest possible manner for the Authority's employees and its customers.

#### **12 Commitments**

#### (a) Fairfax Water

The Authority has several agreements with Fairfax Water, which collectively reserve treated water capacity of 62.4 MGD, representing 92% of the Authority's total water capacity. These agreements allow for the purchase of additional capacity, if available, based on actual construction and administrative costs negotiated at the time of sale. In May 2017, the Authority purchased an additional 5 MGD of water capacity for approximately \$26.6 million. Capacity payments are included in property, plant and equipment on the accompanying Statements of Net Position, and are amortized over the estimated useful life from the inception of the agreement, ranging between 40-50 years.

Fairfax Water provides water to the Service Authority from two water treatment plants, the Corbalis Water Treatment Plant in Herndon, Virginia, which withdraws water from the Potomac River and the Griffith Water Treatment Plant in Lorton, Virginia, which withdraws water from the Occoquan Reservoir. The Authority participates in construction and expansion costs of the two water treatment plants based on the Authority's purchased capacity. Amount expended for construction, expansion and capacity in fiscal year 2021, were \$1.7 million, with total payments to date as of June 30, 2022 of \$130.2 million.

The Authority also has agreements with Fairfax Water for the reservation of transmission main capacity. Under these agreements, the Authority is required to make equal monthly payments for varying terms that range up to 420 months (35 years) from the date of the initial payment. Payments made in fiscal years 2022 and 2021 were approximately \$700,000 for each year. Future payments due to Fairfax Water for these agreements are as follows:

Years Ending June 30,	Amount
2023	\$ 668,006
2024	668,006
2025	668,006
2026	668,006
2027	668,006
2028-2030	 2,672,024
Total	\$ 6,012,054

In addition, Fairfax Water charges the Authority a rate per thousand gallons of water delivered. The rate is based on Fairfax Water's operation, maintenance, and general and administrative costs divided by total consumption billed. Purchased water expenditures related to Fairfax Water for fiscal years 2022 and 2021 were approximately \$11.8 million and \$11.3 million, respectively.

#### (b) City of Manassas

The Authority has a water capacity and service agreement with the City of Manassas which effectively reserves 5 MGD of treated water capacity for the Authority at the City's water treatment facility at Lake Manassas, which represents approximately 7% of the Authority's total available purchased water capacity. The agreement also allows for the use of an additional 2 MGD by either party, if needed. The Authority is obligated to pay the City's wholesale rate for purchases at the water treatment facility and is obligated to pay the City's wholesale rate plus a wheeling charge for water taken at other delivery points. The City's wholesale rate consists of fixed and variable costs per the agreement. The initial amount paid by the Authority to the City for the 5 MGD of capacity was \$8,131,846. This amount is included in property, plant and equipment as advance capacity payments on the accompanying Statements of Net Position, and is being amortized through the year 2039 on a straight-line basis.

The Authority also shares in the cost of certain capital improvements based on the Authority's reserved capacity as a percentage of the total permitted capacity at the City's water treatment facility. The Authority has made payments for capital costs during the fiscal years ended June 30, 2022 and 2021 in the amount of \$762,000 and \$134,000, respectively. These payments are included in property, plant and equipment as advance capacity payments on the accompanying Statements of Net Position, and are being amortized over 40 years on a straight-line basis.

The cost of water purchased by the Authority from the City during fiscal years 2022 and 2021 was approximately \$1.7 million and \$1.9 million, respectively.

#### (c) City of Manassas Park

In December 2008, pursuant to the terms of a Water Capacity Purchase and Service Agreement (the Agreement), the Authority sold 1.4 MGD of wholesale water capacity to the City of Manassas Park for \$9,870,000. The rate for water service will be based on the wholesale rate charged by Fairfax Water to the Authority, plus other charges and costs which are defined in the Agreement.

#### (d) Prince William County Credit

Effective December 31, 2012, the Authority entered into an Amendment to the Modification and Assumption Agreement with the County (the Amendment), whereby the Authority would assume responsibility for paying the County's existing obligation towards UOSA debt service. Under the terms of the Amendment, the Authority established a non-cash credit for the benefit of the County in the amount of \$13,782,300, representing previous payments made by the County toward UOSA debt service under existing agreements.

The County may use this non-cash credit to purchase water and sewer availability, or any asset of the Authority offered for sale by the Authority. The non-cash credit will be reduced by the value of any such sale. In order to access

the non-cash credit, the County must provide to the Authority a duly adopted resolution of the BOCS authorizing the application of the non-cash credit for a specific transaction. To date, the County has used \$4,342,248 of the non-cash credit toward availability fees for various County facilities.

An agreement was executed for the sale of a part of the 57.86 acres of land (the Occoquan Forest site) from the Authority to the County for \$2,000,000, to be paid by the County using the non-cash credit. The facility has been fully decommissioned in accordance with state and federal requirements and the sale was completed per the terms of the sale agreement, in fiscal year 2022.

As of June 30, 2022, the remaining amount of the non-cash credit available to the County is \$9,440,052, of which \$601,940 has been approved by the BOCS for use in earmarked projects.

#### (e) Virginia Department of Transportation (VDOT)

VDOT requires all entities performing work in the VDOT right-of-way to post a continuous bond or surety to insure compliance with the conditions of land use permits that are issued by VDOT and to guarantee the satisfactory performance of the work.

Through its commercial insurance policies, the Authority meets VDOT's requirements for liability coverage for personal injury, property damage and lawsuits that may arise from the work performed under the permits.

#### (f) Other Commitments

The Authority has entered into commitments for capital projects and operating expenditures totaling approximately \$77.1 million as of June 30, 2022. These commitments are goods and services ordered, but not yet received as of June 30, 2022.

#### (g) Federal and State-Assisted Programs

The Authority has received proceeds from several federal and state grant programs. Periodic audits of these grants are required and certain costs may be questioned as not being appropriate expenditures under the grant agreements. Such audits could result in the refund of grant monies to the grantor agencies. Management believes that any required refunds will be immaterial. Based upon past experience, no provision has been made in the accompanying financial statements for the refund of grant monies.

#### 13 Contributions from Developers and Others

	2022	2021
Contributed Assets	\$ 23,683,518	\$ 23,648,463

Contributions from developers and governmental entities were received in the form of cash, property, water mains, sanitary sewer lines, pumping stations, fire hydrants, manholes and associated infrastructure. These amounts are reflected as income on the accompanying Statements of Revenues, Expenses and Changes in Net Position.

#### 14 Grant Revenue

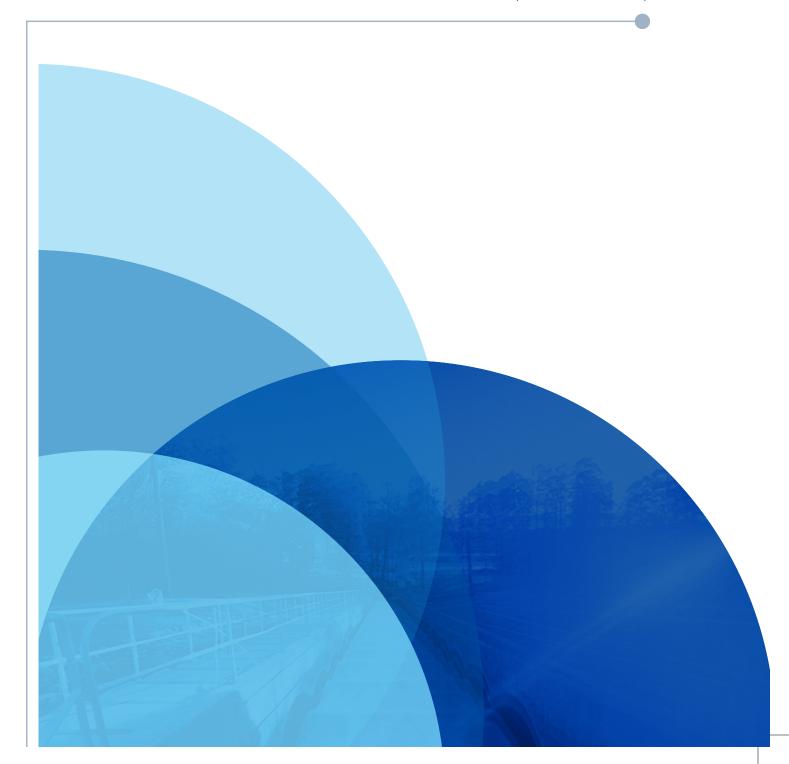
In fiscal year 2022, the Authority was awarded \$1,483,020 in Federal, State and Local Fiscal Recovery Funds (SLFRF) through the American Recovery Plan Act (ARPA) for the COVID-19 ARPA SLFRF Municipal Utility Assistance Progam. This award was used to directly assist residential customers with past-due amounts greater than 60 days outstanding as of August 31, 2021. These funds are reflected as grant revenues in the accompanying Statements of Revenues, Expenses and Change in Net Position, and the corresponding amount provided to customers is reflected as a reduction to water and sewer user charges.

#### **15 Subsequent Events**

In October 2022, the Authority was awarded an additional \$35,635 in Federal State and Local Fiscal Recovery Funds (SLFRF) through the American Recovery Plan Act (ARPA) for the COVID-19 ARPA SLFRF Municipal Utility Assistance Program. As with previous amounts received by the Authority under this program, this award will be used to directly assist residential customers with past-due amounts greater than 60 days outstanding as of August 31, 2021.

# Required Supplementary Information

(Unaudited)



# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### Schedule of Changes in Net Pension Liability (Asset) and Related Ratios - VRS

Information presented is based on the actuarial information for the plan year ended:

	Jun	e 30, 2021	Jı	une 30, 2020	Jı	une 30, 2019	Jı	ıne 30, 2018
Total Pension Liability								
Service cost	\$	2,329,050	\$	2,495,043	\$	2,328,302	\$	2,271,207
Interest		3,534,553		3,247,158		2,921,479		2,632,373
Difference between expected								
and actual experience		(560,692)		314,505		1,180,278		594,573
Changes of assumptions		1,309,374		-		1,586,517		-
Benefit payments, including refunds		(1 0 1 <del> </del>		(4 = 2 2 2 = 2)		(4 = 44 40=)		(4.474.700)
of employee contributions		(1,867,734)		(1,730,275)		(1,561,607)		(1,174,533)
Net change in total pension liability		4,744,551		4,326,431		6,454,969		4,323,620
Total pension liability - beginning		53,297,611		48,971,180		42,516,211		38,192,591
Total pension liability - ending (a)	\$	58,042,162	\$	53,297,611	\$	48,971,180	\$	42,516,211
Plan Fiduciary Net Position								
Contributions - employer	\$	1,375,238	\$	2,497,516	\$	2,515,217	\$	2,400,611
Contributions - employee	*	1,179,892	•	1,217,590	*	1,213,286	Ψ.	1,219,540
Net investment income		13,864,083		905,149		2,903,907		2,797,714
Benefit payments, including refunds		-,,				,, -		, ,
of employee contributions		(1,867,734)		(1,730,275)		(1,561,607)		(1,174,533)
Administrative expense		(32,940)		(28,655)		(25,628)		(21,705)
Other		1,320		(1,122)		(1,872)		(2,599)
Net change in plan fiduciary net								
position		14,519,859		2,860,203		5,043,303		5,219,028
Plan fiduciary net position - beginning		49,788,203		46,928,000		41,884,697		36,665,669
Plan fiduciary net position - ending (b)	\$	64,308,062	\$	49,788,203	\$	46,928,000	\$	41,884,697
Net pension liability (asset) - ending (a) - (b)	\$	(6,265,900)	\$	3,509,408	\$	2,043,180	\$	631,514
Plan fiduciary net position as a percentage		110.000		00.400		05.000		00 540
of the total pension liability - end of year	Ċ	110.80%		93.42%		95.83%		98.51%
Covered payroll*	\$	30,358,488	\$	27,173,316	\$	28,187,573	\$	26,498,366
Net pension liability (asset) as a percentage of covered payroll		-20.64%	1	12.91%		7.25%	ı	2.38%

<sup>\*</sup> Covered payroll is the payroll on which contributions to a pension plan are based.

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years which information is available.

See accompanying notes to required supplementary information.

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### Schedule of Changes in Net Pension Liability (Asset) and Related Ratios – VRS (Continued)

Information presented is based on the actuarial information for the plan year ended:

	Jı	une 30, 2017	Jı	une 30, 2016	Jı	ıne 30, 2015	Jι	ıne 30, 2014
Total Pension Liability								
Service cost	\$	2,309,644	\$	2,355,421	\$	2,242,139	\$	2,206,642
Interest		2,461,107		2,177,586		1,865,113		1,647,355
Difference between expected								
and actual experience		(22,744)		728,798		1,273,190		-
Changes of assumptions		(1,060,533)		-		-		-
Benefit payments, including refunds of employee contributions	_	(1,307,115)		(1,115,876)		(717,210)		(769,149)
Net change in total pension liability		2,380,359		4,145,929		4,663,232		3,084,848
Total pension liability - beginning	_	35,812,232		31,666,303		27,003,071		23,918,223
Total pension liability - ending (a)	\$	38,192,591	\$	35,812,232	\$	31,666,303	\$	27,003,071
Plan Fiduciary Net Position								
Contributions - employer	\$	2,243,187	\$	2,179,687	\$	2,102,230	\$	2,153,139
Contributions - employee	•	1,068,016	•	1,031,701	•	1,004,829	•	977,870
Net investment income		3,924,943		578,136		1,202,198		3,169,360
Benefit payments, including refunds								
of employee contributions		(1,307,115)		(1,115,876)		(717,210)		(769,149)
Administrative expense		(20,334)		(15,995)		(13,734)		(14,928)
Other		(3,583)		(223)		(261)		167
Net change in plan fiduciary net position		5,905,114		2,657,430		3,578,052		5,516,459
Plan fiduciary net position - beginning		30,760,555		28,103,125		24,525,073		19,008,614
Plan fiduciary net position - ending (b)	\$	36,665,669	\$	30,760,555	\$	28,103,125	\$	24,525,073
Net pension liability - ending (a) - (b)	\$	1,526,922	\$	5,051,677	\$	3,563,178	\$	2,477,998
Plan fiduciary net position as a percentage of the total pension liability - end of year		96.00%		85.89%		88.75%		90.82%
Covered payroll*	\$	23,622,592	Ś	22,254,970	Ś	21,098,905	Ś	19,834,457
Net pension liability as a	Ą	23,022,392	Ą	ZZ,ZJ4,7/U	Ą	Z1,030,303	Ş	19,004,407
percentage of covered payroll		6.46%	ı	22.70%	,	16.89%		12.49%

<sup>\*</sup> Covered payroll is the payroll on which contributions to a pension plan are based.

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years which information is available.

See accompanying notes to required supplementary information.

# PINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### **Schedule of Employer Contributions**

For the Year Ended	Contractually Required Contribution	Contribution to the Con Required Co	tractually	Defic	Contribution Covered Deficiency Employee (excess) Payroll			Contribu a Percer Covered	ntage of
June 30, 2022	\$ 1,421,751	\$ 1	,421,751	\$	-	\$	30,358,488	4.0	68%
June 30, 2021	1,375,238	1,	375,238		-		27,863,889	4.9	94
June 30, 2020	2,497,516	2	,497,516		-		27,173,316	9.	19
June 30, 2019	2,515,217	2	,515,217		-		28,187,573	8.9	92
June 30, 2018	2,400,611	2	400,611		-		26,498,366	9.0	06
June 30, 2017	2,243,187	2	243,187		-		23,622,592	9.	50
June 30, 2016	2,179,687	2	,179,687		-		22,254,970	9.	79
June 30, 2015	2,102,230	2	102,230		-		21,098,905	9.9	96
June 30, 2014	2,153,139	2	,153,139		-		19,834,457	10.8	86

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years which information is available.

See accompanying notes to required supplementary information.

#### PRINCE WILLIAM COUNTY SERVICE AUTHORITY

#### **Notes to Required Supplementary Information**

#### For the Year Ended June 30, 2022

#### 1. Changes of Benefit Terms

There have been no significant changes to the VRS benefit provisions since the prior actuarial valuation.

#### 2. Changes of Assumptions

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016, through June 30, 2020, except the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumption as a result of the experience study and VRS Board action are as follows:

- Updated to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
- Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age
- Adjusted withdrawal rates to better fit experience at each age and service year through 9 years of service
- Discount rate unchanged at 6.75%
- Disability rates; no change
- Salary scale; no change
- There are no assets accumulated in a trust that meets the criteria of GASB P22.101 or P52.101 to pay related benefits for VRS

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### Schedule of Changes in Total OPEB Liability and Related Ratios - Health Benefits

	Ju	ne 30, 2021	Ju	ıne 30, 2020	Ju	ıne 30, 2019	Ju	ne 30, 2018	Ju	ine 30, 2017
Total OPEB Liability										
Service cost	\$	712,861	\$	710,981	\$	609,660	\$	574,033	\$	592,753
Interest		321,566		325,784		476,771		503,012		460,115
Effect of economic/demographic gains or losses		702,031		-		611,750		-		-
Effect of assumption changes or other inputs		(1,981,127)		52,383		203,685		372,635		(367,046)
Benefit payments		(1,005,769)		(884,878)		(880,214)		(841,386)		(790,802)
Net change in total OPEB liability		(1,250,438)		204,270		1,021,652		608,294		(104,980)
Total OPEB liability - beginning		14,674,612		14,470,342		13,448,690		12,840,396		12,945,376
Total OPEB liability - ending	\$	13,424,174	\$	14,674,612	\$	14,470,342	\$	13,448,690	\$	12,840,396
Total OPEB liability as a percentage of covered-employee payroll		48.18%		54.00%		51.34%		50.75%		54.36%
Covered-employee payroll	\$	27,863,889	\$	27,173,316	\$	28,187,573	\$	26,498,366	\$	23,622,592

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years which information is available.

See accompanying notes to required supplementary information.

#### PRINCE WILLIAM COUNTY SERVICE AUTHORITY

#### **Notes to Required Supplementary Information**

#### For the Year Ended June 30, 2022

#### 1. Changes of Benefit Terms

There have been no actuarially material changes to the OPEB Plan benefit provisions since the prior actuarial valuation.

#### 2. Changes of Assumptions

The following changes in actuarial assumptions were made effective June 30, 2021:

- The assumed rates of retirement, mortality, withdrawal, and disability were based primarily on the 4-year experience study performed by VRS. This study examined actual VRS experience over the four-year period ending June 30, 2016. The demographic assumptions recommended as a result of this study were adopted by the VRS Board of Trustees on April 26, 2017.
- o The pre-Medicare healthcare trend assumption was changed from 4.90% in fiscal 2021, 5.30% in fiscal 2022, 5.27% in fiscal 2023, then grading to an ultimate rate of 4.00% in fiscal 2074 to 3.10% for fiscal 2021, 5.40% for fiscal 2022, 5.10% for fiscal 2023, then grading to an ultimate rate of 3.90% for fiscal 2073 and later. These rates are consistent with information from the Getzen Trend Model, Milliman's Health Costs Guidelines™. The healthcare trend assumptions include the impact of the Further Consolidated Appropriations Act, 2020, which became law on December 20, 2019. This law repeals the Cadillac Tax completely and removes the Health Insurer Fee permanently beginning in 2021.
- Discount rate decreased from 2.21% to 2.16% (based on the Bond Buyer General Obligation 20-Bond Municipal Index as of June 30, 2021).
- There are no assets accumulated in a trust that meets the criteria of GASB P22.101 or P52.101 to pay related benefits for OPEB

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### Schedule of Employer's Share of Net OPEB Liability - GLI Program

For the Year Ended	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
Employer's proportion of the Net GLI OPEB Liability	0.124%	0.133%	0.128%	0.133%	0.128%
Employer's proportionate share of the net GLI OPEB liability Employer's covered payroll	\$ 1,449,285 27,863,889				
Employer's proportionate share of the net GLI OPEB liability as a percentage of its covered payroll	5.2%	7.8%	7.7%	7.4%	7.7%
Plan fiduciary net position as a percentage of the total GLI OPEB liability	67.45%	52.64%	52.00%	51.22%	48.86%

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years for which information is available.

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### **Schedule of Employer Contributions**

For the Year Ended	Contractually Required Contribution	d the Contractually Required Deficien		ency	Covered Payroll	Contributions as a Percentage of Covered Payroll	
June 30, 2022	\$ 146,680	\$	146,680	\$	-	\$ 30,358,488	0.48%
June 30, 2021	137,760		137,760		-	27,863,889	0.49
June 30, 2020	137,720		137,720		-	27,173,316	0.51
June 30, 2019	136,520		136,520		-	28,187,573	0.48
June 30, 2018	127,971		127,971		-	26,498,366	0.48
June 30, 2017	116,567		116,567		-	23,622,592	0.49

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years for which information is available.

See accompanying notes to required supplementary information.

#### PRINCE WILLIAM COUNTY SERVICE AUTHORITY

#### **Notes to Required Supplementary Information**

#### For the Year Ended June 30, 2022

#### 1. Changes of Benefit Terms

There have been no actuarially material changes to the GLI benefit provisions since the prior actuarial valuation.

#### 2. Changes of Assumptions

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016, through June 30, 2020, except the change in discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumption as a result of the experience study and VRS Board action are as follows:

- Updated mortality rates to PUB2010 public sector mortality tables
- Adjusted retirement rates; Plan 1 adjusted to better fit experience; set separate rates for Plan 2/Hybrid based on experience, changed final retirement age from 75 to 80 for all
- Adjusted withdrawal rates to better fit experience at each year age and service year through 9 years of service
- Discount rate was unchanged at 6.75%
- Disability rates; no change
- Salary scale; no change
- There are no assets accumulated in a trust that meets the criteria of GASB P22.101 or P52.101 to pay related benefits for GLI

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### Schedule of Changes in Total OPEB Liability and Related Ratios - HIC Program

	Jur	ne 30, 2021	Ju	ne 30, 2020	Ju	ne 30, 2019	Ju	ne 30, 2018	Ju	ne 30, 2017
Total HIC OPEB Liability										
Service cost	\$	18,094	\$	19,827	\$	19,224	\$	19,982	\$	21,939
Interest		45,533		42,342		38,101		35,302		35,563
Difference between actual and										
expected experience		(39,227)		(979)		36,748		26,024		-
Changes of assumptions		5,247		-		14,536		-		(24,831)
Benefit payments		(14,534)		(13,305)		(37,946)		(44,708)		(28,085)
Net change in total HIC OPEB liability		15,113		47,885		70,663		36,600		4,586
Total HIC OPEB liability - beginning		681,821		633,936		563,273		526,673		522,087
Total HIC OPEB liability - ending (a)	\$	696,934	\$	681,821	\$	633,936	\$	563,273	\$	526,673
Plan Fiduciary Net Position						-				
Contributions - employer	\$	35,981	\$	36,753	\$	36,426	\$	43,908	\$	40,004
Net investment income		109,011		7,571		22,663		23,144		33,703
Benefit payments, including refunds										
of employee contributions		(14,534)		(13,305)		(37,946)		(44,708)		(28,085)
Administrative expense		(1,354)		(767)		(488)		(559)		(566)
Other		-		(3)		(26)		(1,635)		1,635
Net change in plan fiduciary net										
position		129,104		30,249		20,629		20,150		46,691
Plan fiduciary net position - beginning		401,891		371,642		351,013		330,863		284,172
Plan fiduciary net position - ending (b)	\$	530,995	\$	401,891	\$	371,642	\$	351,013	\$	330,863
Net HIC OPEB liability - ending (a) - (b)	\$	165,939	\$	279,930	\$	262,294	\$	212,260	\$	195,810
Plan fiduciary net position as a percentage										
of the total HIC OPEB liability - end of year		76.19%		58.94%		58.62%		62.32%		62.82%
Covered payroll *	\$	27,863,889	\$	27,173,316	\$	28,187,573	\$	26,498,366	\$	23,622,592
Total HIC OPEB liability as a percentage										
of covered-employee payroll		2.50%		2.51%		2.25%		2.13%		2.23%

<sup>\*</sup>Covered payroll is the payroll on which contributions to a pension plan are based.

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years for which information is available.

See accompanying notes to required supplementary information.

# PRINCE WILLIAM COUNTY SERVICE AUTHORITY Required Supplementary Information (Unaudited)

#### **Schedule of Employer Contributions**

For the Year Ended	Required the Contractually Defici				,		Covered Payroll	Contributions as a Percentage of Covered Payroll	
June 30, 2022	\$	38,284	\$	38,284	\$	-	\$	30,358,488	0.13%
June 30, 2021		35,981		35,981		-		27,863,889	0.13
June 30, 2020		36,753		36,753		-		27,173,316	0.14
June 30, 2019		36,426		36,426		-		28,187,573	0.13
June 30, 2018		43,908		43,908		-		26,498,366	0.17
June 30, 2017		40,004		40,004		-		23,622,592	0.17

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years for which information is available.

See accompanying notes to required supplementary information.

#### PRINCE WILLIAM COUNTY SERVICE AUTHORITY

#### **Notes to Required Supplementary Information**

#### For the Year Ended June 30, 2022

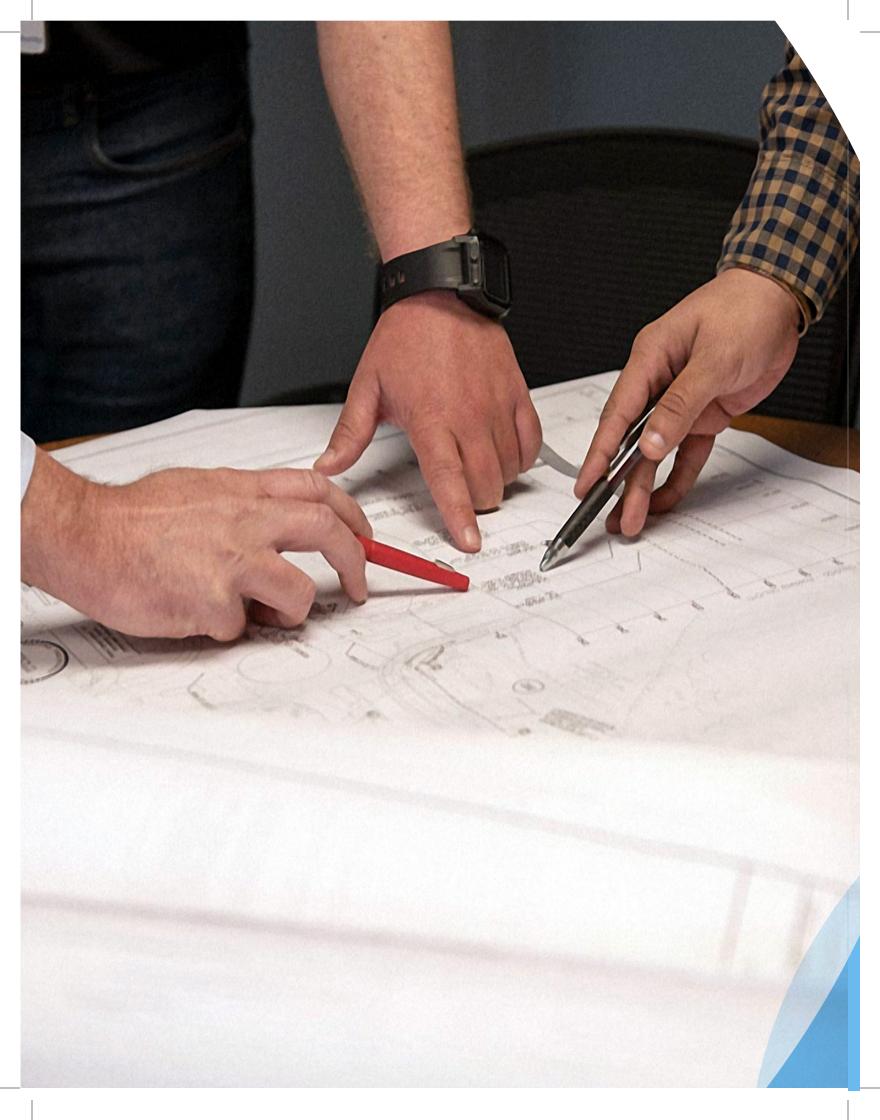
#### 1. Changes of Benefit Terms

There have been no actuarially material changes to the HIC benefit provisions since the prior actuarial valuation.

#### 2. Changes of Assumptions

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016, through June 30, 2020, except the change in discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumption as a result of the experience study and VRS Board action are as follows:

- Updated mortality table to PUB2020 public sector mortality tables
- o Adjusted retirement rates to better fit experience; changed final retirement age from 75 to 80
- o Adjusted withdrawal rates to better fit experience at each year age and service year
- Discount rate unchanged at 6.75%
- There are no assets accumulated in a trust that meets the criteria of GASB P22.101 or P52.101 to pay related benefits for HIC



# STATISTICAL SECTION

(Unaudited)

# STATISTICAL SECTION

(UNAUDITED)

This section of the Authority's ACFR presents detailed information to provide a context for understanding what the information in the financial statements, notes to financial statements and required supplementary information says about the Authority's overall financial health.



#### **Financial Trends**

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#### **Financial Trends**

Financial trend information is intended to assist users in understanding how the Authority's financial position has changed over time. The tables which follow disclose ten years of financial data.

Table 1 Condensed Statements of Net Position – Last Ten Fiscal Years (in thousands)

Assets and Deferred	2022		2021		2000		0010		0010+		00174		0016		2015**		0044444		0010
Outflows of Resources		2022	2021		2020		2019		2018*		2017*	-	2016		2015**	2	2014***		2013
Current assets	\$	219,120	\$ 262,289	\$	254,461	\$	336,077	\$	254,853	\$	154,708	\$	129,473	\$	149,886	\$	130,640	\$	164,369
Non-current assets	1	1,318,341	1,262,100		1,243,198		1,147,718		1,211,978		1,300,963	1	1,289,955	•	1,243,984		1,234,393	•	1,169,506
Deferred outflows of resources		7,250	8,477		9,219		6,808		6,214		7,507		6,587		5,847		4,675		5,182
Total assets and deferred outflows of resources	\$	1,544,711	\$ 1,532,866	\$	1,506,878	\$	1,490,603	\$	1,473,045	\$	1,463,178	\$	1,426,015	\$	1,399,717	\$	1,369,708	\$	1,339,057
Liabilities and Deferred Inflows of Resources																			
Current liabilities	\$	31,501	\$ 33,032	\$	31,277	\$	30,471	\$	27,205	\$	24,756	\$	26,572	\$	24,403	\$	25,917	\$	21,436
Long-term liabilities		97,991	112,503		121,988		129,471		138,954		152,100		148,658		156,032		161,962		169,624
Deferred inflows of resources		18,847	550		1,221		1,544		1,989		-		576		1,405		-		-
Total liabilities and deferred inflows of resources		148,339	146,085		154,486		161,486		168,148		176,856		175,806		181,840		187,879		191,060
Net Position																			
Net investment in capital assets	1	1,000,622	966,504		949,098		936,479		898,873		882,957		840,189		806,629		748,917		723,758
Restricted		16,693	18,096		21,268		18,229		16,750		17,204		16,556		15,954		19,060		20,281
Unrestricted		379,057	402,181		382,026		374,409		389,274		386,161		393,464		395,294		413,852		403,958
Total net position	1	1,396,372	1,386,781		1,352,392		1,329,117		1,304,897		1,286,322	1	,250,209		1,217,877		1,181,829		1,147,997
Total liabilities, deferred inflows of resources and net position	\$	1,544,711	\$ 1,532,866	\$	1,506,878	\$	1,490,603	\$	1,473,045	\$	1,463,178	\$	1,426,015	\$	1,399,717	\$	1,369,708	\$	1,339,057

<sup>\*</sup> The Authority implemented GASB Statement 75 in fiscal year 2018, which changed the manner certain items are reported. Data shown for fiscal year 2017 forward is reported in accordance with GASB 75. Prior years were not changed.

Source: Prince William County Service Authority.

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<sup>\*\*</sup> The Authority implemented GASB Statement 68 in fiscal year 2015, which changed the manner certain items are reported. Data shown for fiscal year 2015 forward is reported in accordance with GASB 68. Prior years were not changed.

<sup>\*\*\*</sup> The Authority implemented GASB Statement 65 in fiscal year 2014, which changed the manner certain items are reported. Data shown for fiscal years 2013 forward are reported in accordance with GASB 65. Prior years were not changed.

Table 2 Condensed Statements of Revenues, Expenses, and Changes in Net Position – Last Ten Fiscal Years (in thousands)

	2022	2021	2020	2019	2018*	2017	2016	2015**	2014	2013
Operating revenues										
Water and sewer	A 100 (E1	4 100100	A	A 444 470	A 444.60=		A 405007	4 100 011	A 400 F00	
user charges	\$ 123,651	\$ 120,193	\$ 116,694	\$ 111,479	\$ 111,625		\$ 105,937	\$ 102,061	\$ 100,592	
Other	2,273	2,343	2,460	2,351	2,134	2,655	2,513	2,380	2,640	2,978
Total operating revenues	125,924	122,536	119,154	113,830	113,759	114,551	108,450	104,441	103,232	101,097
Non-operating revenues										
Availability fees	21,225	36,390	28,996	21,873	27,778	36,617	26,471	33,183	30,892	41,722
Investment and										
other income	(3,850)	2,929	11,359	10,221	3,636	1,428	5,288	3,681	3,325	2,191
Grant revenues	1,483	1,502	5	-	-	-	-	-	-	823
Contributions from										
developers/others	23,684	23,648	13,873	27,083	15,793	22,913	21,794	18,685	16,364	13,422
Equity interest in UOSA	(7,920)	(4,836)	(4,043)	(7,202)	(7,197)	822	(8,058)	(3,808)	(5,413)	(1,629)
Total non-operating										
revenues	34,622	59,633	50,190	51,975	40,010	61,780	45,495	51,741	45,168	56,529
Total revenues	160,546	182,169	169,344	165,805	153,769	176,331	153,945	156,182	148,400	157,626
Operating expenses										
Personnel services	39,569	38,988	39,352	38,089	36,477	32,914	30,561	29,314	28,757	27,505
Purchased resources	27,543	27,232	28,031	25,336	24,376	23,429	22,972	21,244	21,145	22,121
Contractual services	11,438	11,322	9,561	10,304	9,638	8,698	8,668	7,157	6,487	5,513
Materials and supplies	6,692	5,663	5,650	6,247	5,996	4,857	4,609	4,715	4,818	4,199
Other	6,805	6,654	6,708	6,038	5,166	6,203	5,110	5,317	4,900	4,927
Total operating	00.047	00.050	00.000	06.014	01.650	76 101	71.000	67747	66107	64065
expenses	92,047	89,859	89,302	86,014	81,653	76,101	71,920	67,747	66,107	64,265
Non-operating expenses										
Depreciation/amortization	44,261	43,262	42,261	40,990	38,297	38,357	34,716	33,103	31,688	30,810
Interest expense	2,512	2,891	3,152	3,262	3,718	3,969	4,221	5,310	5,703	12,275
Payments for UOSA debt service	11,467	11,100	10,686	10,707	10,802	10,389	10,030	10,491	10,343	9,576
Other	668	668	668	612	724	668	726	726	727	727
Total non-operating										
expenses	58,908	57,921	56,767	55,571	53,541	53,383	49,693	49,630	48,461	53,388
Total expenses	150,955	147,780	146,069	141,585	135,194	129,484	121,613	117,377	114,568	117,653
Change in net position	9,591	34,389	23,275	24,220	18,575	46,847	32,332	38,805	33,832	39,973
Total net position, beginning of year	1,386,781	1,352,392	1,329,117	1,304,897	1,286,322	1,239,475	1,217,877	1,179,072	1,147,997	1,108,024
Total net position, end of year	\$1,396,372	\$1,386,781	\$1,352,392	\$ 1,329,117	\$1,304,897	\$ 1,286,322	\$1,250,209	\$ 1,217,877	\$ 1,181,829	\$ 1,147,997

<sup>\*</sup> The Authority implemented GASB Statement 75 in fiscal year 2018, which required a restatement of beginning Net Position effective July 1, 2016.

STATISTICAL SECTION TABLE 2

<sup>\*\*</sup> The Authority implemented GASB Statement 68 in fiscal year 2015, which required a restatement of beginning Net Position effective July 1, 2014. Source: Prince William County Service Authority.

## **Revenue Capacity Information**

Revenue capacity information is provided to assist users in understanding the factors affecting the Authority's ability to generate sources of revenue. In setting the user rate and availability fee structure, the Authority's general practice has been to cover projected operating costs with user rates and to cover projected capital improvement costs with availability fees. That practice generally allows growth in use of the Authority's services to pay for the additional costs of expanding the Authority's system capacity. The tables below set forth historical user and availability fees for a typical customer over the last ten years. For a complete schedule of all rates and fees, please contact the Authority's Customer Service Department at 703-335-7950 or mail your request to PWCSA, Customer Service Department, PO Box 2266, Woodbridge, Virginia 22195-2266.

### Table 3 Water and Wastewater Charges – Last Ten Fiscal Years (in dollars)

User fees consist of a fixed monthly service charge, plus a commodity charge for water and sewer service. The monthly service fee is designed to recover fixed administrative costs and is based on meter size and the type of service being provided (water and/or sewer). Commodity charges cover the cost of purchased water and sewage treatment as well as the cost of operation and maintenance for the Service Authority's lines, pumping stations and water storage tanks. Commodity rates are based on the revenue class (Residential or Commercial) and the type of service being provided, and are billed based on metered water usage. Starting in the fiscal year ended June 30, 2013 rate increases were effective on January 1.

		Commodity	y Charges (	1)	Service Charges (2)								
	R	esidential	Co	Commercial			3/4 inch		1 inch				
Fiscal Year	Water	Wastewater	Water	Wastewater	Water		Wastewater	Water	Wastewater				
2022	\$ 3.45	\$ 6.65	\$ 3.80	\$ 7.25	\$	6.85	\$ 12.10	\$ 27.45	\$ 48.40				
2021	3.45	6.65	3.80	7.25		6.85	12.10	27.45	48.40				
2020	3.45	6.65	3.80	7.25		6.85	12.10	27.45	48.40				
2019	3.35	6.55	3.70	7.15		5.95	10.45	23.75	41.85				
2018	3.35	6.55	3.70	7.15		5.45	9.60	21.80	38.40				
2017	3.35	6.55	3.70	7.15		5.45	9.60	21.80	38.40				
2016	3.35	6.55	3.70	7.15		5.05	8.90	17.70	31.15				
2015	3.35	6.55	3.70	7.15		4.65	8.20	13.95	24.60				
2014	3.35	6.55	3.70	7.15		4.25	7.50	10.80	18.75				
2013	3.35	6.55	3.70	7.15		4.25	7.50	10.80	18.75				

<sup>(1)</sup> Commodity charges are based on 1,000 gallons of consumption.

Source: Prince William County Service Authority.

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<sup>(2)</sup> Monthly service charges are based on meter size. The two most common meter sizes are disclosed above.



#### Table 4 Availability Fees – Last Ten Fiscal Years (in dollars)

All new customers connecting to the system are required to pay an availability fee before obtaining a building permit from Prince William County. Availability fees are used to fund long-term commitments associated with future system capacity and costs associated with expanding the system to serve new customers. Availability fees are based on the type of service (water and/or sewer) and the amount of monthly capacity purchased. Through the fiscal year ended June 30, 2013, any rate increases were effective September 1 of the fiscal year. Starting in the fiscal year ended June 30, 2013 rate increases were effective on January 1.

		Residential (1)		Commercial (2)
Fiscal Year	Water	Wastewater	Total	Water Wastewater Total
2022	\$ 4,600	\$ 10,800	\$ 15,400	\$ 18,400 \$ 43,200 \$ 61,600
2021	4,600	10,800	15,400	18,400 43,200 61,600
2020	4,600	10,800	15,400	18,400 43,200 61,600
2019	4,600	10,800	15,400	18,400 43,200 61,600
2018	4,600	10,800	15,400	18,400 43,200 61,600
2017	4,600	10,800	15,400	18,400 43,200 61,600
2016	4,600	10,800	15,400	18,400 43,200 61,600
2015	4,600	10,800	15,400	18,400 43,200 61,600
2014	4,600	10,800	15,400	18,400 43,200 61,600
2013	4,600	10,800	15,400	18,400 43,200 61,600

<sup>(1)</sup> Residential availability fee disclosed above is based on a 3/4" meter size.

Source: Prince William County Service Authority.

#### Table 5 Ten Principal Customers – Current Year and Nine Years Ago

Principal rate payer information is useful to determine concentrations in the source of revenues. This information provides predictive value of the Authority's economic condition if, for example, any major customers were to encounter financial difficulties which impact their use of Authority services. Over the past ten years, no single customer accounted for more than 2% of revenues from water and sewer user charges.

Total water and sewer user charge revenu	ues (in thousands)	\$12	23,651	\$98,119			
		2	022	2013			
Name	Туре	Amount	% of Total	Amount	% of Total		
Prince William County Schools	Schools	\$ 1,695	1.37%	\$ 1,382	1.41%		
City of Manassas Park	Utility	1,163	0.94%	597	0.61%		
Amazon	Data Centers	895	0.72%	746	0.76%		
Potomac Club	Housing	773	0.63%	-	-		
Westgate Apartments	Housing	638	0.52%	493	0.50%		
Summerland Heights Apartments	Housing	570	0.46%	445	0.45%		
Navy Military Housing	Housing	540	0.44%	406	0.41%		
Potomac Mills Mall	Shopping Mall	471	0.38%	340	0.35%		
Wellington Apartments	Housing	464	0.38%	-	-		
Sentara Potomac Hospital	Hospital	443	0.36%	340	0.35%		
INOVA Laundry Facility	Hospital Laundry	-	-	471	0.48%		
Dominion Energy	Utility	-	-	359	0.37%		

Source: Prince William County Service Authority.

STATISTICAL SECTION TABLES 4, 5

<sup>(2)</sup> Commercial availability fee disclosed above is based on a 1" meter size.

## **Debt Capacity Information**

Debt capacity information is intended to assist users in understanding the Authority's debt burden and ability to issue additional debt. The ultimate guarantors of Authority debt are its customers, however, availability fees are designed to recover the cost of debt associated with expansion.

Table 6 Outstanding Debt Coverage – June 30, 2022

	VR	A Loans Paya	ble		F	Revenue Bond	ls			Total			
Fiscal Year	Outstanding Debt	Number of Customers	3		Outstanding Debt	Number of Customers		ebt Coverage per Customer	Outstanding Debt		Debt Coverage per Customer		
2022	\$ 40,842,435	96,814	\$ 421.86	\$	47,124,938	96,814	\$	486.76	\$	87,967,373	\$	908.62	
2021	47,404,853	95,805	494.81		50,766,312	95,805		529.89		98,171,165		1,024.70	
2020	53,914,819	94,632	569.73		54,348,671	94,632		574.32		108,263,490		1,144.05	
2019	60,247,198	93,498	644.37		57,877,028	93,498		619.02		118,124,226		1,263.39	
2018	66,460,114	92,654	717.29		61,342,976	92,654		662.07		127,803,090		1,379.36	
2017	72,427,732	90,892	796.85		64,777,622	90,892		712.69		137,205,354		1,509.54	
2016	78,225,583	89,235	876.62		68,182,133	89,235		764.07		146,407,716		1,640.69	
2015	83,858,628	88,057	952.32		67,155,000	88,057		762.63		151,013,628		1,714.95	
2014	89,268,062	87,061	1,025.35		69,550,000	87,061		798.87		158,818,062		1,824.22	
2013	94,428,709	85,991	1,098.12		71,740,000	85,991		834.27		166,168,709		1,932.40	

Source: Prince William County Service Authority.

### Table 7 Pledged Revenue Coverage - Last Ten Fiscal Years (in thousands)

Senior debt consists of Revenue and Refunding bond issuances which are backed by pledged revenues and, senior debt includes financing agreements entered into with the Virginia Resources Authority. Revenues mean all revenues, receipts and other income derived from the ownership or operation of the Authority, including, without limitation, availability fees and any investment earnings. Through fiscal year 2007, subordinate debt consisted of financing agreements entered into with the VRA.

	2	2022	_2	2021	2020	2019	2018	2017	_ :	2016	_ :	2015	2014	2013
Pledged revenues	\$	143,298	\$	161,855	\$ 159,510	\$ 145,924	\$ 145,173	\$ 152,595	\$	140,209	\$	141,305	\$ 137,450	\$ 145,010
Senior debt (1) Principal and interest requirements	\$	7,885	\$	7,885	\$ 7,899	\$ 7,885	\$ 7,927	\$ 7,927	\$	7,927	\$	8,256	\$ 8,544	\$ 9,588
Senior debt revenue coverage		18.17		20.53	20.19	18.51	18.31	19.25		17.69		17.12	16.09	15.12
Subordinate debt (1) Principal and interest requirements	\$	-	\$	-	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$ -	\$ -
Total debt revenue coverage		18.17		20.53	20.19	18.51	18.31	19.25		17.69		17.12	16.09	15.12

<sup>(1)</sup> Effective with the closing of a new financing agreement with VRA on June 28, 2007, all of the outstanding balances with VRA became parity with the outstanding Revenue and Refunding Bonds debt.

See Table 8 and Table 9 for revenue coverage tests as defined by the Revenue Covenant and associated definitions within the Master Bond Indenture. Source: Prince William County Service Authority.

TABLES 6, 7 STATISTICAL SECTION



#### Table 8 Revenue Bond Coverage, Test 1 - Last Ten Fiscal Years (in thousands)

This coverage test measures whether Net Revenues Available for Debt Service are sufficient to cover 1.2 times (or 120%) of annual debt service requirements. The Authority consistently exceeds the required coverage ratio. Calculations are based on the Revenue Covenant and associated definitions within the Authority's Master Bond Indenture.

Fiscal Year	Gross Revenues (1)	Operating Expenses (2)	Net Revenues Available for Debt Service	 2 Times Senior Debt Service equirements (3)	Coverage (1.0 Req'd)	
2022	\$ 143,298	\$ 104,182	\$ 39,116	\$ 9,462	4.13	
2021	161,855	101,629	60,226	9,462	6.37	
2020	159,510	100,656	58,854	9,479	6.21	
2019	145,924	97,334	48,590	9,462	5.14	
2018	145,173	93,178	51,995	9,512	5.47	
2017	152,595	87,158	65,437	9,512	6.88	
2016	140,209	82,677	57,532	9,512	6.05	
2015	141,305	78,965	62,340	9,907	6.29	
2014	137,450	77,177	60,273	10,253	5.88	
2013	145,010	74,567	70,443	11,506	6.12	

<sup>(1)</sup> Gross revenues include all revenue categories except contributions from developers, funds received from grants and equity in earnings of UOSA.

Source: Prince William County Service Authority.

#### Table 9 Revenue Bond Coverage, Test 2 - Last Ten Fiscal Years (in thousands)

The Authority is required to meet at least one of the two coverage ratios reported in the table below. Coverage A demonstrates the Authority's ability to withstand a 50% reduction of Availability Fees and maintain Adjusted Net Revenues sufficient to cover 100% of annual debt service requirements. Coverage B demonstrates the Authority's ability for Adjusted Net Revenues plus 50% of the Unrestricted Reserves (primarily cash and investments) to cover 1.5 times (or 150%) of annual debt service requirements. The Authority consistently exceeds these required coverage ratios. Calculations are based on the Revenue Covenant and associated definitions within the Master Bond Indenture.

								"Eithe	r/Or"	' Coverage Requii	ement
Fiscal Year	1	let Revenues Available for Debt Service	Less 50% Developer Charges	,	Adjusted Net Revenues	Re	Senior Debt Service equirements (2)	Coverage A (1.0 Req'd)	50 50	Adjusted Net Revenues Plus 0% Unrestricted Reserves (1)	Coverage B (1.5 Req'd)
2022	\$	39,116	\$ 10,613	\$	28,503	\$	7,885	3.61	\$	196,247	24.89
2021		60,226	18,195		42,031		7,885	5.33		222,686	28.24
2020		58,854	14,498		44,356		7,899	5.62		212,528	26.90
2019		48,590	10,937		37,653		7,885	4.78		201,805	25.59
2018		51,995	13,889		38,106		7,927	4.81		213,518	26.94
2017		65,437	18,309		47,128		7,927	5.95		216,640	27.33
2016		57,532	13,236		44,296		7,927	5.59		213,779	26.97
2015		62,340	16,592		45,748		8,256	5.54		204,675	24.79
2014		60,273	15,446		44,827		8,544	5.25		210,613	24.65
2013		70,443	20,861		49,582		9,588	5.17		205,698	21.45

<sup>(1)</sup> Unrestricted Reserves is the unrestricted fund balance, less one month's budgeted operating expense.

Source: Prince William County Service Authority.

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<sup>(2)</sup> Operating expenses include operating expenses plus principal and interest payments on UOSA debt and payments on capacity agreements with Fairfax Water.

<sup>(3)</sup> Effective with the closing of a financing agreement with the VRA on June 28, 2007, all of the outstanding balances with the VRA become parity with the outstanding Revenue and Refunding Bonds debt. In fiscal years 2013 through 2022, the Authority made advanced payments to the Trustee toward debt service for the subsequent year.

<sup>(2)</sup> All of the outstanding balances with the VRA become parity with the outstanding Revenue and Refunding Bonds debt. In fiscal years 2013 through 2022, the Authority made advanced payments to the Trustee toward debt service for the subsequent year.

## **Demographic and Economic Information**

Demographic and economic information is intended to assist users in understanding the socio-economic environment within which the Authority operates and to provide information that facilitates comparisons of financial statement information over time.

Table 10 Prince William County Population Data — Last Ten Calendar Years

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Year	Population	Change	% Change
2022	492,576	4,440	0.9%
2021	488,136	5,932	1.2
2020	482,204	8,303	1.8
2019	473,901	7,376	1.6
2018	466,525	5,679	1.2
2017	460,846	7,104	1.6
2016	453,742	11,807	2.7
2015	441,935	10,903	2.5
2014	431,032	7,472	1.8
2013	423,560	7,574	1.4

Source: Prince William County.

Table 11 Prince William County Employment Data — Last Ten Calendar Years

Calendar Year	Civilian Labor Force	At-Place Employment	Unemployment Rate
2022	245,462(1)	130,107(2)	2.8%(1)
2021	241,803	130,075	4.0
2020	247,678	125,254	6.5
2019	250,537	133,237	2.5
2018	244,923	130,335	2.7
2017	241,599	127,892	3.4
2016	235,285	126,283	3.6
2015	232,296	122,607	4.1
2014	232,639	119,463	4.8
2013	231,198	116,645	5.1

<sup>(1)</sup> Average of monthly statistics for first half of 2022.

Source: Prince William County.

TABLES 10, 11 STATISTICAL SECTION

<sup>(2)</sup> Average of monthly statistics for first quarter of 2022.



Table 12 Prince William County Employer Data - Current Year and Nine Years Ago

The ten largest employers in Prince William County for the current year and nine years ago, respectively, are as follows:

			2022		2013
Employer	Industry	Rank	Employees	Rank	Employees
Prince William County School Board	Local Government	1	1,000 and over	1	1,000 and over
County of Prince William	Local Government	2	1,000 and over	3	1,000 and over
U.S. Department of Defense	Federal Government	3	1,000 and over	2	1,000 and over
Walmart	Private	4	1,000 and over	4	1,000 and over
Sentara Healthcare/Potomac Hospital					
Corporation	Private	5	1,000 and over	6	1,000 and over
Morale Welfare and Recreation	Federal Government	6	1,000 and over	5	1,000 and over
Wegmans Store #07	Private	7	500 to 999	7	500 to 999
Target Corporation	Private	8	500 to 999	10	500 to 999
The Fishel Company	Private	9	500 to 999	-	-
The Home Depot	Private	10	500 to 999	26	250 to 499
Minnieland Private Day School	Private	35	250 to 499	8	500 to 999
Northern Virginia Community College	State Government	11	501 to 999	9	500 to 999

Source: Prince William County.

Table 13 Prince William County Personal Wealth Data - Last Ten Calendar Years

Average Assessed Housing Value (1)

Average Assessed Housing Value (1)								
Fiscal Year		gle Family etached		Townhouse		Condominium		All Residential
2022	\$	535,600	\$	372,900	\$	299,900	\$	470,900
2021		475,000		331,800		270,900		418,600
2020		440,300		307,900		252,200		388,300
2019		423,400		292,900		240,800		372,300
2018		409,900		278,600		229,100		359,000
2017		396,400		267,200		218,700		346,600
2016		389,900		260,500		211,600		340,200
2015		381,600		252,700		205,800		332,600
2014		359,900		234,200		186,600		312,100
2013		335,300		212,000		170,100		289,100

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Source: Prince William County.

STATISTICAL SECTION TABLES 12, 13

# **Operating Information**

Operating information is intended to provide contextual information about the Authority's operations and resources to assist readers in using financial statement information to understand and assess the Authority's economic condition.

**Table 14 Operating Indicators - Last Ten Fiscal Years** 

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Number of employees	353	330	338	343	335	306	288	281	258	257
Number of customers	96,814	95,805	94,632	93,498	92,654	90,892	89,235	88,057	87,061	85,991
Days cash on hand	705	912	881	1,257	993	600	511	658	529	748
Miles of water lines	1,308	1,291	1,273	1,260	1,236	1,225	1,214	1,203	1,195	1,185
Miles of sewer lines	1,150	1,137	1,126	1,116	1,097	1,091	1,086	1,080	1,097	1,097
Wastewater pumping stations	65	63	62	61	60	59	59	58	58	57
Water tank storage										
effective capacity (MG)	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1
Number of fire hydrants	12,559	12,348	12,141	11,970	11,661	11,481	11,327	11,181	11,010	10,777
Water capacity (MGD):										
Capacity at Fairfax Water	62.4	62.4	62.4	62.4	62.4	62.4	57.4	57.4	51.4	51.4
Capacity at City of Manassas	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Service Authority wells	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Total water capacity	67.8	67.8	67.8	67.8	67.8	67.9	62.9	62.9	56.9	56.9
Wastewater treatment capacity (MGD):										
Capacity at HLM AWRF	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Capacity at UOSA	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8	19.8
Total wastewater										
treatment capacity	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8

Source: Prince William County Service Authority.

TABLE 14 STATISTICAL SECTION

**Table 15** Service Demand - Last Ten Fiscal Years

Millions of Gallons (MG)

Fiscal Year	Customer Accounts	Water Produced	Water Purchased	Water Peak Day Flow	Wastewater Treated				
2022	96,814	40	11,830	44.4	10,096				
2021	95,805	38	10,912	52.1	10,644				
2020	94,632	36	10,465	42.1	9,794				
2019	93,498	22	9,869	36.9	11,293				
2018	92,654	26	10,106	40.5	9,671				
2017	90,892	43	10,316	43.0	9,177				
2016	89,235	68	9,907	34.2	9,540				
2015	88,057	62	9,468	36.4	9,379				
2014	87,061	58	9,388	35.3	9,739				
2013	85,991	60	9,418	43.2	8,718				

Source: Prince William County Service Authority.

**Table 16 VRS Pension Plan Funding Levels** 

	PW	CSA	All Political Subdivisions			
Fiscal Year	Plan Fiduciary Liability as % of Total Pension Liability	Net Pension Liability (Asset) as % of Total Pension Liability	Plan Fiduciary Liability as % of Total Pension Liability	Net Pension Liability (Asset) as % of Total Pension Liability		
2022	110.8%	(10.8)%	97.2%	2,8%		
2021	93.4%	6.6%	83.4%	16.6%		
2020	95.8%	4.2%	87.8%	12.2%		
2019	98.5%	1.5%	90.2%	9.8%		
2018	96.0%	4.0%	89.3%	10.7%		
2017	85.9%	14.1%	83.7%	16.3%		
2016	88.7%	11.3%	86.7%	13.3%		
2015	90.8%	9.2%	86.9%	13.1%		

This schedule is presented with the requirement to show information for ten years. However, until a full ten-year trend is compiled, the Authority will present information for those years which information is available.

Source: Prince William County Service Authority

STATISTICAL SECTION TABLES 15, 16

Table 17 Equity Interest in UOSA Detail

Fiscal Year	PWCSA Portion of Total Allocated Capacity	UOSA Prior Fiscal Year Change in Net Position	PWCSA Current Year Portion of UOSA Change in Net Position	PWCSA Cumulative Portion of UOSA Change in Net Position	Current Year Amortization 2MGD 2008 Capacity Purchase	Remaining Balance 2MGD 2008 Capacity Purchase	Current Year Amortization 2011 Capacity Purchase	Remaining Balance 2MGD 2011 Capacity Purchase	Current Year Equity Interest in UOSA	Cumulative Equity Interest in UOSA
2022	36.6613%	(13,789,835)	\$ (5,055,533)	\$ 4,216,930	\$ (1,408,337)	\$ 15,672,618	\$ (1,455,881)	\$ 20,729,781	\$ (7,919,751)	\$ 40,619,329
2021	36.6613%	(5,782,540)	(2,119,954)	9,272,463	(1,335,549)	17,080,955	(1,380,154)	22,185,662	(4,835,657)	48,539,080
2020	36.6613%	(4,002,147)	(1,467,239)	11,392,417	(1,266,756)	18,416,504	(1,308,614)	23,565,816	(4,042,609)	53,374,737
2019	36.6613%	(12,981,565)	(4,759,210)	12,859,656	(1,201,957)	19,683,260	(1,241,263)	24,874,430	(7,202,430)	57,417,346
2018	36.6613%	(13,315,277)	(4,881,554)	17,618,866	(1,139,281)	20,885,217	(1,175,785)	26,115,693	(7,196,620)	64,619,776
2017	36.6613%	8,229,222	3,016,940	22,500,420	(1,080,600)	22,024,498	(1,114,495)	27,291,478	821,845	71,816,396
2016	36.6613%	(16,300,476)	(5,975,966)	19,483,480	(1,025,290)	23,105,098	(1,056,621)	28,405,973	(8,057,877)	70,994,551
2015	36.6613%	(4,989,471)	(1,829,205)	25,459,446	(974,599)	24,130,388	(1,003,710)	29,462,594	(3,807,514)	79,052,428
2014	36.6613%	(9,652,534)	(3,538,744)	27,288,651	(923,909)	25,104,987	(950,799)	30,466,304	(5,413,452)	82,859,942
2013	36.6613%	410,438	150,472	30,827,395	(877,214)	26,028,896	(902,076)	31,417,103	(1,628,818)	88,273,394

Source: Prince William County Service Authority.

TABLE 17 STATISTICAL SECTION



# **GLOSSARY OF ACRONYMS**

ACFR	Annual Comprehensive Financial Report		Line of Duty Act
AMA	Asset Management Analytics	MD&A	Management's Discussion and Analysis
	•	MG	Million Gallons
ARPA	American Recovery Plan Act	MGD	Million Gallons per Day
BOCS	Board of County Supervisors	NOL	Net OPEB Liability
BPS	Booster Pumping Station	NPL	Net Pension Liability
CARES	Coronavirus Aid, Relief, and Economic Security	ОРЕВ	Other Postemployment Benefits
CIP	Capital Improvements Program	ORP	Optional Retirement Plan
CIS	Customer Information System	PER	Preliminary Engineering Report
CMMS	Computerized Maintenance	PTO	Paid Time Off
O.M.M.O	Management System	RP	Retirement Plan
COLA	Cost-of-Living Adjustment	S&P	Standard and Poor's Rating Services
COVID	Coronavirus-19	SCADA	Supervisory Control and Data Acquisition
CPI-U	Consumer Price Index for all Urban Consumers	SEC	Securities and Exchange Commission
ERU	Equivalent Residential Unit	SLFRF	State and Local Fiscal Recovery Funds
FDIC	Federal Deposit Insurance Corporation	SPS	Sewage Pumping Station
FFCB	Federal Farm Credit Bank	TOL	Total Other Postemployment Benefits
FHLB	Federal Home Loan Bank		Liability
FTE	Full Time Equivalent	TPL	Total Pension Liability
GAAP	Generally Accepted Accounting	UOSA	Upper Occoquan Service Authority
	Principles	US	United States
GASB	Governmental Accounting Standards	UST	Underground Storage Tank
	Board	VDOT	Virginia Department of Transportation
GFOA	Government Finance Officers Association	VLDP	Virginia Local Disability Program
GIS	Geographic Information System	VRA	Virginia Resources Authority
GLI	Group Life Insurance	VRS	Virginia Retirement System
HIC	Health Insurance Credit	VRSA	Virginia Risk Sharing Association
HLM AWRF	H.L. Mooney Advanced Water Reclamation Facility	VSDP	Virginia Sickness and Disability Program
LGIP	Local Government Investment Pool	VWFRF	Virginia Water Facilities Revolving Fund
LGIP EM	Local Government Investment Pool		

**Extended Maturity** 

