GEORGE MASON UNIVERSITY

AUDITED FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2019



-TABLE OF CONTENTS-

	Pages
MANAGEMENT'S DISCUSSION AND ANALYSIS	1-11
FINANCIAL STATEMENTS:	
Statement of Net Position	12
Statement of Revenues, Expenses, and Changes in Net Position	13
Statement of Cash Flows	14-15
Component Units - Combined Statement of Financial Position	16
Component Units - Combined Statement of Activities	17
NOTES TO FINANCIAL STATEMENTS	18-79
REQUIRED SUPPLEMENTARY INFORMATION	80-88
INDEPENDENT AUDITOR'S REPORT	
Report on Financial Statements	89-91
UNIVERSITY OFFICIALS	92



MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited)

Introduction

This unaudited *Management's Discussion and Analysis* (MD&A) is required supplementary information under the Governmental Accounting Standards Board's (GASB) reporting model. This discussion and analysis provides an overview of the financial condition, results of operations and cash flows of George Mason University ("University" or "Mason") for the fiscal year ended June 30, 2019 (FY 2019). Comparative numbers are included for the fiscal year ended June 30, 2018 (FY 2018). MD&A includes highly summarized data and therefore should be read in conjunction with the full financial statements and footnotes that follow this section. The University's management is responsible for all of the financial information presented, including this discussion and analysis.

The University is an agency of the Commonwealth of Virginia and is governed by the University's Board of Visitors. The Commonwealth prepares a separate financial report that incorporates all agencies, boards, commissions, and authorities over which the Commonwealth exercises or has the ability to exercise oversight authority. The University is a component unit of the Commonwealth and is included in the financial statements of the Commonwealth.

The following summarized financial statements in MD&A include a comparison of FY 2019 and FY 2018.

Financial Highlights

The University's net position increased by \$114.1 million or 17 percent, compared to an increase of \$89.9 million, or 13 percent, for FY 2018 because of an excess of FY 2019 revenues/gains over FY 2019 expenses/losses. Revenue provided by the Commonwealth for equipment and capital projects totaled \$34.0 million, an increase of \$7.5 million over FY 2018, contributed to the increase in net position.

Increases in Operating Revenues and Expenses and Net Position (\$ in millions)						
	FY 2019 FY 2018 FY 2017					
Operating Revenues	\$53.0	7%	\$55.1	8%	\$26.2	4%
Operating Expenses	\$61.7	7%	\$55.1	7%	\$18.5	2%
Increase (Decrease) in Net Position	\$114.1	17%	\$89.9	13%	\$124.9	21%

The University holds the "Highest Research Activity" (R1) status from the Carnegie Classification of Institutions of Higher Education. In FY 2019 the University increased grants and contracts revenue to \$157.6 million, a \$35.7 million increase over FY 2018.

During FY 2019, the University continued to invest in the development of facilities to support and enhance the capacity to achieve its strategic goals. A key aspect of this investment is the development of facilities and systems that enhance the quality of teaching and learning, create operating efficiencies, and support the development of diversified revenue streams, all of which are essential for the University's continued movement to an economic model which is less reliant on state appropriations.

Overview of the Financial Statements and Financial Analysis

The University's financial report includes five financial statements and related notes:

- 1. The Statement of Net Position for the University
- 2. The Statement of Revenues, Expenses, and Changes in Net Position for the University
- 3. The Statement of Cash Flows for the University
- 4. The Combined Statements of Financial Position for the Component Units of the University
- 5. The Combined Statements of Activities for the Component Units of the University

The University's financial statements have been prepared in accordance with GASB principles, which establish standards for external financial reporting for public colleges and universities. These principles require that the University's financial statements be presented on a consolidated basis to focus on the University as a whole, with resources classified for accounting and reporting purposes into four net position categories. As stated above, these financial statements are summarized in MD&A. Please note that although some of the University's foundations are discretely reported by separate page display in other sections of the University's financial statements, this MD&A excludes them except where specifically noted.

Statement of Net Position

The Statement of Net Position presents the assets (current and noncurrent), deferred outflows of resources, liabilities (current and noncurrent), deferred inflows of resources, and net position (assets and deferred outflows of resources minus liabilities and deferred inflows of resources) of the University as of the end of the fiscal year. This statement is a point of time financial statement. The purpose of the Statement of Net Position is to present readers of the financial statements a fiscal snapshot of George Mason University at the end of the fiscal year. Assets, deferred outflows, liabilities, and deferred inflows are generally measured using current values. One notable exception is capital assets, which are stated at historical cost less an allowance for depreciation.

From the information presented, readers of the Statement of Net Position are able to determine the assets available to continue the operations of the University. They are also able to determine how much the institution owes vendors and creditors, and the amount of any deferred outflows of resources and deferred inflows of resources. In addition, the Statement of Net Position provides a picture of the net position and their availability for expenditure by the institution. Net position is one indicator of the current financial condition of the University, while the change in net position is an indicator of whether the overall condition has improved or worsened during the year.

A deferred outflow of resources is a consumption of net assets by the University that is applicable to a future reporting period. A deferred inflow of resources is an acquisition of net assets by the University that is applicable to a future reporting period.

Net position is divided into three major categories. The first category, "net investment in capital assets", provides the University's equity in the property, plant, and equipment that it owns or capital leases. The next category, "restricted net position," is divided into two subcategories, nonexpendable and expendable. Nonexpendable restricted net position consists of endowments and similar funds where donors or other outside sources have stipulated that, as a condition of the gift instrument, the principal is to be maintained inviolate and in perpetuity, and invested for the purpose of producing present and future income to be expended or placed in a reserve fund. Expendable restricted net position is available for expenditure by the institution but must be spent as determined by donors and/or external entities that have placed purpose restrictions on the use of the assets. The final category is "unrestricted net position". Unrestricted net position is available to the University for any lawful purpose of the institution.

A summary of the University's assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position at June 30, 2019, and June 30, 2018, follows:

Condensed Summary of Net Position *

	June 30, 2019	June 30, 2018	Dollar Change	Percent Change
	2017	2010	Change	Onlange
Assets:				
Current assets	\$569,945	\$495,345	\$74,600	15%
Capital assets, net	1,216,563	1,211,399	5,164	-%
Other noncurrent assets	33,121	19,245	13,876	72%
Total Assets	1,819,629	1,725,989	93,640	5%
Deferred Outflows of Resources	46,448	43,411	3,037	7%
Total Assets & Deferred Outflows	1,866,077	1,769,400	96,677	5%
Liabilities:				
Current liabilities	196,601	187,019	9,582	5%
Noncurrent liabilities	825,457	861,633	(36,176)	-4%
Total Liabilities	1,022,058	1,048,652	(26,594)	-3%
Deferred Inflows of Resources	50,164	40,966	9,198	22%
Total Liabilities & Deferred Inflows	1,072,222	1,089,618	(17,396)	-2%
Net Position:				
Net investment in capital assets	672,909	644,560	28,349	4%
Restricted: nonexpendable	7,166	7,166	-	-0/0
Restricted: expendable	7,443	14,727	(7,284)	-49%
Unrestricted	106,337	13,329	93,008	698%
Total Net Position	\$793,855	\$679,782	\$114,073	17%

^{*} In thousands

Total assets and deferred outflows of resources were \$1.9 billion compared to total liabilities and deferred inflows of resources of \$1.1 billion. The difference between these two amounts, total net position, was \$794 million.

For FY 2019 current assets exceeded current liabilities by \$373.3 million. In FY 2018, current assets were \$308.3 million greater than current liabilities. This increasing differential represents a continuation of improving liquidity that began in FY 2011 and has continued through FY 2019. The current ratio, which is the ratio of current assets to current liabilities, and is a common measure of liquidity, improved to 2.90 compared to 2.65 in FY 2018 and 2.37 in FY 2017. Much of the improvement in this ratio is attributable to the University increasing its cash reserves.

Capital assets, net of accumulated depreciation of \$776.2 million, totaled \$1.217 billion, which is an increase of \$5.2 million compared to FY 2018 which decreased by \$13.1 million. This increase reflects modest growth of equipment and facilities at the University.

The \$13.9 million, 72%, increase in Other noncurrent assets primarily reflects a \$13.5 million increase in restricted bond proceeds used to pay for construction of capital assets.

Capital Asset and Debt Administration

Development and renewal of capital assets is one of the critical factors in sustaining the high quality of the University's academic, research, and residential life functions. The University continues to maintain and upgrade current structures, and to add new facilities.

Note 5 of the Notes to Financial Statements describes the University's investment in capital assets, with total depreciable capital asset additions of \$23.4 million (excluding land, construction in progress, and works of art) and additions to construction in progress of \$66.1 million. Depreciation expense increased by \$1.5 million over the prior year to \$65.2 million.

Additions to depreciable capital assets for FY 2019 included the following:

Asset Category	Amount (in millions)
Buildings	\$11.9
Equipment	10.0
Library materials	1.5
Total	\$23.4

Completed building projects included renovations to Krasnow, EagleBank Arena, Mason Global Center, Katherine G. Johnson Hall, Nguyen Engineering Building, University Townhouses, and Exploratory Hall.

Major ongoing capital projects include: Robinson Hall renovation and Utilities Distribution Infrastructure.

Robinson Hall Renovation – In FY17, the University began the design of a \$120 million, 218,000 square foot project to replace Robinson Hall, located on the Fairfax Campus. The project will modernize one of the Fairfax campus' most used buildings and substantially improve the learning and collaborative environment. The building will include classrooms with whiteboards and video screens, collaboration and meeting spaces, informal learning areas outside classrooms, and conference rooms on six floors. Students and student learning are the foundation of the design of the new building. The project will also include a 2,000 square foot addition to, and a 21,000 square foot renovation of, the Harris Theater.

During FY19, the University demolished the Robinson Hall A-wing as part of the Robinson Hall renovation project. The University recognized a \$65 thousand loss on disposal of the asset because of capitalized renovations that had not been fully depreciated. The Robinson Hall B-wing remains operational while Phase I of the project is under construction. The renovation is expected to be completed in December 2021.

Utilities Distribution Infrastructure – In FY17, the University also began the design of a \$49 million utility distribution infrastructure project to replace critical components of the thermal infrastructure loop system. In addition to replacing the utility system beneath plazas, roadways, sidewalks and softscapes, the project will improve and extend the North Plaza and repair all hardscape and softscape systems in all other effected areas to retain the character of the campus. The project is expected to be completed in December 2021.

Financial stewardship requires the effective management of resources, including the use of long-term debt to finance capital projects. Notes 7, 8 and 9 of the Notes to Financial Statements describe changes in the University's long-term debt. New Virginia College Building Authority (VCBA) notes were issued in FY 2019 as follows:

Project	Amount (in millions)
Utilities Distribution Infrastructure	\$21.9
Total	\$21.9

Total long-term debt outstanding, including general obligation bonds, notes payable, capital leases payable, installment purchases, and bond premiums and discounts decreased by \$15.7 million from the end of FY 2018 to the end of FY 2019, to a total of \$564.4 million, as compared to a decrease of \$18.7 million for FY 2018 from the end of FY 2017, to a total of \$580.1 million. Deferred gains and losses on refundings are included in deferred inflows and outflows of resources.

Contractual commitments for capital outlay projects under construction at year end increased from \$1.6 million in FY 2018 to \$109.3 million in FY 2019. These obligations are for future efforts and therefore have not been accrued as expenses or liabilities on the University's financial statements.

Statement of Revenues, Expenses, and Changes in Net Position

The change in total net position as presented in the Statement of Net Position is based on the activity presented in the Statement of Revenues, Expenses, and Changes in Net Position. The purpose of the statement is to present the University's operating revenues earned, operating expenses incurred, and all other revenues, expenses, gains, and losses.

Generally speaking, operating revenues are earned for providing goods and services to the students and other constituencies of the institution. Operating expenses are those expenses incurred to acquire or produce the goods and services provided in return for the operating revenues, and to carry out the mission of the institution. Salaries and fringe benefits for faculty and staff are the largest type of operating expense.

Non-operating revenues are revenues received for which goods and services are not provided in exchange as part of a transaction. For example, state appropriations are non-operating revenues because they are provided by the legislature without the legislature directly receiving commensurate goods and services for those revenues. State appropriations, which are included in non-operating revenues, provide substantial support for paying operating expenses of the University. The University, like most public institutions of higher education, does not cover all operating expenses with operating revenues, and therefore expects to report an operating loss each year.

A summary of the University's Statement of Revenues, Expenses, and Changes in Net Position follows:

Condensed Summary of Revenues, Expenses, and Changes in Net Position *

	June 30,	June 30,	Dollar	Percent
	2019	2018	<u>Change</u>	Change
Operating revenues:				
Student tuition and fees, net of allowances	\$392,429	\$372,757	\$19,672	5%
Grants and contracts	157,591	121,856	35,735	29%
Auxiliary enterprises and other	221,985	224,388	(2,403)	-1%
Total operating revenues	772,005	719,001	53,004	7%
Operating expenses:				
Educational and general	686,268	625,129	61,139	10%
Depreciation	65,194	63,702	1,492	2%
Auxiliary enterprises	144,064	144,953	(889)	-1%

	June 30, 2019	June 30, 2018	Dollar	Percent
			Change	Change
Total operating expenses	895,526	833,784	61,742	7%
Operating income (loss)	(123,521)	(114,783)	(8,738)	-8%
Nonoperating revenues and expenses (net)	192,057	179,783	12,274	7%
Income (loss) before other	68,536	65,000	3,536	5%
revenue/expense/gain/loss	00,000	05,000	3,330	270
Other revenue/expense/gain/loss	45,537	24,878	20,659	83%
Net increase in net position	114,073	89,878	24,195	27%
Net position at beginning of year	\$679,782	\$712,394	\$(32,612)	-5%
Adjusted for OPEB	-	(122,490)	122,490	-100%
Net position at beginning of year, restated	679,782	589,904	89,878	15%
Net position at end of year	\$793,855	\$679,782	\$114,073	17%

^{*} In thousands

Total operating revenues, consisting primarily of tuition and fees, grants and contracts, and auxiliary enterprises, increased by \$53.0 million, or 7%, over the prior year. Student tuition and fees, net of scholarship allowances, increased by \$19.7 million, or 5%, over the prior year. This increase is attributable to a combination of tuition and fee increases and moderate enrollment growth offset by a small increase in scholarships as a percentage of revenues. Revenue from grants and contracts increased from \$121.9 million in FY 2018 to \$157.6 million in FY 2019. The increase is primarily a result of growth in Federal grants and contracts and the University's focus on its research strategy. Auxiliary and other revenue decreased by \$2.4 million, or 1%. The decrease was primarily in other operating revenue related to INTO Mason.

Total scholarships and fellowships, which is the sum of scholarship allowances and student aid expense, increased by \$18.2 million, or 13.8%, to \$149.7 million.

Total operating expenses increased by \$61.7 million, or 7.4%. The causes of this increase included an increase of \$14.7 million, or 2.8%, in compensation expenses, consisting of salaries, wages, and fringe benefits; an increase in the purchase of goods and services of \$46.8 million, or 22.5%, mainly in student facing areas and research; a decrease in student aid expense of \$1.3 million, or -4.3%, and an increase in depreciation expense of \$1.5 million, or 2.3%.

As a result of the operating revenues increasing by less than the increase in operating expenses, the operating loss increased by \$8.7 million, or 8%, to \$123.5 million, as compared to consistent losses of \$114.8 million in FY 2018 and FY 2017.

Nonoperating revenues net of nonoperating expenses increased by \$12.3 million, or 7%, due to a \$5.6 million increase in the restricted and unrestricted state general fund appropriations, a \$1.8 million increase in Pell grants, a \$2.4 million increase in investment income, a \$1.5 million decrease in other non-operating expense and a \$1 million decrease in interest expense.

An important number to note in the Statement of Revenues, Expenses, and Changes in Net Position is "Income/(loss) before other revenues, expenses, gains or losses" (income before capital items) because this number is a better representation of the true operating results than the Operating income (loss) line. This number reflects other non-capital revenues used to fund operating expenses. These items are reported separately from other operating results due to GASB's reporting requirements, but from a financial perspective should be combined to understand operating results. In FY 2019 the income before capital items was \$68.5 million, which was an increase of \$3.5 million compared to the FY 2018 income of \$65.0 million. This \$3.5

million increase is a result of the \$8.7 million increase in the operating loss discussed above and the \$12.3 million increase in nonoperating revenue net of nonoperating expense discussed above.

The final category on the Statement of Revenues, Expenses, and Changes in Net Position is Other revenues, expenses, gains and losses and includes capital appropriations, capital grants and gifts, additions to permanent endowment, and gain/loss on the disposal of fixed assets. This category increased by \$20.7 million, or 83%, caused by an increase of \$5.3 million in capital appropriations from the Virginia College Building Authority, 21st Century capital reimbursement program and the Commonwealth's General Fund, an increase of \$6.2 million in capital grants and gifts, and a decrease in the loss on disposal of capital assets of \$9.2 million.

Statement of Cash Flows

The final statement is the Statement of Cash Flows. This statement presents information about the cash activity of the University during the year. Cash flows from operations will always be different from the operating income/(loss) on the Statement of Revenues, Expenses, and Changes in Net Position (SRECNP). This difference occurs because SRECNP is prepared on the accrual basis of accounting and includes non-cash items, such as depreciation expense, while the Statement of Cash Flows presents cash inflows and cash outflows without regard to accrual items. The Statement of Cash Flows provides information to assess the ability of the University to generate cash flows sufficient to meet its obligations.

The statement is divided into five parts. The first section shows operating cash flows and shows the net cash used by the operating activities of the institution. The second section reflects cash flows from noncapital financing activities. This section reflects the cash received and spent for nonoperating, non-investing, and noncapital financing purposes such as the state appropriations for educational and general programs and financial aid. The third section reflects the cash flows from capital financing activities and shows the purchases, proceeds, and interest received from these activities. This section deals with the cash used for the acquisition and construction of capital and related items. The fourth section deals with cash flows from investing activities. The fifth section reconciles the net cash used by operating activities to the operational loss reflected on the Statement of Revenues, Expenses, and Changes in Net Position and is not presented in this summary presentation.

A summary of the University's Statement of Cash Flows follows:

Condensed Summary of Cash Flows *

	June 30, 2019	June 30, 2018	Dollar Change	Percent Change
Cash provided by operating activities	\$758,447	\$711,969	\$46,478	7%
Cash used by operating activities	(834,171)	(769,811)	(64,360)	-8%
Net cash used by operating activities	(75,724)	(57,842)	(17,882)	-31%
Net cash provided by noncapital financing activities Net cash provided by (used by) capital financing	204,968	196,684	8,284	4%
activities	(71,749)	(59,200)	(12,549)	-21%
Net cash provided by (used by) investing activities	5,872	3,282	2,590	79%
Net increase (decrease) in cash	63,367	82,924	(19,557)	-24%
Cash, beginning of year Cash, end of year	\$476,465	330,174 \$413,098	\$2,924 \$63,367	25% 15%

^{*} In thousands

The above summarized Statement of Cash Flows shows that during FY 2019 the University continued to build cash reserves and generated 90.9 percent (\$758.4 million of \$834.2 million expended) of its operating cash requirements from its own operations. This is consistent with 92.5% in FY 2018, 91.5% in FY 2017, and 90.3% in FY 2016. The remainder (\$75.7 million) was provided from noncapital financing activities, which include non-capital appropriations from the Commonwealth of Virginia, non-capital private gifts, and Pell Grants.

Operating activities used \$64.4 million more cash in FY 2019 than in FY 2018, and generated \$46.5 million more cash than in FY 2018, resulting in an increased need for operating cash to be obtained from sources other than operating activities. Overall, operating activities resulted in a net usage of cash of \$75.7 million which was \$17.9 million more than in FY 2018.

The major sources of the \$46.5 million increase in cash provided by operating activities in FY 2019 compared to FY 2018 were student tuition and fees (\$22.1 million increase), grants & contracts (\$38.5 million increase), other receipts, which includes the INTO program and Mason Korea (\$12.0 million decrease) and auxiliary enterprises (\$2.2 million decrease).

The major causes of the \$64.4 million increase in cash used by operations in FY 2019 compared to FY 2018 were payments to employees for salaries, wages, and fringe benefits (\$25.1 million increase), payments for supplies and services (\$40.7 million increase), payments for scholarships and fellowships (\$1.3 million decrease) and Perkins loan disbursements (\$0.1 million decrease).

Cash provided by non-capital financing activities increased \$8.3 million in FY 2019 compared to FY 2018, due to a \$5.6 million increase in state appropriations, \$1.7 million increase in Pell Grant receipts and \$1.5 million increase in Other net non-operating expense offset by a \$0.5 million decrease in agency transactions.

In order to better understand cash flow from operations it's helpful to combine the two GASB required reporting categories of cash from operating activities and cash from noncapital financing activities. The general fund appropriations from the Commonwealth, Pell grants, and unrestricted gifts are not considered to be exchange transactions and therefore are not included in cash flows from operations in the GASB reporting format. They are, however, used to pay operating expenses, so it is informative to combine the two categories for a more general understanding of cash flows from operations. The FY 2019 net positive cash flow generated by the two categories was \$129.2 million (negative \$75.7 for cash flows from operating activities and positive \$204.9 from cash flows from noncapital financing activities).

From the net positive cash flow produced by this broader view of operations, \$57.4 million was used to pay debt service (principal and interest payments), which is required to be reported as a capital financing activity, although it is not financed by the cash flows provided by capital financing activities.

Cash provided by capital financing activities included capital appropriations from the Commonwealth of Virginia, capital gifts and grants, and the sale of bonds. Cash used by capital financing activities included the acquisition of capital assets and making debt principal and interest payments. Although principal and interest payments are considered to be capital financing activities, the cash to make these payments is not provided by capital financing sources but rather from the net positive cash flow provided from the broader view of operating cash flows described above. In addition, the acquisition of capital assets is considered to be a capital financing activity but not all purchases of capital assets are funded by sources of cash included in the capital financing section. Unfinanced capital asset purchases are also paid for from the net positive cash flow provided by the broader view of operating cash flows described above.

The University's net cash used by capital financing activities increased by \$12.5 million in FY 2019 compared to FY 2018. This increase in cash used was primarily caused by a decrease in proceeds from capital

appropriations and capital grants and contributions of \$6.4 million, a decrease in the Advance from the Treasurer of Virginia of \$12.3 million and an increase in cash used to purchase capital assets of \$17.2 million offset by a decrease in interest and principal payments of \$2.7 million and an increase in proceeds from the issuance of debt of \$20.7 million.

The primary sources of cash from investing activities are interest on cash balances, interest on unspent bond proceeds, and endowment investment earnings. The primary cash outflow from investing activities is the purchase of investments. During FY 2019, these activities generated \$2.6 million more cash than they did in FY 2018. This increased cash was a result of an increase in investment earnings.

Economic Outlook

As part of the Commonwealth of Virginia's statewide system of higher education, the University's economic outlook is closely tied to that of the Commonwealth. The University receives support from the Commonwealth in the form of operating and capital appropriations. Changes in student demographics and increasing student loan debt are external pressures impacting higher education institutions across the country. These pressures are somewhat mitigated at Mason because the University offers a range of affordable, high quality programs that attract and support a diverse and talented student population and as a result of strong economic conditions in Northern Virginia that currently allow many Mason students to work while going to school.

Today, the University enrolls one of the most diverse student populations in the Nation, from traditional college-age students to working adults seeking to complete their four-year degrees. The University's undergraduate student community is now majority minority and 29% of students are Pell-eligible. Mason enrolled over 38,000 students in the Fall of 2019 – the largest student community among all Virginia public 4-year universities and up 578 students from the same time last year - with the majority of enrollment growth reported in STEM-H disciplines. Incoming student classes continue to grow in size, in diversity, and in academic performance. The University is refining its operational and financial model to plan for and develop the infrastructure necessary to support a dynamic research university in a region that includes thousands of advanced industry employers essential to the Commonwealth's success in the 21st century innovation economy. Mason remains deeply committed to providing transformative learning experiences for all students, shaping their development as engaged citizens and well-rounded scholars, and preparing them to make a positive impact on the economy and on the world.

The University offers high quality education programs using innovative approaches attractive to its diverse student population. In Fall 2019, the University and Northern Virginia Community College (NOVA) welcomed 368 students into the ADVANCE program, bringing ADVANCE enrollment to more than 677 students in only its second year. ADVANCE increases access to a four-year degree by removing many of the obstacles that deter students along the way. Nationally, 80 percent of community college students say they intend to complete a four-year degree. Within seven years, however, only 15 percent have achieved that goal, in part because of barriers they encounter. The ADVANCE program aligns Mason and NOVA curricula, advising, financial aid and other student services to remove obstacles and decrease the time and cost for NOVA transfers to graduate from Mason. The initial class offered several majors related to high-demand technology and health industries in support of key workforce needs of regional employers. The University expects that ADVANCE will become a national model for supporting transfer students. The program now offers 102 pathways to various degrees – five times as many as when launched last year. Estimates indicate that ADVANCE enrollment could increase to more than 6,500 students by 2030.

The University also continues to collaborate with Old Dominion University (ODU) to support the Online Virginia Network (OVN), an online degree completion initiative developed to support adult learners throughout the Commonwealth. OVN increases the number of college degree completers in Virginia, creating

accessible and efficient pathways to a bachelor's degree and providing more cost-effective programs than traditional degree offerings.

Through programs like ADVANCE and OVN and by providing more traditional pathways to 4-year and advanced degrees, Mason fuels the innovation engine of Northern Virginia, the Commonwealth, and beyond, preparing a world-class workforce – the University conferred approximately 9,860 degrees and awards in FY 2019 – poised to contribute in meaningful ways to the Commonwealth's diverse innovation economy.

As a top tier research university, Mason conducts state-of-the-art research generating outcomes that make their way into products and services to improve the quality of life for all Virginia citizens. The institution continues to make great strides in this area, with a record \$176 million in research expenditures for FY 2019, up \$27 million (18%) from \$149.1 million in FY 2018. In addition to operating the only federally supported national center of excellence in the Commonwealth, the Department of Homeland Security-funded Center of Excellence in Criminal Investigation and Network Analysis, Mason researchers also support the largest Research & Development (R&D) center focused on secure cyber-physical systems in the Commonwealth, with over \$35 million in research expenditures in FY 2019 alone. Ensuring that Mason R&D helps seed private sector growth, Mason leads the NoVA-Node of the Commonwealth's Cyber Initiative, bringing together over 75 private and public sector organizations in the region to position Northern Virginia and the Commonwealth as global leaders in cybersecurity. The University also continues to build on its strengths in other areas, including in the social sciences and humanities. In FY 2019, the institution received a \$20 million National Institutes of Health (NIH) award to lead and coordinate a national initiative to identify comprehensive solutions to the opioid crisis. The institution's humanities scholars are among the best in the Nation, placing Mason among the top 10 institutions nationally for funding received from the National Endowment for the Humanities over the last 10 years.

Mason is deeply committed to translational research and commercialization activities, and to the development of entrepreneurial acumen among three major stakeholder groups: Mason faculty, students, and Virginia-based entrepreneurs. For example, the University's Innovation Commercialization Assistance Program (ICAP) assists Virginia-based entrepreneurs seeking to create high-growth high-opportunity companies based in Virginia. Modeled after the National Science Foundation's I-CorpsTM program for Lean Startups, ICAP leaders help inventors and entrepreneurs take the right first steps to bring new technologies and innovations to market. One hundred and sixty-four (164) teams have participated in Mason's ICAP program since the program was launched in January 2018, and these teams have gone on to start companies that have generated almost \$5 million of economic impact and 41 jobs to date. The University recently entered into memorandums of understanding (MOU) with the Center for Innovative Technology to bring ICAP to their clients and referrals. In addition, Mason works closely with colleagues from the Virginia Economic Development Partnership and related regional partners to help attract new advanced industry employers like Amazon to the region.

To accommodate its thriving education, research and innovation-commercialization programs, the University is developing new academic, research and innovation facilities on both its SciTech and Arlington campuses. The Bull Run Addition programmed on the SciTech campus, a 100,000 GSF building recently approved by the Commonwealth, will support the instructional needs of students in STEM-H programs like Mechanical Engineering, Forensic Science, Bioengineering, and Computer Game Design, and the University has included the SciTech-based STEM-H-focused Academic VIII building as one of its highest priorities in its 6-Year Capital Plan. The development of the Bull Run Addition and Academic VIII permits the creation of a stand-alone campus at SciTech, where approximately 6,000 students will be able to meet all the requirements of their degree programs, relieving some of the facilities constraints currently experienced on the University's Fairfax campus. Mason is also expanding its Arlington campus, adding a new mixed-use facility that will anchor a computing-centric innovation district on the vibrant Ballston-Virginia Square corridor. The facility will house the graduate programs of Mason's planned School of Computing, complementing graduate programs offered by the Scalia Law School, the Business School, the School of Conflict Analysis and Resolution and the Schar School of

Policy and Government. To be constructed with funding provided by the Tech Talent Investment Program (TTIP) and philanthropic funds raised by the University, the facility will also house research and innovation programs supported by Mason and by other private and public sector partners, including industry, as well as incubators, accelerators and co-working spaces to support high-growth high-opportunity start-ups.

In March 2020, the University shifted from traditional classroom teaching to alternative virtual instruction as a result of the COVID-19 global outbreak. For the health and safety of the campus community, the majority of on-campus operations and events were canceled or delayed and faculty and staff began teleworking. For the fiscal year ending June, 30, 2020, revenue from student housing, dining and parking is expected to be impacted as well as additional expenses related to transition to remote education and other activities in response to the outbreak are expected to be incurred. The financial impact and duration of altered business processes cannot be reasonably estimated at this time.

The University's commitment to continue to accrue operational and administrative efficiencies and our constant innovation in the delivery of affordable, high quality education and research programs attractive to students, employers and sponsors, make us confident that we will continue to attract a diverse and talented student population and that our research and innovation programs will continue to prosper. Strong leadership and resilience of the Mason community will position the University to navigate a successful course through this unprecedented time. Our commitment to academic excellence compels us to find new paradigms for higher education.

FINANCIAL STATEMENTS

Statement of Net Position as of June 30, 2019

ACCETIC	
ASSETS Current assets	
Cash and cash equivalents (Note 2)	\$ 489,773,656
Accounts receivable, net of allowance of \$2,387,854 (Note 4)	60,869,206
Notes receivable, net of allowance of \$25,532 (Note 4)	396,690
Prepaid expenses	8,203,471
Inventory	743,546
Due from the Commonwealth of Virginia	9,958,240
Total Current Assets	569,944,809
Noncurrent assets	
Restricted cash and cash equivalents (Note 2)	14,872,779
Restricted cash and cash equivalents in custody of others (Note 2) Notes receivable, net of allowance of \$159,691 (Note 4)	86,183 2,483,640
Depreciable capital assets, net of accumulated depreciation (Note 5)	1,131,218,656
Non-depreciable capital assets (Note 5)	85,344,821
Other post-employment benefits asset (Note 16)	6,856,000
Long-term investments (Note 2)	8,822,461
Total noncurrent assets	1,249,684,540
Total assets	1,819,629,349
DEFERRED OUTFLOWS OF RESOURCES	
Deferred outflows of resources - refundings of debt (Notes 8-9)	12,736,918
Deferred outflows of resources - pension (Note 15)	21,759,473
Deferred outflows of resources - other post-employment benefits (Note 16)	11,951,781
Total deferred outflows of resources	46,448,172
Total assets and deferred outflows of resources	1,866,077,521
LIABILITIES	
Current liabilities	
Accounts payable and accrued expenses (Note 6)	70,717,352
Unearned revenue	46,711,211
Obligations under securities lending	28,268,058
Deposits held in custody for others Long-term debt-current portion (Notes 7-10)	577,622 41,852,742
Other post-employment benefits liability - current portion (Note 16)	1,666,755
Accrued compensated absences- current portion (Note 7)	6,807,695
Total current liabilities	196,601,435
Noncurrent liabilities	
Long-term debt (Notes 7-10)	522,569,303
Net pension liability (Note 15)	178,139,000
Other post-employment benefits liability (Note 16)	108,655,306
Accrued compensated absences (Note 7)	12,840,248
Other noncurrent liabilities Total noncurrent liabilities	3,252,831 825,456,688
Total liabilities	1,022,058,123
DEFERRED INFLOWS OF RESOURCES Defenred inflows of recourage profundings of debt (Notes 8.0)	2 444 747
Deferred inflows of resources - refundings of debt (Notes 8-9) Deferred inflows of resources - pension (Note 15)	2,444,717 18,751,000
Deferred inflows of resources - pension (Note 15) Deferred inflows of resources - other post-employment benefits (Note 16)	28,968,380
Total deferred inflows of resources	50,164,097
Total liabilities and deferred inflows of resources	1,072,222,220
NET POSITION	
Net investment in capital assets	672,909,493
Restricted: nonexpendable (Note 18)	7,165,836
Restricted: expendable (Note 18)	7,442,935
Unrestricted	106,337,037
Total net position	\$ 793,855,301
The accompanying Notes to Financial Statements are an integral part of this sta	atement.

Statement of Revenues, Expenses, and Changes in Net Position for the Year Ended June 30, 2019

Operating revenues		
Student tuition and fees, net of scholarship allowances of \$91,480,661	\$	392,428,771
Federal grants and contracts	"	126,057,931
State, local, and nongovernmental grants and contracts		31,532,935
Auxiliary enterprises, net of scholarship allowances of \$29,432,086		204,682,235
Other operating revenue		17,303,172
Total operating revenues		772,005,044
O (AL 44)		
Operating expenses (Note 11)		200 546 600
Instruction		309,546,600
Research		114,038,535
Public service		23,260,510
Academic support		73,730,948
Student services		32,139,419
Institutional support		50,504,436
Operation and maintenance of plant		54,216,251
Depreciation and amortization		65,194,421
Student aid		28,831,042
Auxiliary enterprises		144,063,822
Total operating expenses		895,525,984
Operating income (loss)		(123,520,940)
Nonoperating revenues (expenses)		
State educational and general appropriation (Note 12)		139,474,347
State general fund appropriations - restricted		29,788,447
Pell Grant receipts		37,276,367
Gifts		1,929,732
ARRA Build America Bonds Subsidy		701,895
Investment income		6,073,332
Other nonoperating revenue/(expense)		(2,849,757)
Interest expense (Note 13)		(20,337,767)
Net nonoperating revenues		192,056,596
Income before other revenues, expenses, gains, and losses		68,535,656
Other revenues, expenses, gains, and losses		
Capital grants and gifts		17,164,540
Capital appropriations		28,814,636
Additions to permanent endowments		300
Loss on disposal of capital assets		(442,119)
Net other revenues, expenses, gains, and losses		45,537,357
Increase in net position		114,073,013
Net position beginning of year		679,782,288
Net position end of year	\$	793,855,301
The position was or your		770,000,001

Statement of Cash Flows for the Year Ended June 30, 2019

Student tuition and fees Grants and contracts Auxiliary enterprises Perkins loan receipts Other receipts	391,019,467 152,541,751 202,390,973 544,885 11,950,108 (244,672,078) (560,668,066) (28,831,042) (75,724,002)
Auxiliary enterprises Perkins loan receipts	202,390,973 544,885 11,950,108 (244,672,078) (560,668,066) (28,831,042)
Perkins loan receipts	544,885 11,950,108 (244,672,078) (560,668,066) (28,831,042)
	11,950,108 (244,672,078) (560,668,066) (28,831,042)
Other receipts	(244,672,078) (560,668,066) (28,831,042)
	(560,668,066) (28,831,042)
Payments to suppliers	(560,668,066) (28,831,042)
Payments to employees	
Payments for scholarships and fellowships	(75,724,002)
Net cash used by operating activities	
Cash flows from noncapital financing activities	
State appropriations	169,262,794
Additions to endowments	300
Federal Direct Loan Program receipts	158,359,072
Federal Direct Loan Program disbursements	(158, 359, 072)
Pell Grant receipts	37,276,367
Other net nonoperating revenue/(expense)	(2,849,757)
Noncapital gifts	1,929,732
Agency transactions	(651,270)
Net cash provided by noncapital financing activities	204,968,166
Cash flows from capital and related financing activities	
Proceeds from capital appropriations available	22,522,098
Capital grants and contributions	13,272,080
Advance from Treasurer	(12,500,000)
Proceeds from sale of capital assets	64,410
Proceeds from issuance of capital related debt	21,925,000
Bond premium paid on capital related debt	2,254,689
Principal paid on capital related debt	(34,836,357)
Interest paid on capital related debt	(22,586,546)
Purchases of capital assets	(61,864,333)
Net cash used by capital and related financing activities	(71,748,959)
Cash flows from investing activities	
Interest on investments	6,072,482
Purchase of investments	(200,853)
Net cash provided by investing activities	5,871,629
Net increase in cash	63,366,834
Cash and cash equivalents - beginning of the year	434,200,764
Less: Securities Lending - Treasurer of Virginia	(21,103,038)
Net cash and cash equivalents - beginning of the year	413,097,726
Cash and cash equivalents - end of the year (see next page)	476,464,560

Statement of Cash Flows for the Year Ended June 30, 2019

RECONCILIATION OF STATEMENT OF CASH FLOWS, STATEMENT OF NET POSITION

Statement of Net Position Cash and cash equivalents (Unrestricted and Restricted) Less: Securities lending - Treasurer of Virginia	\$ 504,732,618 (28,268,058)
Net cash and cash equivalents	\$ 476,464,560
RECONCILIATION OF NET OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES	
Operating loss	\$ (123,520,940)

Adjustments to reconcile net loss to net cash used by operating activities:	
Depreciation expense	65,194,421

Changes in assets, liabilities, deferred outflows and deferred inflows:

Net pension liability OPEB liability	(10,378,000) (8,706,971)
Unearned revenue	357,939
Accounts payable and accrued liabilities	6,383,805
OPEB asset	(729,000)
Prepaid expenses	3,883,615
Inventory	118,872
Perkins loan liability	34,970
Deferred outflows of resources- OPEB	6,618,383
Deferred outflows of resources- pension	(2,514,356)
Perkins loan receivable	509,915
Restricted assets receivable (net)	(7,174,192)
Accounts receivable (net)	(7,286,492)
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Noncash investing, capital and financing activities:

The following transactions occurred prior to the Statement of Net Position date:

Capital assets acquired through gifts	\$ 3,120,332
Amortization of bond premium/discount and gain/loss on debt refinancing	(2,950,676)
Loss on disposal of capital assets	(442,119)
Capitalized interest accrual	65,647
Unrealized gain/loss on investments	850

Component Units - Combined Statement of Financial Position as of June 30, 2019

	Total	
	Component Units	
ASSETS	·	
Cash and cash equivalents	\$ 43,620,730	
Security deposits	106,563	
Restricted cash and cash equivalents	10,874,668	
Accounts receivable, net	770,754	
Contributions receivable, net	67,870,815	
Prepaid expenses and other assets	5,594,898	
Net investment in direct financing lease	88,681,210	
Beneficial interests in perpetual trusts	11,142,428	
Land held for sale	16,264,828	
Investments	195,035,606	
Property and equipment, net	83,474,634	
Deferred tax asset	288,862	
Total assets	\$ 523,725,996	
LIABILITIES AND NET ASSETS		
LIABILITES		
Accounts payable and accrued expenses	\$ 12,696,409	
Accrued payroll and related expenses	504,454	
Grants and student research awards payable	2,370,978	
Participation rent payable	420,250	
Tenant security deposits liability	101,054	
Unearned revenue	2,515,790	
Charitable gift annuities	200,971	
Other liabilities	1,285,746	
Interest rate swap liability	10,241,688	
Long-term debt including loan payable	187,728,944	
Amounts held for others	12,883,192	
Total liabilities	230,949,482	
NET ASSETS		
Net assets without donor restrictions	40,697,197	
Net assets with donor restrictions	252,079,317	
Total net assets	292,776,514	
Total liabilities and net assets	\$ 523,725,996	

Component Units - Combined Statement of Activities for the Year Ended June 30, 2019

	Total	
	Component Units	
Operating revenues		
Contributions	\$ 132,967,103	
Grants	28,512,918	
Interest on direct financing lease	5,749,757	
Investment and trust return	9,705,787	
Miscellaneous and other income	384,416	
Rental income, net	16,678,139	
Service fees	9,451,842	
Total operating revenues	203,449,962	
Operating expenses		
Academic program support	106,643,133	
Advertising and promotion	19,497	
Depreciation	2,852,832	
Fundraising	2,632,080	
Insurance	75,970	
Interest expense	8,092,844	
Maintenance	196,824	
Management fees	1,678,182	
Office and other administrative expenses	5,229,143	
Salaries and wages	5,834,736	
Rent, utilities and other	2,909,402	
Total operating expenses	136,164,643	
Change in net assets before non-operating items and other changes	67,285,319	
Non-operating items	(2,031,621)	
Change in net assets	65,253,698	
Beginning net assets	227,522,816	
Ending net assets	\$ 292,776,514	

NOTES TO FINANCIAL STATEMENTS

NOTES TO THE FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. REPORTING ENTITY

George Mason University is a comprehensive, doctoral institution that is part of the Commonwealth of Virginia's statewide system of higher education. The Board of Visitors, appointed by the Governor, is responsible for overseeing the governance of the University. A separate report is prepared for the Commonwealth of Virginia that includes all agencies, boards, commissions, and authorities over which the Commonwealth exercises or has the ability to exercise oversight authority. The University is a component unit of the Commonwealth of Virginia and is included in the general-purpose financial statements of the Commonwealth.

The George Mason University Foundation, Inc. (GMUF), Mason Housing, Inc. (MHI), George Mason University Instructional Foundation (GMUIF), Mason Korea, LLC (MK) and Mercatus Center, Inc. (Mercatus) are private, independent organizations whose close relationships with the University require them to be reported as component units of the University. GMUF, MHI, GMUIF, MK and Mercatus are discretely presented herein by separate page display.

GMUF was established to receive, hold, invest and administer property, and to make expenditures for the benefit of the University. During the year ended June 30, 2019, GMUF distributed \$79,555,356 to, or on behalf of, the University for both restricted and unrestricted purposes. Separate financial information for GMUF may be obtained by writing to the GMUF Business Office at 4400 University Drive, MSN 1A3, Fairfax, VA 22030.

MHI was established to build and manage the University's faculty and staff housing. Separate financial information for MHI may be obtained by writing to Mason Housing, Inc., Attn.: General Accounting, 4400 University Drive, MSN 4B2, Fairfax, VA 22030.

GMUIF was established to transmit educational and public affairs programming to the greater Washington, DC metropolitan area for a program fee under licenses issued by the Federal Communications Commission. During FY 14 the University and GMUIF agreed that GMUIF would establish, and be the sole member of, Mason Global Pathways, LLC. The purpose of Mason Global Pathways LLC is to invest in, and own 50% of, INTO Mason, LLC. INTO Mason, LLC was established to manage a new program to recruit international students and create pathways programs, providing the students the opportunity to become degree seeking students at the University. Separate financial information for GMUIF may be obtained by writing to GMUIF, Attn.: CFO, Kelley II - 10716 Kelley Drive, MSN 1D2, Fairfax, VA 22030.

MK was established to develop and operate a campus for the University on the Incheon Global Campus in Songdo, South Korea. Separate financial information for MK may be obtained by writing to Mason Korea, LLC, Attn.: General Accounting, 4400 University Drive, MSN 4B2, Fairfax, VA 22030.

Mercatus supports the University by providing a research center that conducts research, works with students to apply ideas to problems in the world and makes research findings available to the general public to connect academic learning with real-world practice. Separate financial information for Mercatus may be obtained by writing to Mercatus Center, Inc., Attn.: Gary Leff, 3434 Washington Blvd., 4th Floor, Arlington, VA 22201.

B. BASIS OF PRESENTATION

The University's accounting policies conform with generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board (GASB), in the Codification of Governmental Accounting and Financial Reporting Standards. The University follows accounting and reporting standards for "reporting by special-purpose governments engaged only in business-type activities."

GMUF, MHI, GMUIF, MK and Mercatus are private, nonprofit organizations that report under Financial Accounting Standards Board (FASB) standards. Their financial statements included herein are presented in accordance with those standards.

C. BASIS OF ACCOUNTING

The University's financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting. The economic resources measurement focus considers all inflows, outflows, and balances affecting an entity's net position. Under the accrual basis, revenues are recognized when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. All significant intraagency transactions have been eliminated. The University's policy is to spend restricted resources before unrestricted resources when both are available for expenses that are properly chargeable to restricted resources.

D. PREPAID EXPENSES

The University has recorded as a current asset certain expenses for fiscal year 2020 that were paid in advance as of June 30, 2019. These prepaid expenses consist primarily of facility rentals, insurance premiums and technology expenses.

E. INVENTORY

Inventory is composed of two distinct categories of items. The first category is natural gas, which is used to power the University's physical plant. The second category consists of the on-hand stock of materials, supplies, and parts for use in maintaining the University's physical plant. Both categories of inventory are valued at cost using the first-in, first-out inventory methodology.

F. INVESTMENTS

The University's investments consist of an interest in an internal investment pool managed by GMUF. The internal investment pool functions like an external investment pool. Investments in external investment pools are measured at the net asset value (NAV) per share, or its equivalent, determined by the pool. All investment income, including changes in the value of investments (unrealized gains and losses), is reported as nonoperating revenue in the Statement of Revenues, Expenses, and Changes in Net Position.

G. CAPITAL ASSETS

Capital assets include land, buildings, library materials, works of art and historical treasures, equipment, improvements, infrastructure assets such as sidewalks, electrical and computer network cabling systems and intangible assets including computer software. Capital assets generally are defined by the University as assets with an initial cost of \$5,000 or more and an estimated useful life in excess of one year. Commencing with FY 2016, library books and materials are valued at averaged actual cost of purchase for library acquisitions. Prior to FY 2016, library books were valued at published averaged costs. Other capital assets are recorded at actual cost or estimated historical cost if purchased or constructed. Donated capital assets, including library books, are recorded at acquisition value at the date of donation, with the exception of intra-entity capital asset donations which are recorded at the carrying value of the asset on the transferor's books as of the date of transfer. Expenses for major capital assets and improvements are capitalized as projects are constructed (construction in progress). Interest expense relating to construction is capitalized net of interest income earned on resources set aside for this purpose. The costs of normal maintenance and repairs that do not enhance the use of an asset, or materially extend its useful life, are not capitalized.

Depreciation is computed using the straight-line method over the estimated useful life of the asset with no residual value. Depreciation is not allocated to the functional expense categories. Normal useful lives by asset categories are listed below:

- Buildings 25-50 years*
- Improvements and infrastructure 10-30 years
- Equipment 3-20 years
- Intangibles including computer software 5-10 years
- Library materials 10 years

H. NONCURRENT CASH AND INVESTMENTS

Cash and investments that are externally restricted for expenditure in the acquisition or construction of noncurrent assets, to make debt service payments, or maintain sinking or reserve funds are classified as noncurrent assets in the Statement of Net Position.

I. UNEARNED REVENUE

Unearned revenue represents monies collected but not earned as of June 30, 2019. This is primarily composed of student tuition collected for courses that will be offered after June 30, 2019.

J. ACCRUED COMPENSATED ABSENCES

The amount of leave earned but not taken by salaried employees and administrative faculty members is recorded as a liability. The amount reflects, as of June 30, 2019, all unused vacation, overtime, compensatory, recognition and sick leave payable upon termination under University policy. The applicable share of employer related payroll taxes also is included.

K. FEDERAL FINANCIAL ASSISTANCE PROGRAMS

The University participates in federally funded Pell Grants, Supplemental Educational Opportunity Grants, Federal Work-Study, Direct Loan, and the Perkins Loan programs. Federal programs are audited in accordance with generally accepted governmental auditing standards.

L. NET POSITION

The Statement of Net Position reports the difference between assets plus deferred outflows and liabilities plus deferred inflows as net position. Net position is classified as net investment in capital assets; restricted; and unrestricted. Net investment in capital assets consists of capital assets, net of accumulated depreciation less outstanding debt that is attributable to the acquisition, construction, or improvement of those assets. Net position is reported as restricted when constraints on the net position use are either externally imposed by creditors, grantors, or contributors; or imposed by law. Unrestricted net position consists of net position that does not meet the definitions above.

^{*} Research buildings are depreciated using the component method. The estimated useful lives of research building components range from 10-50 years.

M. REVENUE CLASSIFICATIONS

Operating revenues include activities that have the characteristics of exchange transactions, such as: (1) student tuition and fees, net of scholarship discounts and allowances; (2) sales and services of auxiliary enterprises, net of scholarship allowances; and (3) federal, state, local and nongovernmental grants and contracts.

Governmental financial aid grants are treated as operating revenue, with the exception of Pell grants which are treated as nonoperating revenue in the University's financial statements.

Nonoperating revenues include activities that have the characteristics of nonexchange transactions, such as gifts and state appropriations. Nonoperating expenses include interest on debt related to the purchase of capital assets.

N. SCHOLARSHIP DISCOUNTS AND ALLOWANCES

Student tuition and fees revenues, and certain other revenues from students, are reported net of scholarship discounts and allowances in the Statement of Revenues, Expenses, and Changes in Net Position. Scholarship discounts and allowances are the difference between the stated charge for goods and services provided by the University, and the amount that is paid by students and/or third parties making payments on the student's behalf.

O. DISCOUNTS, PREMIUMS, AND BOND ISSUANCE COSTS

General Obligation Bonds and notes payable on the Statement of Net Position are reported net of related discounts and premiums, which are recognized over the life of the bond. Deferred gains and losses on debt refundings are recorded as deferred inflows of resources and deferred outflows of resources, respectively. The deferred inflows and outflows are recognized as a component of interest expense over the remaining life of the old bond or the life of the new bond, whichever is shorter. Bond issuance costs are expensed.

P. COMMONWEALTH EQUIPMENT AND CAPITAL PROJECT REIMBURSEMENT PROGRAMS

The Commonwealth has established several programs to provide state-supported institutions of higher education with bond proceeds for financing the acquisition of instructional and research equipment and facilities. The Commonwealth issues bonds and uses the proceeds to reimburse the University, and other institutions of higher education, for expenses incurred in the acquisition of equipment and facilities. The bond liability is assumed by the Commonwealth and is not reflected as a liability on the University's financial statements.

During Fiscal Year 2019, funding has been provided to the University from three Reimbursement Programs:

- General Obligation Bonds (GOB) Capital Project
- 21st Century Capital Project
- Equipment Trust Fund (ETF)

The Statement of Net Position line item "Due from the Commonwealth of Virginia" includes pending reimbursements at year-end from these programs. The Statement of Revenues, Expenses, and Changes in Net Position line items "Capital grants and gifts" and "Capital appropriations" include the reimbursements from these programs.

Q. DEFINED BENEFIT PENSIONS

The Virginia Retirement System (VRS) State Employee Retirement Plan and the Virginia Law Officers' System (VaLORS) Retirement Plan are single employer pension plans that are treated like cost-sharing plans. 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 Virginia Retirement System (VRS) State Employee Retirement Plan and the Virginia Law Officers' System (VaLORS) Retirement Plan; and the additions to/deductions from the VRS State Employee Retirement Plan's and the VaLORS Retirement 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.

R. DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES

Deferred outflows of resources are defined as the consumption of net assets applicable to a future reporting period and increase net position similar to assets. Deferred inflows of resources are defined as the acquisition of net assets applicable to a future reporting period and decrease net position similar to liabilities.

S. OTHER POST-EMPLOYMENT BENEFITS

Group Life Insurance

The Virginia Retirement System (VRS) Group Life Insurance Program is a multiple employer, cost-sharing plan. It provides coverage to state employees, teachers, and employees of participating political subdivisions. The Group Life Insurance Program was established pursuant to §51.1-500 et seq. of the *Code of Virginia*, as amended, and which provides the authority under which benefit terms are established or may be amended. The Group Life Insurance Program is a defined benefit plan that provides a basic group life insurance benefit for employees 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'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.

State Employee Health Insurance Credit Program

The Virginia Retirement System (VRS) State Employee Health Insurance Credit Program is a single employer plan that is presented as a multiple-employer, cost-sharing plan. The State Employee 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. The State Employee Health Insurance Credit Program is a defined benefit plan that provides a credit toward the cost of health insurance coverage for retired state employees. For purposes of measuring the net State Employee Health Insurance Credit Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the State Employee Health Insurance Credit Program OPEB, and the State Employee Health Insurance Credit Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) State Employee Health Insurance Credit Program; and the additions to/deductions from the VRS State Employee 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.

Line of Duty Act Program

The Virginia Retirement System (VRS) Line of Duty Act Program (LODA) is a multiple-employer, cost-sharing plan. The Line of Duty Act Program was established pursuant to §9.1-400 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 Line of Duty

Act Program provides death and health insurance benefits to eligible state employees and local government employees, including volunteers, who die or become disabled as a result of the performance of their duties as a public safety officer. In addition, health insurance benefits are provided to eligible survivors and family members. For purposes of measuring the net Line of Duty Act Program OPEB liability, deferred outflows of resources and deferred inflows of resources related to the Line of Duty Act Program OPEB, and Line of Duty Act Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Line of Duty Act Program OPEB Plan and the additions to/deductions from the VRS Line of Duty Act Program OPEB Plan'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.

Disability Insurance Program

The Virginia Retirement System (VRS) Disability Insurance Program (Virginia Sickness and Disability Program) is a single employer plan that is presented as a multiple-employer, cost-sharing plan. The Disability Insurance Program was established pursuant to §51.1-1100 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 Disability Insurance Program is a managed care program that provides sick, family and personal leave and short-term and long-term disability benefits for State Police Officers, state employees, and VaLORS employees. For purposes of measuring the net Disability Insurance Program OPEB liability (asset), deferred outflows of resources and deferred inflows of resources related to the Disability Insurance Program OPEB, and Disability Insurance Program OPEB expense, information about the fiduciary net position of the Virginia Retirement System (VRS) Disability Insurance Program OPEB Plan and the additions to/deductions from the VRS Disability Insurance Program OPEB Plan'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.

Pre-Medicare Retiree Healthcare Plan

Pre-Medicare Retiree Healthcare is a single-employer defined benefit OPEB plan that is treated like a cost-sharing plan for financial reporting purposes. This program was established by Title 2.2, Chapter 28 of the *Code of Virginia* for retirees who are not yet eligible to participate in Medicare. It is the same health insurance program offered to active employees and managed by the Virginia Department of Human Resource Management. After retirement, the University no longer subsidizes the retiree's premium; however, since both active employees and retirees are included in the same pool for purposes of determining health insurance rates, retiree rates are effectively lower than what might otherwise be available outside of this benefit.

T. NEW ACCOUNTING PRONOUNCEMENTS

The GASB issued Statement No. 83, Certain Asset Retirement Obligations. The objective of this Statement is to provide financial statement users with information about asset retirement obligations that were not addressed in GASB standards by establishing uniform accounting and financial reporting requirements for these obligations. The requirements of this Statement were effective for reporting periods beginning after June 15, 2018. The statement has no effect on the University's financial statements.

The GASB issued Statement No. 84, Fiduciary Activities. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. The University has not yet determined the effect this Statement will have on its financial statements.

The GASB issued Statement No. 87, Leases. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. The Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. The University has not yet determined the effect this Statement will have on its financial statements.

The GASB issued Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. The objective of this statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. The requirements of this statement were effective for reporting periods beginning after June 15, 2018. Debt disclosures have been modified as a result of this statement.

The GASB issued Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period. The objectives of this statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period. The requirements of this statement are effective for reporting periods beginning after December 15, 2019. The University has not yet determined the effect this Statement will have on its financial statements.

The GASB issued Statement No. 90, *Majority Equity Interests*. The objectives of this statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. The University has not yet determined the effect this Statement will have on its financial statements.

The GASB issued Statement No. 91, *Conduit Debt Obligations*. The objectives of this statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. The University has not yet determined the effect this Statement will have on its financial statements.

2. CASH, CASH EQUIVALENTS AND INVESTMENTS

The University's deposits and investments are subject to the following risks:

<u>Custodial Credit Risk</u> - the custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the University will not be able to recover the value of investment or collateral securities that are in possession of an outside party. The University's investments consist of an interest in an internal investment pool managed by George Mason University Foundation (GMUF). The investment pool contains corporate stocks and corporate bonds, both of which are subject to custodial credit risk. The other investments held by GMUF in the investment pool are not subject to custodial credit risk.

<u>Credit Risk</u> - the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Credit quality ratings are not required for U.S. government securities or other obligations explicitly guaranteed by the U.S. government. GMUF's investment pool contains corporate bonds, which are debt securities, and therefore subject to credit risk. Credit risk relative to these bonds is mitigated by GMUF's endowment investment policy guidelines on the credit quality of fixed income investments which state that the percentage of core fixed income assets rated below investment grade by one of the major reporting agencies (Standard and Poor's and Moody's) cannot exceed

25% of the total core fixed income allocation. The other investments held by GMUF in the investment pool are not investments of a type that are subject to credit risk.

Concentration of Credit Risk - the risk of loss attributed to the magnitude of a government's investment in a single issuer. Investments with any one issuer that represent five percent or more of total investments constitute concentration of credit risk. However, investments issued or explicitly guaranteed by the U.S. government, and investments in mutual funds, internal investment pools, and other pooled investments are excluded from the requirement. The University's interest in the internal investment pool managed by GMUF is a portion of the total investment pool managed by GMUF. In order to achieve a prudent level of portfolio diversification, GMUF's endowment investment policy guidelines require that not more than 5% of the portfolio may be invested in the securities of any one issuer, at cost, unless the issue is U.S. Government guaranteed, or an agency of the U.S. Government.

Interest Rate Risk - the risk that changes in interest rates will adversely affect the fair value of an investment. GMUF's investment pool contains money market funds. These money market funds have a maturity of less than one year. GMUF's investment pool also contains corporate bonds. These corporate bonds are subject to interest rate risk. The interest rate risk relative to these bonds is mitigated by GMUF's endowment investment policy guidelines on fixed income investments, which state that the weighted average portfolio duration of the core bond portfolio should not exceed 125% of the weighted average portfolio duration of the Barclays Aggregate Bond Index. The other investments held by GMUF in the investment pool are not investments of a type that are subject to interest rate risk.

<u>Foreign Currency Risk</u> - the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The University had no foreign investments or foreign deposits for FY 2019.

A. CASH AND CASH EQUIVALENTS

Pursuant to Section 2.2-1800, et seq., Code of Virginia, the Treasurer of Virginia, who is responsible for the collection, disbursement, custody, and investment of state funds, maintains all state funds of the University. Cash deposits held by the University are maintained in accounts that are collateralized in accordance with the Virginia Security for Public Deposits Act, Section 2.2-4400, et seq., Code of Virginia. Cash represents cash with the Treasurer, cash on hand, cash deposits including certificates of deposit and temporary investments with original maturities of three months or less and cash equivalents with the Virginia State Non-Arbitrage Program (SNAP). SNAP offers a professionally-managed money market mutual fund, which provides a temporary pooled investment vehicle for proceeds pending expenditure, and includes record keeping, depository and arbitrage rebate calculation services. SNAP complies with all requirements of GASB Statement 79. SNAP investments are reported using the net asset value per share, which is calculated on an amortized cost basis that provides a NAV per share that approximates fair value.

B. INVESTMENTS

The investment policy of the University is established by the Board of Visitors and monitored by the Finance and Land Use Committee of the Board. The University has cash and cash equivalents and investments as set forth in Section D.

C. SECURITIES LENDING TRANSACTIONS

Cash equivalents held by the Treasurer of Virginia represent the University's allocated share of cash collateral received and reinvested and securities received for the State Treasury's securities lending program. Information related to the credit risk of these investments and the State Treasury's securities lending program is available on a statewide level in the Commonwealth of Virginia's Comprehensive Annual Financial Report. The Commonwealth's policy is

to record unrealized gains and losses in the General Fund in the Commonwealth's basic financial statements. When gains or losses are realized, the actual gains and losses are recorded by the affected agencies.

D. SUMMARY OF THE UNIVERSITY'S CASH, CASH EQUIVALENTS AND INVESTMENTS

Cash and Cash Equivalents	
Cash and cash equivalents:	
Local cash	\$19,562,292
Treasurer of Virginia	441,943,306
Treasurer of Virginia (Securities Lending)	28,268,058
Subtotal	489,773,656
Restricted cash and cash equivalents:	
Treasurer of Virginia (State Nonarbitrage Program)	\$14,872,779
Held in custody of others	86,183
Subtotal	14,958,962
Total Cash and cash equivalents	\$504,732,618

Investments	
	<u>Market Value</u>
Long term:	
GMUF Investment Pool	\$8,822,461
Total Investments	\$8,822,461

E. FAIR VALUE MEASUREMENT OF INVESTMENTS

The University 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 pricing inputs other than quoted prices in active markets; Level 3 inputs are not readily observable and require significant management estimation. Investments in internal investment pools are measured at the net asset value (NAV) per share, or its equivalent, determined by the pool.

Assets held in the GMUF Investment pool total \$8.8 million, all are measured at NAV. Investments measured at net asset value (NAV):

	Unfunded Fair Value Commitme		Redemption Frequency	Redemption Notice Period
Investments held by GMUF	\$8,822,461	N/A	N/A	N/A

3. DONOR-RESTRICTED ENDOWMENTS

The University's endowment is managed by the George Mason University Foundation (GMUF). During FY 2019, the net appreciation on the investments of donor-restricted endowments was an overall investment gain of \$207,249, which became available for expenditure by the governing board.

Net appreciation/loss of donor restricted-endowments is recorded in the Net position of the University as an increase/decrease in Net position restricted- expendable to reflect the fact that the net appreciation must be spent in accordance with the stipulations set forth in the underlying endowment agreements.

The state law regarding the ability to spend net appreciation of donor-restricted endowments is the *Uniform Prudent Management of Institutional Funds Act*, Section 64.2-11 of the Code of Virginia.

GMUF's endowment policy seeks to maintain the growth of the present value of existing assets at a rate at least equal to the inflation rate plus the current spending rate. In fiscal year 2017, the spending rate was modified to fix the payout distributions for existing endowments at its fiscal year 2016 payout amount through fiscal year 2019. Payouts for existing endowments whose fair value equals or exceeds market value were calculated at 3.75% of the fiscal year 2016 market value. Payout distributions for new or fully funded endowments are calculated at 1.25% of the gift corpus through fiscal year 2019.

Effective fiscal year 2020, a banded inflation spending policy will be implemented. For endowments in which the market value exceeds the original gift value, the prior year payout distribution will increase at the rate of the Consumer Price Index, with annual distributions to remain above 3% but not to exceed 6% of prior year fair market value. The endowment payout for accounts for which the market value is below the original gift value will receive a 2% of prior year fair market value payout.

4. ACCOUNTS AND NOTES RECEIVABLE

Accounts and notes receivable consisted of the following at June 30, 2019:

Accounts Receivable	
Student tuition and fees	\$14,822,881
Grants and contracts receivable (restricted)	40,062,700
Other accounts receivable	8,371,479
Total accounts receivable	\$63,257,060
Less allowance for doubtful accounts	(2,387,854)
Net accounts receivable	\$60,869,206
Notes Receivable	
Current:	
Perkins loans receivable	\$415,504
Nurse faculty loan	6,718
Less allowance for doubtful accounts	(25,532)
Net current notes receivable	\$396,690
Noncurrent:	
Perkins loan receivable	\$2,598,762
Nurse faculty loan	42,016
Local loans to student	2,553
Less allowance for doubtful accounts	(159,691)
Net non-current notes receivable	\$2,483,640

5. CAPITAL ASSETS

A summary of changes in capital assets for the year ended June 30, 2019 is as follows:

	Beginning			Ending
	Balance	Additions	Reductions	Balance
Non-depreciable capital assets:				
Land	\$22,328,863	\$-	\$-	\$22,328,863
Construction-in-progress	13,058,173	66,109,959	21,218,516	57,949,616
Works of art and historical treasures	2,527,419	2,538,923	-	5,066,342
Total non-depreciable capital assets	37,914,455	68,648,882	21,218,516	85,344,821
Depreciable capital assets:				
Buildings	1,442,713,258	11,877,815	4,042,640	1,450,548,433
Buildings – capital lease	101,980,822	-	, , , <u>-</u>	101,980,822
Improvements	36,110,668	-	-	36,110,668
Infrastructure assets	69,927,922	-	-	69,927,922
Equipment	126,656,525	10,077,452	7,176,442	129,557,535
Equipment – capital lease	1,825,932	-	-	1,825,932
Intangibles including computer software	12,214,663	-	-	12,214,663
Library materials	105,578,911	1,479,931	1,790,104	105,268,738
Total depreciable capital assets	1,897,008,701	23,435,198	13,009,186	1,907,434,713
Less accumulated depreciation:				
Buildings	470,568,259	45,667,944	3,977,250	512,258,953
Buildings – capital lease	13,024,866	3,279,377	, , , <u>-</u>	16,304,243
Improvements	28,555,091	1,094,427	-	29,649,518
Infrastructure assets	27,870,199	1,767,682	-	29,637,881
Equipment	83,466,410	9,173,346	6,735,302	85,904,454
Equipment – capital lease	1,825,761	171	-	1,825,932
Intangibles including computer software	11,914,812	47,195	-	11,962,007
Library materials	86,298,894	4,164,279	1,790,104	88,673,069
Total accumulated depreciation	723,524,292	65,194,421	12,502,656	776,216,057
Depreciable capital assets, net	1,173,484,409	(41,759,223)	506,530	1,131,218,656
Total capital assets, net	\$1,211,398,864	\$26,889,659	\$21,725,046	\$1,216,563,477

6. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses consisted of the following at June 30, 2019:

Accounts Payable and Accrued Expenses	
Employee salaries, wages and fringe benefits payable	\$31,637,684
Vendors and suppliers accounts payable	22,992,825
Interest payable	4,448,763
Capital projects retainage payable	2,812,084
Capital projects and equipment accounts payable	8,825,996
Total accounts payable and accrued expenses	\$70,717,352

7. NONCURRENT LIABILITIES

Noncurrent liabilities consist of long-term debt, accruals for compensated absences and other noncurrent liabilities. A summary of changes in noncurrent liabilities for the year ended June 30, 2019 is as follows:

	Beginning			Ending	Current	Non-current
	Balance	Additions	Reductions	Balance	Portion	Portion
Long-term debt:						
Revenue Bonds	\$172,869,186	\$-	\$10,862,116	\$162,007,070	\$11,028,039	\$150,979,031
Notes Payable	262,580,000	21,925,000	19,080,000	265,425,000	20,540,000	244,885,000
Capital Lease Obligation	95,674,839	-	3,197,530	92,477,309	3,773,117	88,704,192
Installment Purchases	4,388,661	-	742,367	3,646,294	711,093	2,935,201
Installment Purchases						
from direct borrowing &						
direct placements	2,904,197	-	954,344	1,949,853	968,001	981,852
Bond Premium	41,669,183	2,254,689	5,007,353	38,916,519	4,832,492	34,084,027
Total Long-term debt	580,086,066	24,179,689	39,843,710	564,422,045	41,852,742	522,569,303
Net Pension Liability	188,517,000	-	10,378,000	178,139,000	-	178,139,000
OPEB Liability	119,029,032	-	8,706,971	110,322,061	1,666,755	108,655,306
Accrued Compensated						
Absences	17,747,834	16,829,742	14,929,633	19,647,943	6,807,695	12,840,248
Other noncurrent liabilities:						
Faculty Early Retirement						
Incentive Liability	421,680	_	416,080	5,600	_	5,600
Loan Funds	3,212,261	34,970	-	3,247,231	_	3,247,231
						
Total Long-term Liabilities	\$909,013,873	\$41,044,401	\$74,274,394	\$875,783,880	\$50,327,192	\$825,456,688

8. BONDS PAYABLE

A. GENERAL OBLIGATION BONDS

The Commonwealth issues General Obligation Bonds, pursuant to Article X, Section 9c of the Constitution of Virginia. These General Obligation Bonds are backed by the full faith, credit, and taxing power of the Commonwealth, and are issued to finance capital projects which, when completed, are expected to generate revenue to repay the debt.

The following schedule describes each of the bonds outstanding:

Bond Title	Calendar Year Issued	Original Amount	Original Interest Rate	Original Bond Term	Fiscal Year Final Payment Due	Balance Outstanding at June 30, 2019
9(c) 2009 C Refunding (2001)	2009	6,266,975	3.0 to 4.0%	15 Years	2024	6,087,890
9(c) 2009 C Refunding (2002)	2009	4,448,039	3.0 to 4.0%	13 Years	2022	1,794,400
9(c) 2009 D Refunding (2005)	2009	6,630,000	2.5 to 5.0%	13 Years	2022	3,555,000
9(c) 2009 D Refunding (2006B)	2009	8,230,000	2.5 to 5.0%	13 Years	2022	5,175,000
Renovate Presidents Park Ph II	2010	2,790,000	2.1 to 5.0%	10 Years	2020	335,000
Housing VIII	2010	39,420,000	2.1 to 5.0%	25 Years	2035	29,710,000
Smithsonian CRC - Housing	2010	5,415,000	2.1 to 5.0%	25 Years	2035	4,080,000
Renovate Commons	2010	1,325,000	2.1 to 5.0%	20 Years	2030	875,000
Student Housing VII-C	2011	1,045,000	2.0 to 5.0%	25 Years	2036	860,000
Presidential Park Renovation	2011	2,700,000	2.0 to 5.0%	10 Years	2021	675,000

Bond Title	Calendar Year Issued	Original Amount	Original Interest Rate	Original Bond Term	Fiscal Year Final Payment Due	Balance Outstanding at June 30, 2019
Housing VIII	2011	20,230,000	2.0 to 5.0%	25 Years	2036	16,210,000
Smithsonian CRC - Housing	2011	4,070,000	2.0 to 5.0%	25 Years	2036	3,340,000
Renovate Commons	2011	14,350,000	2.0 to 5.0%	20 Years	2031	10,605,000
9(c) 2012 A Refunding (2005)	2012	2,674,040	3.0 to 5.0%	12 Years	2024	2,674,040
9(c) 2013 B Refunding (2005)	2013	10,504,185	3.0 to 5.0%	17 Years	2030	9,532,214
9(c) 2013 B Refunding (2006)	2013	9,186,889	4.0 to 5.0%	13 Years	2026	7,821,663
9(c) 2013 B Refunding (2007)	2013	5,162,482	4.0 to 5.0%	12 Years	2025	4,524,652
Housing VIII	2014	2,235,000	2.0 to 5.0%	20 Years	2034	1,850,000
9(c) 2014 B Refunding (2004B)	2014	6,306,209	2.0 to 5.0%	6 Years	2020	1,206,706
9(c) 2015 B Refunding (2006B)	2015	11,765,000	3.0 to 5.0%	16 Years	2031	11,765,000
9(c) 2015 B Refunding (2007B)	2015	7,670,410	3.0 to 5.0%	17 Years	2032	7,035,623
9(c) 2015 B Refunding (Housing VII 2008B)	2015	1,366,447	3.0 to 5.0%	18 Years	2033	1,302,859
9(c) 2015 B Refunding (Housing VIIC 2008B)	2015	17,565,586	3.0 to 5.0%	18 Years	2033	16,734,046
9(c) 2015 B Refunding (Pres Park II 2008B)	2015	1,999,393	4.0 to 5.0%	13 Years	2028	1,837,977
9(c) 2016 B Refunding (2009B)	2016	12,420,000	2.0 to 5.0%	17 Years	2034	12,420,000
Total Bonds Payable		\$205,775,655				\$162,007,070

Long-term debt from bonds as of June 30, 2019 matures as follows:

Year	Principal	Interest	BAB Interest Subsidy*	Total Net of Subsidy
2020	\$11,028,039	\$6,779,795	\$(506,225)	\$17,301,609
2021	11,204,626	6,312,164	(483,434)	17,033,356
2022	11,408,380	5,831,533	(463,203)	16,776,710
2023	11,171,845	5,329,579	(441,489)	16,059,935
2024	11,624,881	4,846,791	(418,426)	16,053,246
2025-2029	57,080,675	16,864,769	(1,681,099)	72,264,345
2030-2034	42,633,624	5,480,518	(814,461)	47,299,681
2035-2039	5,855,000	318,705	(43,017)	6,130,688
Total	\$162,007,070	\$51,763,854	\$(4,851,354)	\$208,919,570

^{*} The University expects the BAB (Build America Bonds) subsidy to occur as displayed. However, the subsidy is subject to intervening Congressional action and thus is not guaranteed.

9. NOTES PAYABLE

A. VCBA NOTES

The University participates in the Public Higher Education Financing Program (Pooled Bond Program) created by the Virginia General Assembly in 1996. Through the Pooled Bond Program, the Virginia College Building Authority (VCBA) issues 9(d) bonds and uses the proceeds to purchase debt obligations (notes) of the University and various other institutions of higher education. VCBA Pooled Bonds are reported as Notes Payable by the University. The University's general revenue secures these notes.

The following schedule describes each of the notes outstanding:

Non-Tide	Calendar Year	Original	Original	Original Note	Fiscal Year Final Pymt	Balance Outstanding at June 30,
Note Title VCBA 2007B Refunding (2005A)	Issued 2007	\$1,675,000	Interest Rate 4.0 to 4.5%	Term 12 Years	Due 2020	2019 \$535,000
Arlington Phase II	2007	7,945,000	2.1 to 5.0%	25 Years	2020	\$535,000 290,000
	2009			20 Years		
PW Performing Arts Center RB#3 Parking Deck III - Phase I	2009	17,960,000	2.1 to 5.0%	25 Years	2021 2021	950,000
PE Building, Phase I	2009	9,790,000	2.1 to 5.0%	20 Years	2021	360,000 145,000
	2009	2,750,000	2.1 to 5.0%	20 Years		
Surge Space & Fit-Out		10,730,000	2.1 to 5.0%		2021	570,000
Academic VI/Research II, RB#2	2009	20,335,000	2.1 to 5.0%	20 Years	2021	1,075,000
PE Building, Phase II	2009	5,245,000	2.1 to 5.0%	20 Years	2021	280,000
Biomedical Research Lab, RB#2	2009	6,405,000	2.1 to 5.0%	20 Years	2021	335,000
Hotel & Conference Center	2009	25,190,000	2.1 to 5.0%	30 Years	2021	655,000
Student Union I Addition/Renovation	2009	7,980,000	2.1 to 5.0%	20 Years	2021	420,000
Parking Deck III, Phase II	2009	13,885,000	2.1 to 5.0%	25 Years	2021	505,000
West Campus Connector & Campus Entrances	2009	6,010,000	2.1 to 5.0%	20 Years	2021	315,000
Arlington Phase II	2009	5,010,000	3.0 to 5.0%	25 Years	2020	165,000
PW Performing Arts Center	2009	3,390,000	3.0 to 5.0%	20 Years	2020	165,000
Fairfax Surge Space Fit Out Data Center	2009	1,685,000	2.0 to 5.0%	20 Years	2020	80,000
PW Regional Biomedical Laboratory	2009	1,950,000	2.0 to 5.0%	20 Years	2020	90,000
Hotel & Conference Center	2009	8,300,000	3.0 to 5.0%	30 Years	2020	200,000
Student Union I Addition/Renovation	2009	7,725,000	3.0 to 5.0%	20 Years	2020	375,000
Student Union II Renovation	2009	4,830,000	3.0 to 5.0%	20 Years	2020	235,000
Student Union II Renovation	2010	2,935,000	3.75 to 5.5%	20 Years	2031	2,085,000
Student Union I Addition/Renovation	2010	5,390,000	3.75 to 5.5%	20 Years	2031	3,820,000
Smithsonian CRC-Dining	2010	2,395,000	3.75 to 5.6%	25 Years	2036	1,895,000
Krasnow Institute Addition II	2010	5,215,000	2.0 to 5.5%	20 Years	2031	3,570,000
Fieldhouse Life/Safety/Code Renovation	2010	1,395,000	3.75 to 5.5%	20 Years	2031	990,000
Repair Aquatic & Fitness Center HVAC	2010	2,325,000	2.0 to 5.0%	10 Years	2021	550,000
VCBA 2010B Refunding (2003A)	2010	2,990,000	2.0 to 5.0%	10 Years	2021	1,570,000
Fairfax Campus Dining	2011	6,090,000	5.00%	10 Years	2022	2,340,000
Smithsonian CRC – Dining	2011	2,690,000	3.0 to 5.0%	25 Years	2037	1,786,637
Central Utility Plant	2011	-	3.0 to 5.0%	25 Years	2037	468,363
VCBA 2012A Refunding (2003A)	2012	5,525,000	3.0 to 5.0%	12 Years	2025	3,630,000
VCBA 2012A Refunding (Aquatic Center 2004A)	2012	3,130,000	5.00%	8 Years	2021	1,145,000
VCBA 2012A Refunding (Research I 2004A)	2012	6,310,000	2.75 to 5.0%	13 Years	2026	4,380,000
VCBA 2012A Refunding (2005A)	2012	4,260,000	3.0 to 5.0%	12 Years	2025	3,340,000
Fieldhouse Life/Safety/Code Renovation	2012	3,060,000	4.0 to 5.0%	10 Years	2023	488,835
Central Utility Plant	2012		4.0 to 5.0%	10 Years	2023	1,041,165
W Campus Connector & Campus Entrances	2013	2,135,000	2.0 to 5.0%	10 Years	2024	1,275,000
Ike's Dining	2013	7,830,000	2.0 to 5.0%	20 Years	2034	6,615,000
Johnson Center	2013	2,620,000	2.0 to 5.0%	8 Years	2022	696,840
Central Utility Plant	2013	3,065,000	2.0 to 5.0%	20 Years	2034	3,098,160
Renovate Fieldhouse	2013	3,230,000	1.0 to 3.5%	10 Years	2024	1,885,000
VCBA 2013B Refunding (2006A)	2013	7,280,000	1.0 to 4.0%	14 Years	2028	4,995,000
VCBA 2013B Refunding (2009A)	2013	1,845,000	1.0 to 4.0%	15 Years	2029	1,310,000
VCBA 2014B Refunding (1999)	2014	1,345,000	3.0 to 5.0%	5 Years	2020	285,000
VCBA 2014B Refunding (2005A)	2014	1,455,000	3.0 to 5.0%	12 Years	2027	1,035,000
VCBA 2014B Refunding (2006A)	2014	16,640,000	3.0 to 5.0%	9 Years	2024	12,455,000
VCBA 2014B Refunding (2007A)	2014	28,290,000	3.0 to 5.0%	11 Years	2026	25,345,000
VCBA 2015B Refunding (Arlington Ph II 2009A)	2015	5,595,000	3.0 to 5.0%	18 Years	2034	5,595,000
VCBA 2015B Refunding (PW Perf Arts 2009A)	2015	10,375,000	3.0 to 5.0%	13 Years	2029	10,375,000
VCBA 2015B Refunding (Parking Deck Ph I 2009A)	2015	6,520,000	3.0 to 5.0%	18 Years	2034	6,520,000
VCBA 2015B Refunding (PE Bldg Ph I 2009A)	2015	1,580,000	3.0 to 5.0%	13 Years	2029	1,580,000
VCBA 2015B Refunding (Surge Space/Fit Out 2009A)	2015	6,185,000	3.0 to 5.0%	13 Years	2029	6,185,000
VCBA 2015B Refunding (Acad VI/Res II 2009A)	2015	11,750,000	3.0 to 5.0%	13 Years	2029	11,750,000
VCBA 2015B Refunding (PE Bldg Ph II 2009A)	2015	3,020,000	3.0 to 5.0%	13 Years	2029	3,020,000
VCBA 2015B Refunding (Biomed Rsch Lab 2009A)	2015	3,685,000	3.0 to 5.0%	13 Years	2029	3,685,000
VCBA 2015B Refunding (Hotel & Conf Ctr 2009A)	2015	15,790,000	3.0 to 5.0%	23 Years	2039	15,790,000
VCBA 2015B Refunding (SUB I Add/Renov 2009A)	2015	4,600,000	3.0 to 5.0%	13 Years	2029	4,600,000

Note Title	Calendar Year Issued	Original Amount	Original Interest Rate	Original Note Term	Fiscal Year Final Pymt Due	Balance Outstanding at June 30, 2019
VCBA 2015B Refunding (Park Deck III Ph II 2009A)	2015	9,275,000	3.0 to 5.0%	18 Years	2034	9,275,000
VCBA 2015B Refunding (W Campus Connect 2009A)	2015	3,460,000	3.0 to 5.0%	13 Years	2029	3,460,000
VCBA 2016A Refunding (Krasnow 2006A)	2016	390,000	3.00%	10 Years	2027	390,000
VCBA 2016A Refunding (PE Add/Renov 2006A)	2016	1,750,000	3.0 to 5.0%	12 Years	2029	1,750,000
VCBA 2016A Refunding (PE Bldg Add, Ph II 2006A)	2016	805,000	3.0 to 5.0%	12 Years	2029	805,000
VCBA 2016A Refunding (PW Bio Lab 2006A)	2016	3,825,000	3.0 to 5.0%	12 Years	2029	3,825,000
VCBA 2016A Refunding (PW Perf Arts Ctr 2006A)	2016	3,105,000	3.0 to 5.0%	12 Years	2029	3,105,000
VCBA 2016A Refunding (Student Union III 2006A)	2016	1,315,000	3.0 to 5.0%	11 Years	2028	1,315,000
VCBA 2016A Refunding (Surge Space Fit Out 2006A)	2016	390,000	3.0 to 5.0%	11 Years	2028	390,000
VCBA 2016A Refunding (Surge Space Bldg 2006A)	2016	1,595,000	3.0 to 5.0%	11 Years	2028	1,595,000
VCBA 2016A Refunding (PW Perf Arts Ctr 2007A)	2016	1,285,000	3.0 to 5.0%	11 Years	2028	1,285,000
VCBA 2016A Refunding (Parking Deck III 2007A)	2016	7,795,000	3.0 to 5.0%	16 Years	2033	7,795,000
VCBA 2016A Refunding (PE Bldg Ph I 2007A)	2016	1,285,000	3.0 to 5.0%	11 Years	2028	1,285,000
VCBA 2016A Refunding (Surge Space Bldg 2007A)	2016	450,000	3.0 to 5.0%	11 Years	2028	450,000
VCBA 2016A Refunding (Acad VI/Res II 2007A)	2016	745,000	3.0 to 5.0%	11 Years	2028	745,000
VCBA 2016A Refunding (PE Bldg Add, Ph II 2007A)	2016	575,000	3.0 to 5.0%	11 Years	2028	575,000
VCBA 2016A Refunding (Hotel & Conf Ctr 2007A)	2016	8,345,000	3.0 to 5.0%	21 Years	2038	8,345,000
VCBA 2016A Refunding (Sub I Renov 2007A)	2016	765,000	3.0 to 5.0%	11 Years	2028	765,000
VCBA 2016A Refunding (Student Union III 2007A)	2016	2,255,000	3.0 to 5.0%	16 Years	2033	2,255,000
VCBA 2016A Refunding (Arl Ph II 2009B)	2016	3,520,000	3.0 to 5.0%	18 Years	2035	3,520,000
VCBA 2016A Refunding (PW Perf Arts Ctr 2009B)	2016	2,195,000	3.0 to 5.0%	13 Years	2030	2,195,000
VCBA 2016A Refunding (Surge Space Fit Out 2009B)	2016	1,020,000	3.0 to 5.0%	13 Years	2030	1,020,000
VCBA 2016A Refunding (Biomed Rsch Lab 2009B)	2016	1,225,000	3.0 to 5.0%	13 Years	2030	1,225,000
VCBA 2016A Refunding (Hotel & Conf Ctr 2009B)	2016	5,955,000	3.0 to 5.0%	23 Years	2040	5,955,000
VCBA 2016A Refunding (Sub I Add/Renov 2009B)	2016	4,980,000	3.0 to 5.0%	13 Years	2030	4,980,000
VCBA 2016A Refunding (SUB II Renov 2009B)	2016	3,120,000	3.0 to 5.0%	13 Years	2030	3,120,000
Utilities Distribution Infrastructure	2017	3,240,000	2.125 to 5.0%	20 Years	2038	3,135,000
Utilities Distribution Infrastructure	2018	21,925,000	4.0 to 5.0%	20 Years	2039	21,925,000
Total Notes Payable		\$463,925,000			•	\$265,425,000

Long-term debt from Notes Payable as of June 30, 2019 matures as follows:

			BAB Interest	Total Net of
Year	Principal	Interest	Subsidy*	Subsidy
2020	\$20,540,000	\$11,190,291	\$(214,092)	\$31,516,199
2021	20,705,000	10,242,061	(199,099)	30,747,962
2022	20,770,000	9,248,876	(184,941)	29,833,935
2023	20,475,000	8,243,229	(171,847)	28,546,382
2024	21,070,000	7,228,019	(157,747)	28,140,272
2025-2029	102,480,000	22,508,281	(532,092)	124,456,189
2030-2034	41,245,000	7,073,303	(99,059)	48,219,244
2035-2039	17,780,000	1,595,669	(5,635)	19,370,034
2040-2044	360,000	5,400	=	365,400
Total	\$265,425,000	\$77,335,129	\$(1,564,512)	\$341,195,617

^{*} The University expects the BAB (Build America Bonds) subsidy to occur as displayed. However, the subsidy is subject to intervening Congressional action and thus is not guaranteed.

B. PRIOR YEAR DEBT DEFEASANCE

In previous fiscal years, the Virginia College Building Authority (VCBA) issued 9(d) VCBA pooled bonds. The proceeds were deposited into an irrevocable trust with an escrow agent to provide for all future debt service payments on other debt. The notes representing that other debt are therefore considered defeased. Accordingly,

the trust account's assets and liabilities for the defeased notes are not included in the University's financial statements. On June 30, 2019, \$23,055,000 from Series 2009B 9(d) VCBA pooled bonds were considered defeased and outstanding.

10. INSTALLMENT PURCHASES PAYABLE & CAPITAL LEASE OBLIGATIONS

A. INSTALLMENT PURCHASES PAYABLE

The University has entered into various installment purchase contracts to finance the acquisition of photocopiers, pianos, the equipment necessary for the implementation of the Energy Performance Contract Agreements and other equipment. The remaining lengths of the purchase agreements range from one to six years with varying rates of interest.

The outstanding installment purchases from direct borrowings and direct placements are secured with a first priority security interest in the energy equipment purchased with the financing. The borrowing contains a provision that outstanding amounts become due immediately if the University is unable to make payment. In the event of payment default, the lender can retake possession of the equipment.

Principal and interest payments on these commitments for fiscal years subsequent to June 30, 2019 are as follows:

	Installment Pu	rchases	Installment Purchase Borrowings & Direct	
Year	Principal	Interest	Principal	Interest
2020	\$711,093	\$51,879	\$968,001	\$22,602
2021	656,799	41,828	981,852	8,750
2022	662,685	31,973	-	-
2023	587,573	22,319	-	-
2024	510,423	14,702	-	-
2025	517,721	7,403	-	-
Total	\$3,646,294	\$170,104	\$1,949,853	\$31,352

B. CAPITAL LEASE OBLIGATIONS

During FY 2011, the University entered into a twenty-five year capital lease with George Mason University Foundation (GMUF) for the provision of a 150,000 square foot administration building at the Fairfax campus. In May 2018, GMUF issued refunding revenue bonds, the proceeds of which were used to retire the outstanding bonds and the interest rate swap termination fee (See Note 19.E). The refunding did not have a material effect on the capital lease. The University has accounted for the acquisition of the administration building and its furniture and equipment as a capital lease, and therefore has recorded the building and its furniture and equipment as depreciable capital assets, and has also recorded a corresponding lease liability in long-term debt, both of which are on its Statement of Net Position as of June 30, 2019.

During FY 2013, the University began a 30 year capital lease with George Mason University Foundation (GMUF) for the provision of an 80,858 square foot residence hall at the Prince William campus. The University has accounted for the acquisition of the residence hall as a capital lease, and therefore has recorded the building as a depreciable capital asset, and has recorded a corresponding lease liability in long-term debt, both on its Statement of Net Position as of June 30, 2019.

During FY 2014, the University began a 20 year capital lease with George Mason University Foundation (GMUF) for the provision of a 31,879 square foot office building and land in downtown Fairfax, close to the Fairfax campus.

The University has accounted for the acquisition of the office building as a capital lease, and therefore has recorded land as a non-depreciable capital asset, the building as a depreciable capital asset, and has recorded a corresponding lease liability in long-term debt, all on its Statement of Net Position as of June 30, 2019.

During FY 2015, the University began a 29.5 year capital lease with George Mason University Foundation (GMUF) for the provision of a 75,000 square foot lab building at the Prince William campus. The University has accounted for the acquisition of the lab building as a capital lease, and therefore has recorded the building as a depreciable capital asset, and has recorded a corresponding lease liability in long-term debt, both on its Statement of Net Position as of June 30, 2019.

During FY 2018, the University began a 10 year capital lease with George Mason University Foundation (GMUF) for the provision of an 183,000 square foot residence hall at the Fairfax campus. The University has accounted for the acquisition of the residence hall as a capital lease, and therefore has recorded the building as a depreciable capital asset, and has recorded a corresponding lease liability in long-term debt, both on its Statement of Net Position as of June 30, 2019.

Payments of principal, interest, and executory costs on the capital leases for fiscal years subsequent to June 30, 2019 are as follows:

Fiscal Year	Principal	Interest	Executory	Total
2020	\$3,773,117	\$4,758,013	\$344,470	\$8,875,600
2021	4,002,758	4,586,052	350,238	8,939,048
2022	4,174,766	4,410,012	349,835	8,934,613
2023	4,399,762	4,220,382	353,372	8,973,516
2024	4,638,183	4,018,789	357,055	9,014,027
2025-2029	23,809,276	16,678,891	1,838,604	42,326,771
2030-2034	19,729,710	11,089,051	821,794	31,640,555
2035-2039	17,589,892	5,226,369	635,626	23,451,887
2040-2044	10,359,845	683,448	380,729	11,424,022
Total	\$92,477,309	\$55,671,007	\$5,431,723	\$153,580,039

11. EXPENSES BY NATURAL CLASSIFICATION

The following table shows a classification of expenses both by function as listed in the Statement of Revenues, Expenses, and Changes in Net Position and by natural classification, which is the basis for amounts shown in the Statement of Cash Flows.

					Depreciation	
	Salaries	Fringe	Goods and	Student	&	
	and Wages	Benefits	Services	Aid	Amortization	Total
Instruction	\$219,777,969	\$56,000,095	\$33,768,536	\$-	\$-	\$309,546,600
Research	44,410,179	8,440,855	61,187,501	-	-	114,038,535
Public Service	10,591,529	2,355,980	10,313,001	-	-	23,260,510
Academic Support	42,103,433	12,826,398	18,801,117	-	-	73,730,948
Student Services	19,407,148	5,935,597	6,796,674	-	-	32,139,419
Institutional Support	34,517,996	11,231,673	4,754,767	-	-	50,504,436
Operation & Maintenance	18,533,451	6,612,390	29,070,410	-	-	54,216,251
Depreciation & Amortization	-	-	-	-	65,194,421	65,194,421
Student Aid	-	-	-	28,831,042	-	28,831,042
Auxiliary Enterprises	42,461,984	11,599,520	90,002,318	-	-	144,063,822
Totals	\$431,803,689	\$115,002,508	\$254,694,324	\$28,831,042	\$65,194,421	\$895,525,984

12. STATE APPROPRIATIONS- CURRENT UNRESTRICTED FUNDS

George Mason University receives appropriations from the General Fund of the Commonwealth. The Appropriation Act specifies that unexpended General Fund appropriations that remain on the last day of the current year, ending June 30, 2019, shall be reappropriated for expenditure in the first month of the next year, beginning on July 1, 2019, except as may be specifically provided otherwise by the General Assembly. The Governor may, at his discretion, unallot funds from the reappropriated balances that relate to unexpended appropriations. The following is a summary of General Fund appropriations received by the institution including all supplemental appropriations and reversions:

General Fund Appropriations	
Original Appropriation	\$137,254,116
Central Appropriations Distributions:	
State Employee Benefits Adjustments	933,729
PMIS Internal Service Fund Charges Adjustment	948
Other Central Appropriations Adjustments	(14,055)
VIVA	45,819
Virginia Degree Completion Network	860,000
Other General Fund Adjustments	1,426,222
Reversion to General Fund – planned FY20 carryforward	(1,032,432)
Total	\$139,474,347

13. INTEREST EXPENSE

During fiscal year 2019, the University incurred interest charges totaling \$20,403,414. Of this amount, \$65,647 was capitalized as part of the cost of construction and \$20,337,767 was expensed.

14. COMMITMENTS

A. OPERATING LEASES

The University is committed under various operating leases for rental of off-campus facilities. The future lease terms are for periods of one to nine years. Facility rental expenses for the fiscal year ended June 30, 2019 were \$7,231,493. The University had, as of June 30, 2019, the following total future minimum rental payments due under the above leases:

Year Ended June 30	Total
2020	\$6,470,146
2021	6,468,332
2022	6,515,444
2023	6,188,127
2024	5,851,235
2025-2029	9,882,024
Total	\$41,375,308

B. CONSTRUCTION

Outstanding commitments for capital outlay projects that were under construction at June 30, 2019 were \$109,269,877.

15. RETIREMENT AND PENSION SYSTEMS

A. VIRGINIA RETIREMENT SYSTEM (VRS) STATE EMPLOYEE DEFINED BENEFIT RETIREMENT PLAN AND VIRGINIA LAW OFFICERS SYSTEM (Valors) DEFINED BENEFIT RETIREMENT PLAN

Plan Description

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

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

RETIREMENT PLAN PROVISIONS BY PLAN STRUCTURE

PLAN 1	PLAN 2	HYBRID RETIREMENT
		PLAN
About Plan 1	About Plan 2	About the Hybrid Retirement
Plan 1 is a defined benefit plan. The	Plan 2 is a defined benefit plan. The	Plan
retirement benefit is based on a	retirement benefit is based on a	The Hybrid Retirement Plan combines
member's age, creditable service and average final compensation at	member's age, creditable service and average final compensation at	the features of a defined benefit plan and
retirement using a formula.	retirement using a formula.	a defined contribution plan.The defined benefit is based on a
rearement doing a remain	Teaterness doing a romana	member's age, creditable service and
		average final compensation at
		retirement using a formula.
		The benefit from the defined
		contribution component of the plan
		depends on the member and employer
		contributions made to the plan and the investment performance of those
		contributions.
		• In addition to the monthly benefit
		payment payable from the defined
		benefit plan at retirement, a member
		may start receiving distributions from
		the balance in the defined contribution
		account, reflecting the contributions,

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
		investment gains or losses, and any required fees.
Eligible Members Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013, and they have not taken a refund.	Eligible Members Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.	Eligible Members Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes: • State employees* • Members in Plan 1 or Plan 2 who elected to opt into the plan during the
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.	Hybrid Opt-In Election VRS non-hazardous duty covered Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held	election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014 *Non-Eligible Members Some employees are not eligible to participate in the Hybrid Retirement Plan. They include:
The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014.	January 1 through April 30, 2014. The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014.	Members of the Virginia Law Officers' Retirement System (VaLORS) Those employees eligible for an optional retirement plan (ORP) must elect the
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.	ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1
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.	or Plan 2 (as applicable) or ORP.
Retirement Contributions State employees, excluding state elected officials, and optional retirement plan participants, contribute 5% of their compensation each month to their member contribution account through a pretax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.	Retirement Contributions State employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.	Retirement Contributions 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.

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Creditable Service Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.	Creditable Service Same as Plan 1.	Creditable Service Defined Benefit Component: Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.
Vesting	Vecting	Defined Contributions Component: Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.
Vesting Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.	Vesting Same as Plan 1.	Vesting Defined Benefit Component: Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component: Defined Contributions Component:
Members are always 100% vested in the contributions that they make.		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

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
		contribution component of the plan, based on service. • After two years, a member is 50% vested and may withdraw 50% of employer contributions. • After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.
Calculating the Benefit The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier and total service credit at retirement. It is one of the benefit payout options available to a member at retirement. An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.	Calculating the Benefit See definition under Plan 1.	Calculating the Benefit Defined Benefit Component: See definition under Plan 1 Defined Contribution Component: The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	Average Final Compensation A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	Average Final Compensation Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.
Service Retirement Multiplier VRS: The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.	Service Retirement Multiplier VRS: Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013.	Service Retirement Multiplier Defined Benefit Component: VRS: The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.
VaLORS: The retirement multiplier for VaLORS employees is 1.70% or 2.00%.	VaLORS: The retirement multiplier for VaLORS employees is 2.00%.	VaLORS: Not applicable. Defined Contribution Component: Not applicable.

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Normal Retirement Age VRS: Age 65.	Normal Retirement Age VRS: Normal Social Security	Normal Retirement Age Defined Benefit Component:
1100 1190 000	retirement age.	VRS: Same as Plan 2.
VaLORS: Age 60.	VaLORS: Same as Plan 1.	VaLORS: Not applicable.
		<u>Defined Contribution Component:</u> Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Unreduced Retirement Eligibility	Earliest Unreduced Retirement Eligibility	Earliest Unreduced Retirement Eligibility
VRS: Age 65 with at least five years (60 months) of creditable service or	VRS: Normal Social Security retirement age with at least five years	Defined Benefit Component: VRS: Normal Social Security retirement
at age 50 with at least 30 years of creditable service.	(60 months) of creditable service or when their age and service equal 90.	age and have at least five years (60 months) of creditable service or when
VaLORS: Age 60 with at least five	VaLORS: Same as Plan 1.	their age and service equal 90. VaLORS: Not applicable.
years of creditable service or age 50 with at least 25 years of creditable		Defined Contribution Component:
service.		Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Reduced Retirement Eligibility	Earliest Reduced Retirement Eligibility	Earliest Reduced Retirement Eligibility
VRS: Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.	VRS: Age 60 with at least five years (60 months) of creditable service.	Defined Benefit Component: VRS: Age 60 with at least five years (60 months) of creditable service.
VaLORS: 50 with at least five years of creditable service.	VaLORS: Same as Plan 1.	VaLORS: Not applicable.
0.0000000000000000000000000000000000000		Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index	Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any	Cost-of-Living Adjustment (COLA) in Retirement <u>Defined Benefit Component:</u> Same as Plan 2.
for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.	additional increase (up to 2%), for a maximum COLA of 3%.	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 creditable service, the COLA will go into effect on July 1 after one full	Eligibility: Same as Plan 1	Eligibility: Same as Plan 1 and Plan 2.

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.		
Exceptions to COLA Effective Dates: The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances: • The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013. • The member retires on disability. • The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP). • The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program. • The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.	Exceptions to COLA Effective Dates: Same as Plan 1	Exceptions to COLA Effective Dates: Same as Plan 1 and Plan 2.
Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.	Disability Coverage Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.	Disability Coverage State employees (including Plan 1 and Plan 2 opt-ins) participating in the Hybrid Retirement Plan are covered under the Virginia Sickness and Disability Program (VSDP), and are not eligible for disability retirement.
Most state employees are covered under the Virginia Sickness and	Most state employees are covered under the Virginia Sickness and	Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VSDP are subject to a one-year waiting period

PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
Disability Program (VSDP), and are not eligible for disability retirement. VSDP members are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.	Disability Program (VSDP), and are not eligible for disability retirement. VSDP members are subject to a one-year waiting period before becoming eligible for non-work related disability benefits.	before becoming eligible for non-work-related disability benefits.
Purchase of Prior Service Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.	Purchase of Prior Service Same as Plan 1.	Purchase of Prior Service Defined Benefit Component: Same as Plan 1, with the following exception: • Hybrid Retirement Plan members are ineligible for ported service. Defined Contribution Component: Not applicable.

Contributions

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Each state agency's contractually required employer contribution rate for the year ended June 30, 2019 was 13.52% of covered employee compensation for employees in the VRS State Employee Retirement Plan. For employees in the VaLORS Retirement Plan, the contribution rate was 21.61% of covered employee compensation. These rates were based on actuarially determined rates from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the University to the VRS State Employee Retirement Plan were \$17,627,449 and \$17,194,913 for the years ended June 30, 2019 and June 30, 2018, respectively. Contributions from the University to the VaLORS Retirement Plan were \$595,024 and \$614,204 for the years ended June 30, 2019 and June 30, 2018, respectively.

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

At June 30, 2019, the University reported a liability of \$172,885,000 for its proportionate share of the VRS State Employee Retirement Plan Net Pension Liability and a liability of \$5,254,000 for its proportionate share of the VaLORS Retirement Plan Net Pension Liability. The Net Pension Liability was measured as of June 30, 2018 and the total pension liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date. The University's proportion of the Net Pension Liability was based on the University's actuarially determined employer contributions to the pension plan for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2018, the University's proportion of the VRS State Employee Retirement Plan was 3.19351% as compared to 3.15262% at June 30, 2017.

At June 30, 2018, the University's proportion of the VaLORS Retirement Plan was 0.84312% as compared to 0.73104% at June 30, 2017.

For the year ended June 30, 2019, the University recognized pension expense of \$5,147,000 for the VRS State Employee Retirement Plan and \$502,000 for the VaLORS Retirement Plan. Since there was a change in proportionate share between June 30, 2017 and June 30, 2018, a portion of the pension expense was related to deferred amounts from changes in proportion and from differences between employer contributions and the proportionate share of employer contributions.

At June 30, 2019, the University reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual		
experience	\$3,000	\$10,598,000
Net difference between projected and actual		
earnings on pension plan investments	-	4,602,000
Change in assumptions	1,157,000	184,000
Changes in proportion and differences between		
employer contributions and proportionate share		
of contributions	2,377,000	3,367,000
Employer contributions subsequent to		
measurement date	18,222,473	-
Total	\$21,759,473	\$18,751,000

\$18,222,473 reported as deferred outflows of resources related to pensions resulting from the University's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the Fiscal Year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

Year Ended June 30	
FY 2020	\$(3,531,000)
FY 2021	(3,686,000)
FY 2022	(7,507,000)
FY 2023	(490,000)

Actuarial Assumptions

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

Inflation	2.5 percent	
Salary increases, including		
inflation	3.5 percent – 5.35 percent	

7.0 percent, net of pension plan investment expenses, including inflation*

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates:

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Updated to a more current mortality table – RP- 2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years' service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 25%

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

Inflation	2.5 percent
Salary increases, including inflation	3.5 percent – 4.75 percent
Investment rate of return	7.0 percent, net of pension plan investment

expenses, including inflation*

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates:

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Net Pension Liability

The net pension liability (NPL) is calculated separately for each system and represents that particular system's total pension liability determined in accordance with GASB Statement No. 67, less that system's fiduciary net position. As of June 30, 2018, NPL amounts for the VRS State Employee Retirement Plan and the VaLORS Retirement Plan are as follows (amounts expressed in thousands):

	State Employee Retirement <u>Plan</u>	VaLORS Retirement <u>Plan</u>
Total Pension Liability	\$ 23,945,821	\$ 2,047,161

Plan Fiduciary Net Position	18,532,189	1,423,980
Employers' Net Pension Liability (Asset)	\$ 5,413,632	\$ 623,181
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	77.39%	69.56%

The total pension liability is calculated by the System's actuary, and each plan's fiduciary net position is reported in the System's financial statements. The net pension liability is disclosed in accordance with the requirements of GASB Statement No. 67 in the System's notes to the financial statements and required supplementary information.

Long-Term Expected Rate of Return

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

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

^{*} The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the University for the VRS State Employee Retirement Plan and the VaLORS Retirement Plan 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, 2018 on, all agencies are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the University's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the University's proportionate share of the VRS State Employee Retirement Plan net pension liability using the discount rate of 7.00%, as well as what the University's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1.00% Decrease	Current Discount	1.00% Increase
	(6.00%)	Rate (7.00%)	(8.00%)
University's proportionate share of the VRS State Employee Retirement Plan Net Pension Liability	\$261,758,000	\$172,885,000	\$98,074,000

The following presents the University's proportionate share of the VaLORS Retirement Plan net pension liability using the discount rate of 7.00%, as well as what the University's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1.00% Decrease	Current Discount	1.00% Increase
	(6.00%)	Rate (7.00%)	(8.00%)
University's proportionate share of the VaLORS Retirement Plan Net Pension Liability	\$7,456,000	\$5,254,000	\$3,431,000

Pension Plan Fiduciary Net Position

Detailed information about the VRS State Employee Retirement Plan's Fiduciary Net Position or the VaLORS Retirement Plan's Fiduciary Net Position is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Payables to the Pension Plan

As of June 30, 2019, the University had a payable to VRS in the amount of \$1,126,168. Of this amount, \$1,069,132 was for the VRS State Employee Retirement Plan and \$57,036 was for VaLORS. These amounts represent current legally required contributions to the pension plan not yet remitted to VRS in accordance with the payment terms.

The University's employer pension contribution amounts for each month are calculated based on employee salaries as of the first business day of each month multiplied by the legally required contribution rate and paid to VRS no later than the 10th of the following month.

B. HYBRID RETIREMENT PLAN - DEFINED CONTRIBUTION COMPONENT

The University's expenses also include the amount assessed by the Commonwealth for the employer's required contributions to the defined contribution component of the Hybrid retirement plan.

During FY 2019, the employer's required retirement contribution rate was 1% for the defined contribution component of the Hybrid Plan. These contributions totaled \$446,577 for the year ended June 30, 2019. All participants were required to contribute 1% to the defined contribution portion of the Hybrid Plan.

During FY 2019, participants were permitted to make voluntary contributions of up to 4% to the Hybrid plan which the University is required to match with an employer contribution of up to 2.5%. The employer matching contribution totaled \$425,731 for the year ended June 30, 2019.

Contributions to the Hybrid plan were calculated using plan's covered payroll of \$44,657,734 for the year ended June 30, 2019.

C. FACULTY RETIREMENT PLANS

Most full-time faculty and certain administrative staff participate in one faculty retirement plan with two investment providers rather than the VRS. These are defined contribution plans where the retirement benefits received are based upon the employer's contribution plus interest and dividends.

For plan participants hired prior to July 1, 2010, the employer's contribution was 10.4% and the participant was not required to make contributions to the plan. Plan participants hired after June 30, 2010 received an employer contribution of 8.5% and were required to contribute 5%. The plan structure for participants hired after June 30, 2010 is designated in the table below with a 2 following the investment providers' names.

Individual contracts issued under the plan provide for full and immediate vesting of the University's contributions. Total pension expense under these plans was \$18,210,915 for the fiscal year ended June 30, 2019 based on total covered payroll of \$191,779,298. The University's outstanding liability for accrued pension expense as of June 30, 2019 was \$635,379. The change in the accrued liability amount from the prior year end was an increase of \$11,736, which accounts for the difference between the pension contributions made to plan trustees, as set forth in the table below, and the pension expense amount stated above. FY 2019 pension contributions were calculated using the plan's covered payroll of \$191,655,583 for Fiscal Year 2019.

The following table summarizes the contributions and participation in the optional retirement plans:

Faculty Retirement	Pension Contributions	Plan's Covered	Contribution
Plan	Made to Plan Trustees	Payroll	Percentage
TIAA-CREF*	\$7,448,711	\$71,622,220	10.4%
TIAA-CREF 2	3,646,692	42,902,258	8.5%
Fidelity Investments	2,997,564	28,822,728	10.4%
Fidelity Investments 2	4,106,212	48,308,377	8.5%
Total	\$18,199,179	\$191,655,583	

^{*}Teachers Insurance and Annuity Association/College Retirement Equities Fund

D. DEFERRED COMPENSATION

Employees of the University are employees of the Commonwealth of Virginia. State employees may participate in the Commonwealth's Deferred Compensation Plan. Participating employees can contribute to the plan each pay period with the Commonwealth matching up to \$20 per pay period. The dollar amount match can change depending on the funding available in the Commonwealth's budget. The Commonwealth's Deferred Compensation Plan is a qualified defined contribution plan under Section 401(a) of the Internal Revenue Code.

Employees may also participate in a University sponsored 403(b) plan or Roth plan, and receive Employer matching contributions on the same basis as the Commonwealth's plan.

Employer contributions under these Deferred Compensation Plans were \$1,224,235 for the fiscal year ended June 30, 2019.

16. OTHER POSTEMPLOYMENT BENEFITS

The University participates in postemployment benefit programs that are sponsored by the Commonwealth and administered by the Virginia Retirement System. These programs include the Group Life Insurance Program (GLI), Retiree Health Insurance Credit Program (HIC), Line of Duty Act Program (LODA) and Virginia Sickness and Disability Program (VSDP). The University also participates in the Pre-Medicare Retiree Healthcare Plan (PMRH), which is sponsored by the Commonwealth and administered by the Department of Human Resources Management.

Virginia Retirement System OPEB Plans				
GLI	HIC	LODA	VSDP	
Plan Description	Plan Description	Plan Description	Plan Description	
All full-time, salaried permanent employees of the state agencies, teachers and employees of participating political subdivisions are automatically covered by the VRS Group Life Insurance Program upon employment. This plan is administered by the Virginia Retirement System (the System), along with pensions and other OBEB plans, for public employer groups in the Commonwealth of Virginia. In addition to the Basic Group Life Insurance benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program. For members who elect the optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured program, it is not included as part of the Group Life Insurance Program OPEB.	All full-time, salaried permanent employees of state agencies are automatically covered by the VRS State Employee Health Insurance Credit Program. This plan is administered by the Virginia Retirement System (the System), along with pension and other OPEB plans, for public employer groups in the Commonwealth of Virginia. Members earn one month of service credit toward the benefit for each month they are employed and for which their employer pays contributions to VRS. The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance premiums retirees pay for single coverage, excluding any portion covering the spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.	All paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) are automatically covered by the Line of Duty Act Program (LODA). As required by statute, the Virginia Retirement System (the System) is responsible for managing the assets of the program. Participating employers made contributions to the program beginning in FY 2012. The employer contributions are determined by the System's actuary using anticipated program costs and the number of covered individuals associated with all participating employers.	All full-time and part-time permanent salaried state employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS) or the Virginia Law Officers' Retirement System (VaLORS) hired on or after January 1, 1999 are automatically covered by the Disability Insurance Program (VSDP) upon employment. The Disability Insurance Program also covers state employees hired before January 1, 1999 who elected to transfer to VSDP rather than retain their eligibility to be considered for disability retirement. This plan is administered by the Virginia Retirement System (the System), along with pensions and other OBEB plans, for public employer groups in the Commonwealth of Virginia.	

Eligible Employees	Eligible Employees	Eligible Employees	Eligible Employees
The Group Life Insurance Program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program, including the following employers that do not participate in VRS for retirement:	The State Employee Retiree Health Insurance Credit Program was established January 1, 1990 for retired state employees covered under VRS, SPORS, VaLORS and JRS who retire with at least 15 years of service credit. Eligible employees are enrolled automatically upon employment. They include: • Full-time and part-time permanent salaried state employees covered under VRS, SPORS, VaLORS and JRS.	The eligible employees of the Line of Duty Act Program (LODA) are paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS).	The Virginia Sickness and Disability Program (VSDP), also known as the Disability Insurance Trust Fund was established January 1, 1999 to provide short-term and long-term disability benefits for non-work-related and work-related disabilities. Eligible employees are enrolled automatically upon employment. They include: • Full-time and part-time permanent salaried state employees covered under VRS, SPORS, and VaLORS (members new to VaLORS following its creation on October 1, 1999, have been enrolled since the inception of VSDP). • State employees hired before January 1, 1999, who elected to transfer to VSDP rather than retain their eligibility to be considered for VRS disability retirement. • Public college and university faculty members who elect the VRS defined benefit plan. They may participate in VSDP or their institution's disability program, if offered. If the institution does not offer the program or the faculty member does not make an election, he or she is
Benefit Amounts	Benefit Amounts	Benefit Amounts	enrolled in VSDP. Benefit Amounts
The benefits payable under the Group Life Insurance Program have several components.	The State Employee Retiree Health Insurance Credit Program provides the	The Line of Duty Act Program (LODA) provides death and health insurance	The Virginia Sickness and Disability Program (VSDP) provides the following benefits for eligible employees:

- Natural Death Benefit –
 The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled.
- Accidental Death
 Benefit The accidental death benefit is double the natural death benefit.
- Other Benefit Provisions - In addition to the basic accidental natural and death benefits, the program additional provides benefits provided under specific circumstances. These include accidental dismemberment benefit. safety belt benefit. repatriation benefit, felonious assault benefit and accelerated death benefit option.

Reduction in Benefit Amounts

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

following benefits fo eligible employees:

- At Retirement For State employees who retire with at least 15 years of service credit, the monthly benefit is \$4.00 per year of service per month with no cap on the benefit amount.
 - Disability Retirement

 For State employees, other than state police officers, who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program (VSDP), the monthly benefit is \$120.00 or \$4.00 per year of service, whichever is higher.

For State police officers with a non-work-related disability who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program (VSDP) the monthly benefit is \$120.00 or \$4.00 per year of service, whichever is higher.

For State police officers with a work-related disability, there is no benefit provided under the State Employee Retiree Health Insurance Credit Program if the premiums are being paid under the Virginia Line of Duty Act. However, they may receive the credit for premiums paid for other qualified health plans.

benefits for eligible individuals:

- <u>Death</u> The Line of Duty Act program death benefit is a one-time payment made to the beneficiary or beneficiaries of a covered individual. Amounts vary as follows:
- \$100,000 when a death occurs as the direct or proximate result of performing duty as of January 1, 2006, or after.
- \$25,000 when the cause of death is attributed to one of the applicable presumptions and occurred earlier than five years after the retirement date.
- An additional \$20,000 benefit is payable when certain members of the National Guard and U.S. military reserves are killed in action in any armed conflict on or after October 7, 2001.
- <u>Health Insurance</u> The Line of Duty Act program provides health insurance benefits.
- Prior to July 1, 2017, these benefits were managed through the various employer plans maintained benefits that existed prior to the employee's death disability. These premiums were reimbursed the employer by the LODA program.
- Beginning July 1, 2017, the health insurance benefits are managed through the Virginia Department of Human Resource Management (DHRM). The health benefits are modeled after the State Employee Health benefits Program

- Leave Sick, family and personal leave. Eligible leave benefits are paid by the employer.
- Short-Term Disability -The program provides a short-term disability benefit beginning after a seven-calendar-day waiting period from the first day of disability. The benefit provides income replacement beginning at 100% of the employee's pre-disability income. reducing to 80% and then 60% based on the period of the disability and the length of service of the employee. Short-term disability benefits are paid by the employer.
 - Long-Term Disability -The program provides a long-term disability benefit beginning after 125 workdays of shortterm disability and continuing until the employee reaches his or her normal retirement age. The benefit provides income replacement of 60% of the employee's pre-disability income. If an employee becomes disabled within five years of his or her normal retirement age, the employee will receive up to five years of VSDP benefits, provided he or she remains medically eligible. Long-term disability benefits are paid for by the Virginia Disability Insurance Program (VSDP) OPEB Plan.
- Income Replacement
 Adjustment The
 program provides for an
 income replacement
 adjustment to 80% for
 catastrophic conditions.

		plans and provide consistent, premium-free continued health plan coverage for LODA-eligible disabled individuals, survivors and family members. Individuals receiving the health insurance benefits must continue to meet eligibility requirements as defined by the Line of Duty Act.	VSDP Long-Term Care Plan – The program also includes a self-funded long-term care plan that assists with the cost of covered long-term care services.
Minimum Benefit Amount and Cost-of-Living Adjustment (COLA)	Minimum Benefit Amount and Cost-of- Living Adjustment (COLA)	Minimum Benefit Amount and Cost-of-Living Adjustment (COLA)	Minimum Benefit Amount and Cost-of-Living Adjustment (COLA)
For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the Group Life Insurance Program. The minimum benefit was set at \$8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and was increased to \$8,279 effective July 1, 2018.	Not Applicable	Not Applicable	During periods an employee receives long-term disability benefits, the LTD benefit may be increased annually by an amount recommended by the actuary and approved by the Board. • Plan 1 employees vested as of 1/1/2013 – 100% of the VRS Plan 1 COLA (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%). • Plan 1 employee nonvested as of 1/1/2013, Plan 2 and Hybrid Plan employees – 100% of the VRS Plan 2 and Hybrid COLA (The first 2% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 2%) up to a maximum COLA of 3%). For participating full-time employees taking service retirement, the creditable compensation may be increased annually by an amount recommended by the actuary and approved by the Board, from the date of the

commencement the disability to the date of retirement. • 100% of the increase in the pay over the previous plan year for continuing VSDP members in the State, SPORS, and VaLORS Plans, with a maximum COLA of 4.00% For participating full-time employees receiving supplemental (work-related) disability benefits, creditable compensation may be increased annually by an amount recommended by the actuary and approved by the Board, from the date of the commencement of the disability to the date of retirement 100% of the increase in the pay over the previous plan year for continuing VSDP members in the State, SPORS, and VaLORS Plans, with a maximum COLA of 4.00%. **Health Insurance Credit Disability Insurance** Program (VSDP) Plan **Program Notes:** Notes: The monthly Health Insurance Credit benefit Employees hired cannot exceed the rehired on or after July 1, individual's premium 2009, must satisfy amount. eligibility periods before becoming eligible for non-Employees who retire work-related short-term after being on long-term disability benefits and disability under VSDP certain incomemust have at least 15 year replacement levels. of service credit to qualif for the Health Insurance A state employee who is Credit as a retiree. approved for VSDP benefits on or after the date that is five years prior to his or her normal retirement date is eligible for up five years of VSDP benefits. Employees on workrelated short-term disability receiving only a workers' compensation payment may be eligible

	to purchase service credit for this period if retirement contributions
	are not being withheld from the workers'
	compensation payment. The rate will be based on 5.00% of the employee's
	compensation.

Department of Human Resources Management OPEB Plan Pre-Medicare Retiree Healthcare Plan (PMRH)

Plan Description

The Commonwealth provides a healthcare plan established by Title 2.2, Chapter 28 of the *Code of Virginia* for retirees who are not yet eligible to participate in Medicare. This fund is reported as part of the Commonwealth's Healthcare Internal Service Fund. Benefit payments are recognized when due and payable in accordance with the benefit terms. Pre-Medicare Retiree Healthcare is a single-employer defined benefit OPEB plan that is treated like a cost-sharing plan for financial reporting purposes, and is administered by the Department of Human Resource Management. There were approximately 5,200 retirees and 91,800 active employees in the program in fiscal year 2018. There are no inactive employees entitled to future benefits who are not currently receiving benefits. There are no assets accumulated in a trust to pay benefits.

Following are eligibility requirements for Virginia Retirement System retirees:

- You are a retiring state employee who is eligible for a monthly retirement benefit from the Virginia Retirement System (VRS), and
- You start receiving (do not defer) your retirement benefit immediately upon retirement*, and
- Your last employer before retirement was the Commonwealth of Virginia, and
- You were eligible for (even if you were not enrolled) coverage as an active employee in the State Health Benefits Program until your retirement date (not including Extended Coverage/COBRA), and
- You enroll no later than 31 days from your retirement date.

*For VRS retirees, this means your employing agency reported a retirement contribution or leave without pay status for retirement in the month immediately prior to your retirement date. Some faculty members may also be eligible if they are paid on an alternate pay cycle but maintain eligibility for active coverage until their retirement date.

Effective January 1, 2017**, following are eligibility requirements for Optional Retirement Plan retirees:

- You are a terminating state employee who participates in one of the qualified Optional Retirement Plans, and
- Your last employer before termination was the Commonwealth of Virginia, and
- You were eligible for (even if you were not enrolled) coverage in the State Health Benefits Program for active employees at the time of your termination, and
- You meet the age and service requirements for an immediate retirement benefit under the non-ORP Virginia Retirement System plan that you would have been eligible on your date of hire had you not elected the ORP, and
- You enroll in the State Retiree Health Benefits Program no later than 31 days from the date you lose coverage (or lost eligibility for coverage) in the State Health Benefits Program for active employees due to your termination of employment.

**This change applies to ORP terminations effective January 1, 2017, or later. Eligibility for those who terminated employment prior to January 1 should be determined based on the policy in place at the time of their termination.

Contributions

The contribution requirements for the Group Life Insurance Program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and

school divisions by the Virginia General Assembly. The total rate for the Group Life Insurance Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2019 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the Group Life Insurance Program from the University were \$1,739,638 and \$1,686,252 for the years ended June 30, 2019 and June 30, 2018, respectively.

The contribution requirement for the HIC program active employees is governed by §51.1-1400(D) of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each state agency's contractually required employer contribution rate for the year ended June 30, 2019 was 1.17% of covered employee compensation for employees in the VRS State Employee Health Insurance Credit Program. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from the University to the VRS State Employee Health Insurance Credit Program were \$3,896,135 and \$3,809,658 for the years ended June 30, 2019 and June 30, 2018, respectively.

The contribution requirements for the Line of Duty Act Program (LODA) are governed by §9.1-400.1 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the Line of Duty Act Program (LODA) for the year ended June 30, 2019 was \$705.77 per covered full-time-equivalent employee. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017 and represents the pay-as-you-go funding rate and not the full actuarial cost of the benefits under the program. The actuarially determined pay-as-you-go rate was expected to finance the costs and related expenses of benefits payable during the year. Contributions to the Line of Duty Act Program (LODA) from the University were \$33,171 and \$23,262 for the years ended June 30, 2019 and June 30, 2018, respectively.

The contribution requirements for the Disability Insurance Program (VSDP) are governed by §51.1-1140 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the Disability Insurance Program (VSDP) for the year ended June 30, 2019 was 0.62% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate was expected to finance the costs of benefits payable during the year, with an adjustment to amortize the accrued OPEB assets. Contributions to the Disability Insurance Program (VSDP) from the University were \$777,972 and \$772,464 for the year ended June 30, 2019 and June 30, 2018, respectively.

Under the PMRH program, the University does not pay a portion of the retirees' healthcare premium; however, since both active employees and retirees are included in the same pool for purposes of determining health insurance rates, this generally results in a higher rate for active employees. Therefore, the University effectively subsidizes the costs of the participating retirees' healthcare through payment of the employer's portion of the premiums for active employees.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the VRS OPEB Plans

At June 30, 2019, the University reported the following liabilities (assets) for its proportionate share of these programs:

GLI	\$25,915,000
HIC	43,766,000
LODA	685,000
VSDP	(6,856,000)
PMRH	39,956,061

The liabilities were measured as of June 30, 2018 and the total OPEB liability used to calculate each net OPEB Liability was determined by an actuarial valuation as of that date. The University's proportion of the Net OPEB Liability for GLI, HIC and VSDP was based on the University's actuarially determined employer contributions to these programs for the year ended June 30, 2018 relative to the total of the actuarially determined employer contributions for all participating employers. The University's proportion of the Net LODA OPEB Liability was based on the University's actuarially determined pay-as-you-go employer contributions to the LODA plan for the year ended June 30, 2018 relative to the total of the actuarially determined pay-as-you-go employer contributions for all participating employers. The covered employer's proportion of the PMRH OPEB liability was based on each employer's healthcare premium contributions as a percentage of the total employer's healthcare premium contributions for all participating employers. The University's proportion for each plan at June 30, 2018 and June 30, 2017 are as follows:

	GLI	HIC	LODA	VSDP	PMRH
June 30, 2018	1.71%	4.80%	0.22%	3.04%	3.97%
June 30, 2017	1.66%	4.71%	0.22%	2.98%	3.89%

For the year ended June 30, 2019, the University recognized the following expenses for these programs:

GLI	\$261,000
HIC	3,782,000
LODA	44,000
VSDP	358,000
PMRH	906,185

Since there was a change in proportionate share between measurement dates, a portion of these expenses was related to deferred amounts from changes in proportion.

At June 30, 2019, the University reported deferred outflows of resources and deferred inflows of resources related to these programs from the following sources:

	Deferred	Deferred
	Outflows of	Inflows of
GLI	Resources	Resources
Differences between expected and actual experience	\$1,266,000	\$465,000
Net difference between projected and actual earnings on		
GLI OPEB program investments	-	843,000
Change in assumptions	-	1,080,000
Changes in proportion	620,000	161,000
Employer contributions subsequent to measurement date	1,752,265	
Total	\$3,638,265	\$2,549,000

ніс	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$31,000	\$-
Net difference between projected and actual earnings on		
State HIC OPEB plan investments	-	72,000
Change in assumptions	-	398,000
Changes in proportionate share	647,000	330,000
Employer contributions subsequent to measurement date	3,896,493	-
Total	\$4,574,493	\$800,000

	Deferred	Deferred
	Outflows of	Inflows of
LODA	Resources	Resources
Differences between expected and actual experience	\$98,000	\$-
Net difference between projected and actual earnings on		
LODA OPEB plan investments	-	2,000
Change in assumptions	-	79,000
Changes in proportion	-	82,000
Employer contributions subsequent to measurement date	33,171	-
Total	\$131,171	\$163,000

VSDP	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$-	\$290,000
Net difference between projected and actual earnings on		
VSDP OPEB plan investments	-	405,000
Change in assumptions	-	405,000
Changes in proportion	54,000	88,000
Employer contributions subsequent to measurement date	760,402	-
Total	\$814,402	\$1,188,000

PMRH	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$-	\$8,056,291
Change in assumptions	-	15,980,510
Changes in proportion	1,150,695	231,579
Amounts associated with transactions subsequent to the		
measurement date	1,642,755	-
Total	\$2,793,450	\$24,268,380

The following amounts reported as deferred outflows of resources related to each program, resulting from the University's contributions subsequent to the measurement date, will be recognized as a reduction of each program's net liability (asset) in the fiscal year ending June 30, 2020:

GLI	\$1,752,265
HIC	3,896,493
LODA	33,171
VSDP	760,402
PMRH	1,642,755

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the OPEB programs will be recognized in each program's expense in future reporting periods as follows:

Year Ended June 30	GLI	HIC	LODA	VSDP	PMRH
FY 2020	\$(302,000)	\$(66,000)	\$(9,000)	\$(254,000)	\$(4,812,962)
FY 2021	(302,000)	(66,000)	(9,000)	(254,000)	(4,812,962)
FY 2022	(302,000)	(66,000)	(9,000)	(254,000)	(4,812,962)
FY 2023	(61,000)	(40,000)	(9,000)	(131,000)	(4,812,962)
FY 2024	177,000	93,000	(9,000)	(122,000)	(3,416,772)
Thereafter	127,000	23,000	(20,000)	(119,000)	(449,067)

Actuarial Assumptions

The total OPEB liability for all VRS programs was based on an actuarial valuation as of June 30, 2017, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2018.

Inflation 2.5 percent

Salary increases, including inflation per plan:

Employee Type	GLI	HIC	LODA	VSDP
General state	3.5 - 5.35%	3.5 - 5.35%	3.5 - 5.35%	3.5 - 5.35%
Teachers	3.5 - 5.95%	N/A	N/A	N/A
SPORS	3.5 – 4.75%	3.5 – 4.75%	3.5 – 4.75%	3.5 – 4.75%
VaLORS	3.5 – 4.75%	3.5 – 4.75%	3.5 – 4.75%	3.5 – 4.75%
JRS	4.5%	4.5%	N/A	N/A
Locality - General	3.5 – 5.35%	N/A	N/A	N/A
Locality – Hazardous Duty	3.5 – 4.75%	N/A	3.5 – 4.75%	N/A

LODA Medical cost trend rates assumption:

Under age 657.75 percent - 5.00 percentAges 65 and older5.75 percent - 5.00 percentYear of ultimate trend rateFiscal year ended 2024

Investment rate of return 7 percent (3.89 percent for LODA), net of OPEB plan investment expenses, including inflation*

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0% (3.89% for LODA). However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to

simplify preparation of the OPEB liabilities for GLI, HIC and VSDP. Since LODA is funded on a current-disbursement basis, the assumed annual rate of return of 3.89% was used since it approximates the risk-free rate of return.

Mortality rates – General State Employees (GLI, HIC, LODA, VSDP)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post-	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement
	from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and
	service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 25%

Mortality rates – Teachers (GLI)

Pre-Retirement:

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

Post-Retirement:

RP-2014 White Collar Employee Rates to age 49, White Collar Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males 1% increase compounded from ages 70 to 90; females set back 3 years with 1.5% increase compounded from ages 65 to 70 and 2.0% increase compounded from ages 75 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with Scale BB to 2020; 115% of rates for males and females.

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

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

Mortality rates - SPORS Employees (GLI, HIC, LODA, VSDP)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Mortality rates - VaLORS Employees (GLI, HIC, LODA, VSDP)

Pre-Retirement:

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

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with Scale

BB to 2020; males set forward 1 year with 1.0% increase compounded from ages 70 to 90; females set forward 3 years.

Post-Disablement:

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

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

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

Mortality rates - JRS Employees (GLI, HIC)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

RP-2014 Disability Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates.

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

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

Mortality rates – Largest Ten Locality Employers - General Employees (GLI)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Mortality rates - Non-Largest Ten Locality Employers - General Employees (GLI)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

	age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 15%

Mortality rates - Largest Ten Locality Employers - Hazardous Duty Employees (GLI, LODA)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

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

Mortality rates - Non-Largest Ten Locality Employers - Hazardous Duty Employees (GLI, LODA)

Pre-Retirement:

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

Post-Retirement:

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

Post-Disablement:

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

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

Mortality Rates (Pre-retirement, post-	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each
	age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

The total Pre-Medicare Retiree Healthcare OPEB liability was based on an actuarial valuation with a valuation date of June 30, 2018. The Department of Human Resource Management selected the economic, demographic and healthcare claim cost assumptions. The actuary provided guidance with respect to these assumptions. Initial healthcare costs trend rates used were 8.21 percent for medical and pharmacy and 4.0 percent for dental. The ultimate trend rates used were 5.0 percent for medical and pharmacy and 4.0 percent for dental.

Valuation Date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported		
Measurement Date	June 30, 2018 (one year prior to the end of the fiscal year)		
Actuarial Cost Method	Entry Age Normal		
Amortization Method	Level dollar, Closed		
Effective Amortization Period	6.19 years		
Discount Rate	3.87%		
Projected Salary Increases	4.0%		
Medical Trend Under 65	Medical & Rx: 8.21% to 5.00% Dental: 4.00%		
	Before reflecting Excise tax		
Year of Ultimate Trend	2025		
Mortality	Mortality rates vary by participant status		
Pre-Retirement:	RP-2014 Employee Rates projected with Scale BB to 2020; males setback 1 year, 85% of rates; females setback 1 year		
Post-Retirement:	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 5 and older projected with Scale BB to 2020; males and females setback year		
Post-Disablement:	RP-2014 Disabled Mortality Rates projected with Scale BB to 2020; males 115% of rates; females 130% of rates		

The following actuarial assumptions were updated since the June 30, 2017 valuation based on recent experience:

Spousal Coverage	Reduced the rate from 50% to 35%
Retiree Participation	Reduced the rate from 70% to 60%

Spousal coverage and retiree participation were both reduced based on a blend of recent experience and the prior year assumptions. The mortality assumption was modified slightly to reflect mortality improvement projection scale BB to 2020.

Net OPEB Liability (Asset)

The net OPEB liability (NOL) or Net OBEP asset (NOA) for the VRS administered OPEB plans represent the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of the measurement date of June 30, 2018, NOL and NOA amounts for these programs are as follows (amounts expressed in thousands):

	GLI	HIC	LODA	VSDP
Total OPEB Liability	\$3,113,508	\$1,008,184	\$315,395	\$237,733
Plan Fiduciary Net Position	1,594,773	95,908	1,889	462,961
Employers' Net OPEB Liability (Asset)	\$1,518,735	\$912,276	\$313,506	\$(225,228)
Plan Fiduciary Net Position as a Percentage of				
the Total OPEB Liability	51.22%	9.51%	0.60%	194.74%

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

Long-Term Expected Rate of Return (GLI, HIC, VSDP)

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

Asset Class (Strategy)	Target Allocation	Arithmetic Long- Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Public Equity	40.00%	4.54%	1.82%
Fixed Income	15.00%	0.69%	0.10%
Credit Strategies	15.00%	3.96%	0.59%
Real Assets	15.00%	5.76%	0.86%
Private Equity	15.00%	9.53%	1.43%
Total	100.00%		4.80%
		2.50%	
* Expected 2	arithmetic nominal return		7.30%

^{*} The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

Long-Term Expected Rate of Return (LODA)

The long-term expected rate of return on LODA OPEB Program's investments was set at 3.89% for this valuation. Since LODA is funded on a current-disbursement basis, it is not able to use the VRS Pooled Investments 7.00% assumption. Instead, the assumed annual rate of return of 3.89% was used since it approximates the risk-free rate of return. This Single Equivalent Interest Rate (SEIR) is the applicable municipal bond index rate based on the Bond Buyer General Obligation 20-year Municipal Bond Index as of the measurement date of June 30, 2018.

Discount Rate

The discount rate used to measure the total GLI, HIC and VSDP OPEB liability was 7.00% and 3.89% was used to measure the total LODA OPEB liability. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the University for the programs 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, 2018 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the 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 OPEB liability.

The discount rate for the PMRH program was based on the Bond Buyers GO 20 Municipal Bond Index as of the measurement date which is June 30, 2018. It was increased from 3.58% to 3.87%.

Sensitivity of the University's Proportionate Share of the Net OPEB Liability (Asset) and Total PMRH OPEB Liability to Changes in the Discount Rate

The following presents the University's proportionate share of the net OPEB liability (asset) for GLI, HIC and VSDP using the discount rate of 7.00%, LODA using the discount rate of 3.89% and the University's proportionate share of the total OPEB liability for PMRH using the discount rate of 3.87%, as well as what the University's proportionate share of the net OPEB liability (asset) and total PMRH OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

University's Pi	roportionate	Share of Net	OPEB Liab	lity (Asse	t) and Tota	I PMRH C	OPEB Liability

	1.00% Decrease	Current Discount Rate	1.00% Increase
	<u>6%</u>	<u>7%</u>	<u>8%</u>
GLI	\$33,867,000	\$25,915,000	\$19,458,000
HIC	\$48,400,000	\$43,766,000	\$39,779,000
VSDP	\$(6,609,000)	\$(6,856,000)	\$(7,067,000)
LODA	2.89% \$785,000	3.89% \$685,000	4.89% \$604,000
	<u>2.87%</u>	<u>3.87%</u>	<u>4.87%</u>

	1.00%	Current	1.00%
	Decrease	Discount Rate	Increase
PMRH	\$42,751,877	\$39,956,061	\$37,297,491

Sensitivity of the University's Proportionate Share of the Net LODA & Total PMRH OPEB Liabilities to Changes in the Health Care Trend Rate

Because the Line of Duty Act Program (LODA) and Pre-Medicare Retiree Healthcare Program (PMRH) contain provisions for the payment of health insurance premiums, the liabilities are also impacted by the health care trend rates. The following presents the University's proportionate share of the net OPEB liability for these programs using health care trend rate of 7.75% decreasing to 5.00% for LODA and 8.21% decreasing to 5% for PMRH, as well as what the University's proportionate share of the net OPEB liabilities would be if it were calculated using a health care trend rate that is one percentage point lower (LODA: 6.75% decreasing to 4.00%, PMRH: 7.21% decreasing to 4.0%) or one percentage point higher (LODA: 8.75% decreasing to 6.00%, PMRH: 9.21% decreasing to 6.00%) than the current rate:

University's Proportionate Share of Net OPEB Liability (Asset) and Total PMRH OPEB Liability

	1.00% Decrease	Health Care Trend	1.00% Increase
		Rates	
	6.75% decreasing	7.75% decreasing to	8.75% decreasing
	<u>to 4%</u>	<u>5%</u>	<u>to 6%</u>
LODA	\$583,000	\$685,000	\$811,000
	7.21% decreasing	8.21% decreasing to	9.21% decreasing
	<u>to 4%</u>	<u>5%</u>	<u>to 6%</u>
PMRH	\$35,638,240	\$39,956,061	\$45,031,409

Fiduciary Net Position

Detailed information about the Fiduciary Net Position for each of the VRS programs is available in the separately issued VRS 2018 Comprehensive Annual Financial Report (CAFR). A copy of the 2018 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2018-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

Payables to the GLI, HIC, and VSDP Programs

As of June 30, 2019, the University had the following payables to each of these OPEB programs:

GLI	\$148,595
HIC	140,734
VSDP	36,020

17. RISK MANAGEMENT AND EMPLOYEE HEALTH CARE PLANS

The University is exposed to various risks of loss related to torts; theft, or damage to and destruction of assets; errors and omissions; non-performance of duty; injuries to employees; and natural disasters. The University participates in insurance plans maintained by the Commonwealth of Virginia. The Department of Human Resource Management administers the Commonwealth employee health care and worker's compensation plans, and the Department of Treasury, Division of Risk Management, administers the risk management insurance plans. Risk management insurance includes property, general liability, faithful performance of duty bond,

automobile, and air and watercraft plans. The University pays premiums to each of these departments for its insurance coverage. Information relating to the Commonwealth's insurance plans is available at the statewide level in the Commonwealth's Comprehensive Annual Financial Report.

18. RESTRICTED NET POSITION

At June 30, 2019 restricted net position included the following purpose restrictions:

Restricted, nonexpendable	
Student aid	\$1,406,281
Instruction	4,631,000
Research	1,128,555
Total restricted, nonexpendable	\$7,165,836

Restricted, expendable	
Student aid	\$86,815
Instruction	843,912
Research	5,913,261
Capital	598,947
Total restricted, expendable	\$7,442,935

19. COMPONENT UNITS

Component unit combining financial statements and additional disclosures in accordance with FASB standards

are presented below.

	Combining Statement of Financial Position							
	C W	As of June 3						
	George Mason	Mason	GMU	Mason	Mercatus	77 . 1		
	University	Housing,	Instructional	Korea,	Center,	Total		
	Foundation	Inc. *	Foundation*	LLC ^	Inc. #	Component		
Anna	(GMUF)	(MHI)	(GMUIF)	(MK)	(Mercatus)	Units		
Assets	\$10.00F.61F	\$101.072	#2.160.F46	#2 207 740	¢10.777.047	£42.620.720		
Cash and cash equivalents	\$19,085,615	\$191,873	\$3,169,546	\$2,396,649	\$18,777,047	\$43,620,730		
Security deposits	-	106,563	-	-	-	106,563		
Restricted cash and cash	6 4 2 2 0 0 7	4740 ((4				40.074.660		
equivalents	6,132,007	4,742,661	74.057	- 07.400	-	10,874,668		
Accounts receivable, net	357,016	-	71,957	97,429	244,352	770,754		
Contributions receivable, net	66,265,442	2.050	40.700	-	1,605,373	67,870,815		
Prepaids and other assets	5,421,780	2,058	10,782	57,304	102,974	5,594,898		
Net investment in direct	00 (04 040					00 (04 040		
financing lease	88,681,210	-	-	-	-	88,681,210		
Beneficial interest in	44.440.400					44.440.400		
perpetual trusts	11,142,428	-	-	-	-	11,142,428		
Land held for sale	16,264,828	-	-	-	-	16,264,828		
Investments	190,136,784	952,007	2,589,130	-	1,357,685	195,035,606		
Property and equipment, net	53,453,344	21,950,250	7,085,164	-	985,876	83,474,634		
Deferred tax asset	27,862	-	261,000	-	-	288,862		
Total Assets	456,968,316	27,945,412	13,187,579	2,551,382	23,073,307	523,725,996		
Liabilities and Net Assets								
Liabilities								
Accounts payable and								
accrued expenses	8,988,701	227,965	1,352,127	381,285	1,746,331	12,696,409		
Accrued payroll and related	0,700,701	221,503	1,552,127	301,203	1,7 10,551	12,000,100		
expenses	_	4,776	_	499,678	_	504,454		
Grants and student research		1,770		177,070		301,131		
awards payable	_	_	_	_	2,370,978	2,370,978		
Participation rent payable	_	420,250	_	_	2,570,570	420,250		
Tenant security deposits		120,230				120,230		
liability	_	101,054	_	_	_	101,054		
Unearned revenue	339,657	23,404	2,132,445	20,290	_	2,515,796		
Charitable gift annuities	-	25,101	2,132,113	20,200	200,971	200,971		
Other liabilities	1,285,746	_	_	_	200,571	1,285,746		
Interest rate swap liability	1,203,710	10,241,688	_	_	_	10,241,688		
Long-term debt including		10,211,000				10,211,000		
loan payable	149,216,535	37,401,904	1,110,505	_	_	187,728,944		
Amounts held for others	12,883,192	-	- 1,110,505	_	_	12,883,192		
Total Liabilities	172,713,831	48,421,041	4,595,077	901,253	4,318,280	230,949,482		
	3 3	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,	, , , , , , , , , , , , , , , , , , , ,	.,,	, ,		
Net Assets								
Net assets (deficit) without								
donor restrictions	33,799,842	(20,475,629)	8,592,502	1,650,129	17,130,353	40,697,197		
Net assets with donor								
restrictions	250,454,643	-	-	-	1,624,674	252,079,317		
Total Net Assets	284,254,485	(20,475,629)	8,592,502	1,650,129	18,755,027	292,776,514		
77 . 17 1 1 11 1								
Total Liabilities and Net	\$4EC 0C0 24C	¢27.045.442	¢12 107 570	¢0 ∈∈4 200	\$22,072,207	\$E02.70F.007		
Assets	\$456,968,316	\$27,945,412	\$13,187,579	\$2,551,382	\$23,073,307	\$523,725,996		

^{*} March 31, 2019 year-end ^ December 31, 2018 year-end # August 31, 2018 year-end

Combining Statement of Activities For the Year Ended June 30, 2019							
	George Mason University Foundation (GMUF)	Mason Housing, Inc. * (MHI)	GMU Instructional Foundation * (GMUIF)	Mason Korea, LLC ^ (MK)	Mercatus Center, Inc. # (Mercatus)	Total Component Units	
Operating Revenues	\$120.604.06 2	e t	\$	¢1 11 4 02 4	¢1 150 207	\$122.077.102	
Contributions Grants	\$130,694,062	\$-	\$- 262,348	\$1,114,834	\$1,158,207 28,250,570	\$132,967,103 28,512,918	
Interest on direct financing	-	-	202,340	-	20,230,370	20,312,710	
lease	5,749,757	-	_	_	_	5,749,757	
Investment and trust return	9,484,018	-	100,461	-	121,308	9,705,787	
Miscellaneous and other							
income	-	102,106	-	92,124	190,186	384,416	
Rental income, net	11,469,105	3,707,136	1,501,898	-	-	16,678,139	
Service fees	2,176,964	-	746,685	6,528,193	-	9,451,842	
Total Operating Revenue	159,573,906	3,809,242	2,611,392	7,735,151	29,720,271	203,449,962	
Operating Expenses							
Academic program support	78,702,793	_	_	923,801	27,016,539	106,643,133	
Advertising and promotion	70,702,793	19,497	_	-	27,010,555	19,497	
Depreciation	1,612,468	1,184,069	56,295	-	-	2,852,832	
Fundraising	852,563	-	,	-	1,779,517	2,632,080	
Insurance	-	69,577	6,393	-	-	75,970	
Interest expense	6,037,842	1,998,824	56,178	-	-	8,092,844	
Maintenance	-	196,824	-	-	-	196,824	
Management fees	-	115,880	-	324,914	1,237,388	1,678,182	
Office and other	4.127.220	127.200	207.079	((0 F2(F 220 142	
administrative expenses Salaries and wages	4,136,329	126,200 296,929	306,078 519,823	660,536 5,017,984	-	5,229,143 5,834,736	
Rent, utilities and other	1,691,889	27,089	111,570	1,078,854	-	2,909,402	
Total Operating Expenses	93,033,884	4,034,889	1,056,337	8,006,089	30,033,444	136,164,643	
	70,000,001	1,001,000	1,000,007	0,000,000	50,055,111	100,101,010	
Change in net assets before non-operating items and other							
changes	66,540,022	(225,647)	1,555,055	(270,938)	(313,173)	67,285,319	
Non-operating items	(280,000)	(1,218,536)	(420,849)	(109,332)	(2,904)	(2,031,621)	
Change in Net Assets	66,260,022	(1,444,183)	1,134,206	(380,270)	(316,077)	65,253,698	
Beginning Net Assets	217,994,463	(19,031,446)	7,458,296	2,030,399	19,071,104	227,522,816	
Ending Net Assets	\$284,254,485	\$(20,475,629)	\$8,592,502	\$1,650,129	\$18,755,027	\$292,776,514	

^{*} March 31, 2019 year-end ^ December 31, 2018 year-end # August 31, 2018 year-end

A. CONTRIBUTIONS RECEIVABLE

Contributions receivable as of June 30, 2019 are as follows:

	GMUF	Mercatus#	Total
Due in less than one year	\$50,482,571	\$1,605,373	\$52,087,944
Due in one to five years	17,419,436	-	17,419,436
Due in more than five years	1,026,901	-	1,026,901
	68,928,908	1,605,373	70,534,281
Less allowance for doubtful accounts	(317,209)	-	(317,209)
Less discount present value	(2,346,257)	-	(2,346,257)
Total	\$66,265,442	\$1,605,373	\$67,870,815

[#] August 31, 2018 year-end

Discount rates range from 0.95 percent to 3.69 percent.

As of June 30, 2019, GMUF has \$13,653,955 of conditional promises to give. These conditional promises to give are not recognized as assets in the consolidated statement of financial position until the conditions are met.

B. INVESTMENTS

Investments, which are reported at fair value, consisted of the following as of June 30, 2019:

	GMUF	MHI*	GMUIF*	Mercatus#	Total
Cash and money market funds	\$12,158,807	\$-	\$-	\$74,557	\$12,233,364
Equities	62,316,077	-	-	-	62,316,077
Fixed income	88,438,412	-	-	-	88,438,412
Liquid alternatives	4,432,738	-	-	-	4,432,738
Hedge funds	11,514,852	-	-	-	11,514,852
Managed futures	2,667,045	-	-	-	2,667,045
Private equity and real assets	8,608,853	-	-	-	8,608,853
Mutual funds	-	454,098	-	1,283,128	1,737,226
Certificates of deposits	-	497,909	2,539,130	-	3,037,039
Convertible note and warrant	-	-	50,000		50,000
Total	\$190,136,784	\$952,007	\$2,589,130	\$1,357,685	\$195,035,606

^{*} March 31, 2019 year-end

C. FAIR VALUE MEASUREMENT

FASB Accounting Standards Codification 820, Fair Value Measurements and Disclosures ("FASB ASC 820"), establishes a framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under FASB ASC 820 are described below:

Level 1 – Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Foundation has the ability to access.

Level 2 – Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets, quoted prices for similar assets or liabilities in inactive markets, inputs other than quoted prices that are observable for the asset or liability, or inputs that are derived principally from or

[#] August 31, 2018 year-end

corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 – Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of the observable inputs and minimize the use of unobservable inputs.

Level 2 fair value measurements are derived from the underlying assets of the perpetual and third-party trusts which substantially consists of investments with readily determinable fair values. The fair value of the assets in the third-party trusts is reduced by the net present value of the expected payments to other beneficiaries, discounted at a risk adjusted interest rate.

Other investments include those investments carried at NAV as published by the applicable fund manager, as a practical expedient.

The following table summarizes the valuation of George Mason University Foundation's financial assets and liabilities measured at fair value as of June 30, 2019, based on the level of input utilized to measure fair value:

Measurement at fair value on a recurring basis as of June 30, 2019:

				Reported at	
GMUF Financial Assets:	Level 1	Level 2	Level 3	NAV*	Total
Cash and cash equivalents	\$12,158,807	\$-	\$-	\$-	\$12,158,807
Equities:	\$12,130,007	Ψ-	φ-	ψ-	φ1 2, 130,007
Domestic large cap	31,864,437				31,864,437
Domestic small/mid cap	5,054,294	_	_	_	5,054,294
International (developed countries)	20,883,832	-	-	-	20,883,832
International (emerging markets)	4,513,514	-	-	-	4,513,514
Fixed income:	4,515,514	-	-	-	4,313,314
Short-term bonds	55,877,196	1,191,226			57,068,422
Intermediate bonds	10,603,397	9,640,459	-	-	20,243,856
	10,003,397	, ,	-	-	77,968
Long-term bonds World bonds	4 250 047	77,968	-	-	
	4,358,847	-	-	-	4,358,847
Bank loans	4,816,749	-	-	-	4,816,749
Preferred stock	1,872,570	-	-	-	1,872,570
Liquid alternatives	4,432,738	-	-	-	4,432,738
Hedge funds	-	-	-	11,514,852	11,514,852
Managed futures	-	-	-	2,667,045	2,667,045
Private equity and real assets				8,608,853	8,608,853
Investments	156,436,381	10,909,653	-	22,790,750	190,136,784
Beneficial interests in perpetual trusts		11,142,428			11,142,428
Total GMUF financial assets	\$156,436,381	\$22,052,081	\$-	\$22,790,750	\$201,279,212

^{*} Certain investments that are measured at NAV, as a practical expedient, have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated statement of financial position.

The following table presents the nature and risk of assets with fair values estimated using NAV held at June 30, 2019:

	Fair Value	Unfunded	Redemption	Redemption Notice
		Commitment	Frequency	Period
				45 days, 60 days,
			Quarterly,	65 days, 90 days,
Hedge funds - Multi-strategies (a)	\$11,514,852	N/A	Annually	105 days
Hedge funds - Directional (b)	-	N/A	Annually	105 days
Managed futures (c)	2,667,045	N/A	Daily	1 day
Private equity and real assets (d)	8,608,853	\$6,037,407	N/A	N/A
Total	\$22,790,750	\$6,037,407		

- (a) Hedge funds Multi-strategies: This class includes investments that use multiple strategies to obtain absolute returns. Direct and indirect investments are made using capital structure arbitrage, distressed debt, equity long/short, multi-strategy credit, multi-strategy event driven, value and other trading strategies. The investments in this class are redeemable based on the redemption frequencies and notice periods described above. Some investments include "gates" which limit the percentage of the Foundation's investments that can be redeemed at one time.
- (b) Hedge funds Directional: This class includes investments that use directional strategies, primarily long/short strategies. Investments held by this fund primarily consist of equities. The investments in this class are redeemable based on the redemption frequency and notice period described above.
- (c) Managed futures: This class includes investments with the objective to seek long-term capital appreciation. This is a multi-manager fund traded by approximately 20 commodity trading advisors ("CTAs") across different styles of managed futures trading. Geographic distribution of investments is approximately 50% to North America and 50% to Europe. Currently, all investments in this class are redeemable.
- (d) Private equity and real assets: This class includes investments in private equity and real asset funds. The real asset funds invest in global real estate investments for purpose of generating income and capital appreciation. The private equity funds, which include venture capital funds, make direct and indirect investments in privately and publicly issued debt equity securities. Strategies employed by the private equity funds include distress, growth equity, buyout, alternative credit and opportunistic strategies across a variety of industries and geographies. A portion of this class also invests in social impact companies. These investments can never be redeemed with the funds. Instead, the nature of the investments in this class is that distributions are received through liquidation of the underlying assets of the funds.

The following table presents Mason Housing, Inc.'s fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of March 31, 2019:

MHI Financial Assets and Liability:	Level 1	Level 2	Level 3	Total
Assets:				
Mutual funds	\$454,098	\$-	\$-	\$454,098
Certificates of deposits	497,909	-	-	497,909
Investments	\$952,007	\$-	\$-	\$952,007
T 5.4.95 .				
Liability:				
Interest rate swap	\$-	\$10,241,688	<u>\$-</u>	\$10,241,688
	<u> </u>			

The following table presents GMUIF's fair value hierarchy for those assets measured at fair value as of March 31, 2019:

GMUIF Financial Assets	Level 1	Level 2	Level 3	Total
Certificates of deposit Closely-held stock and warrant Total Assets	\$- \$-	\$2,539,130 - - \$2,539,130	\$- 50,000 \$50,000	\$2,539,130 50,000 \$2,589,130

The following table presents the Mercatus Center, Inc.'s fair value hierarchy for those investments measured at fair value on a recurring basis as of August 31, 2018:

Mercatus Financial Assets	Level 1	Level 2	Level 3	Total
	***	<i>t</i> b		*** ** ** ** ** ** ** **
Money markets	\$74,557	\$-	\$-	\$74,557
Mutual funds – fixed income	937,878	-	-	937,878
Mutual funds – equities	345,250			345,250
Total Investments	\$1,357,685	\$-	\$-	\$1,357,685

D. PROPERTY AND EQUIPMENT

The following comprises property and equipment for the component units at June 30, 2019:

	GMUF	MHI *	GMUIF *	Mercatus #	Total
Land	\$14,059,263	\$-	\$6,435,556	\$-	\$20,494,819
Land improvements	-	98,737	-	-	98,737
Buildings & building improvements	65,523,158	31,267,734	600,000	375,996	97,766,888
Furniture, fixtures and equipment	1,037,375	779,236	787,777	2,393,699	4,998,087
Total	80,619,796	32,145,707	7,823,333	2,769,695	123,358,531
Accumulated depreciation and					
amortization	(27,166,452)	(10,195,457)	(738,169)	(1,783,819)	(39,883,897)
Net property and equipment	\$53,453,344	\$21,950,250	\$7,085,164	\$985,876	\$83,474,634
Land held for sale	\$16,264,828	\$-	\$-	\$-	\$16,264,828

^{*} March 31, 2019 year-end, # August 31, 2018 year-end

E. LONG-TERM DEBT - GEORGE MASON UNIVERSITY FOUNDATION

George Mason University Foundation, Inc. (Potomac Heights and University Park Projects) - Fairfax County Economic Development Authority Bonds

On October 7, 2003, the Fairfax County Economic Development Authority ("FCEDA") issued \$35,125,000 of variable rate bonds to finance a housing project for use by the University and to refinance existing properties the Foundation owns and rents to the University. On May 1, 2013, the Foundation refinanced the remaining \$25,520,000 of the FCEDA bonds with the same commercial bank. On November 7, 2016, the commercial bank agreed to release the lien of the deed of trust from the University Park Projects. On December 21, 2017, the Foundation, through its newly established subsidiary, GMUF Potomac Heights, LLC, refinanced with a second commercial bank, the remaining \$16,597,500 of FCEDA bonds as well as the interest rate swap termination fee. Bonds were issued including \$16,795,000 of FCEDA Refunding Revenue Note, Series 2017A (GMUF Potomac Heights, LLC Issue) tax-exempt fixed rate bonds, and \$1,380,000 of FCEDA Refunding Revenue Note, Series

2017B (GMUF Potomac Heights, LLC Issue) taxable fixed rate bonds. The Foundation began leasing the property to the University in fiscal year 2018 with a 10 year lease term and the lease payments service the bonds' principal and interest payments.

GMUF Mason Administration, LLC (Merten Hall) - Fairfax County Economic Development Authority Bonds

On April 21, 2010 the FCEDA issued its \$36,100,000 Revenue Bond Series 2010A (Tax Exempt - GMUF Mason Administration, LLC Project) and its \$1,900,000 Revenue Bond Series 2010B (Taxable - GMUF Mason Administration, LLC Project) and sold such bonds to a commercial bank pursuant to a Bond Purchase and Loan Agreement dated April 1, 2010. The Foundation borrowed \$32,100,000 of the Revenue Bond Series 2010A and the entire \$1,900,000 of the Revenue Bond Series 2010B.

The Series 2010A Bonds were subject to mandatory repayment at the option of the commercial bank on December 1, 2023. On November 4, 2016, the Foundation executed a loan modification agreement in which the commercial bank shall not exercise the mandatory prepayment option, but the Foundation is now obligated to prepay the Series 2010A Bonds on June 1, 2024.

Proceeds were used in the acquisition, construction, renovation and equipping of a five-story administration building for classrooms, administrative office and retail space. The building was substantially completed in May 2011, with remaining construction for retail space completed in fiscal year 2014. The Foundation's debt obligation is limited to that portion of the bond issuance which it drew upon pursuant to the Bond Purchase and Loan Agreement.

As part of this transaction, the Foundation simultaneously entered into two forward floating-to-fixed interest rate swaps with a commercial bank to effectively fix the interest rates on the tax-exempt and taxable bonds. These swaps were terminated in fiscal year 2018. See Note 19.F for discussion regarding the interest rate swaps.

On May 18, 2018, the FCEDA issued its \$30,395,000 Refunding Revenue Bond, Series 2018 (GMUF Mason Administration, LLC Project) and sold such bonds to a commercial bank pursuant to a loan and financing agreement. Proceeds were used to retire the \$28,243,403 of outstanding FCEDA Revenue Bond Series 2010A (Tax-Exempt – GMUF Mason Administration, LLC Project) bonds as well as the interest rate swap termination fee. The Foundation began leasing the property to the University in fiscal year 2011 with a 25 year lease term and the lease payments service the bonds' principal and interest payments.

GMUF Prince William Housing, LLC (Beacon Hall) - Industrial Development Authority of the County of Prince William Bonds

On August 11, 2011, the Industrial Development Authority of the County of Prince William issued its \$14,640,000 Revenue Bond Series 2011A (Tax-Exempt George Mason University Foundation Prince William Housing LLC Project) and its \$985,000 Revenue Bond Series 2011B (Taxable George Mason University Foundation Prince William Housing LLC Project). Proceeds were used to finance the acquisition, construction and equipping of a student residence hall, university program space, and unimproved "shell space" designated for retail tenants.

The Series 2011A and Series 2011B Bonds are special, limited obligations of the issuer, payable solely from the revenues pledged therefore under the indenture. Neither the Foundation nor the University is liable for payments of the principal or redemption price of interest on the Bonds. The Foundation began leasing the property to the University in fiscal year 2013 with a 30 year lease term, and the lease payments service the bonds' principal and interest payments.

All of the term bonds for the Industrial Development Authority of the County of Prince William Series 2011 Bonds are subject to mandatory redemption by operation of sinking fund installments.

GMUF Prince William Life Sciences Lab, LLC - Industrial Development Authority of the County of Prince William Bonds

On August 11, 2011, the Industrial Development Authority of the County of Prince William issued its \$31,065,000 Revenue Bond Series 2011AA (Tax-Exempt George Mason University Foundation Prince William Life Sciences Lab LLC Project) and its \$2,145,000 Revenue Bond Series 2011BB (Taxable George Mason University Foundation Prince William Life Sciences Lab LLC Project) pursuant to a Trust Indenture dated August 1, 2011. Proceeds were used to finance the acquisition, construction and equipping of life sciences lab facilities and the acquisition and construction of unimproved "shell space" designated for commercial laboratory use. The project was completed in fiscal year 2015.

The Series 2011AA and Series 2011BB Bonds are special, limited obligations of the issuer, payable solely from the revenues pledged therefore under the indenture. Neither the Foundation nor the University is liable for payments of the principal or redemption price of interest on the Bonds. The Foundation began leasing the property in fiscal year 2013 to the University with a 29.5 year lease term, and the lease payments service the bonds' principal and interest payments. The Series 2011BB Bonds matured on September 1, 2016.

During fiscal year 2017, the Industrial Development Authority of the County of Prince William issued its \$35,330,000 Revenue Bond Series 2017 ("Series 2017 Bonds") pursuant to a Trust Indenture dated February 1, 2017. Proceeds were used by the Foundation to execute an advanced refunding and to legally defease the Series 2011AA Bonds. The Foundation entered into this advanced refunding to eliminate the private business use restrictions on the building, allowing the Foundation more flexibility in utilizing the space and to take advantage of historically low long-term interest rates. The University's lease payments fund the debt service of the Series 2017 Bonds.

All of the term bonds for the Industrial Development Authority of the County of Prince William Series 2017 Bonds are subject to mandatory redemption by operation of sinking fund installments.

GMUF Commerce Buildings, LLC Notes

On March 16, 2015, GMU Commerce Buildings, LLC modified its existing loan with the commercial bank resulting in a taxable loan of \$5,720,000 at a fixed rate of 3.63%, maturing March 1, 2030. The Foundation leases the property to the University with a 15 year lease term and the lease payments made by the University service the notes' principal and interest payments as well as operating costs.

GMUF Arlington Campus, LLC Notes

On August 18, 2006, GMUF Arlington Campus, LLC secured a 10-year \$68.5 million loan by executing a deed of trust on real property located at 3434 North Washington Street, Arlington, VA, with a financial institution.

During fiscal year 2016, GMUF Arlington Campus, LLC extinguished its existing loan and terminated a related letter of credit. Effective June 1, 2016, GMUF Arlington Campus, LLC negotiated a new loan of \$60 million with another commercial bank at a fixed rate of 4.05%, maturing June 1, 2033.

The following represents the Foundation's bonds and notes payable at June 30, 2019:

	2019
Fairfax County Economic Development Authority Bonds (FCEDA)	
GMUF Potomac Heights, LLC Tax-Exempt Revenue Bonds, term interest rate	
2.41%, maturing on November 1, 2027	15,955,000
GMUF Mason Administration, LLC Tax-Exempt Revenue Bond, interest rate 3.47%	
maturing on April 1, 2036	28,981,518

	2019
Industrial Development Authority of the County of Prince William (IDA-PW)	
Prince William County Series 2011A Bonds, serial with interest rates ranging from	
4.25% to 5.00%, maturing at various dates from September 1, 2022 to September	
1, 2026	\$1,895,000
Prince William County Series 2011A Bonds, term interest rate 5.50%, maturing	π -, ο ε ο , ο ο ο
September 1, 2031	3,190,000
interest rate 5.125%, maturing September 1, 2041	9,555,000
Prince William County Series 2011B Bonds, term interest rate 3.375%, maturing	
at various dates from September 1, 2014 to September 1, 2021	610,000
Prince William County Series 2017 Bonds, serial with interest rates ranging from	
1.206% to 4.424%, maturing at various dates from October 1, 2017 to October	
1, 2036	23,330,000
Prince William County Series 2017 Bonds, term interest rate 4.524%, maturing	
October 1, 2041	10,315,000
Bank Notes	
GMUF Arlington Campus, LLC Note with interest rate of 4.05% maturing June 1,	
2033	\$52,207,989
GMUF Commerce Buildings, LLC Note with interest rate of 3.63% maturing	#C=,=C1,5C5
March 1, 2030	4,357,096
Notes and bonds payable at face value	150,396,603
Plus: Unamortized net premium	50,935
Less: Debt issuance costs, net	(1,231,003)
Total long-term debt	\$149,216,535

Scheduled maturities and sinking fund requirements are as follows:

Year Ended June 30	Total
2020	\$7,280,122
2021	7,586,781
2022	7,842,956
2023	8,159,771
2024	8,467,869
Thereafter	111,059,104
Total	\$150,396,603

Interest expense on notes, bonds and related swaps along with the amortization of deferred financing charges was \$6,037,842 for the year ended June 30, 2019.

For certain debt issuances, on a periodic basis, the Foundation is required to comply with administrative reporting and debt covenant calculations. As of June 30, 2019, the Foundation was in compliance with its required debt covenant calculations.

F. LONG-TERM DEBT - MASON HOUSING, INC

In October 2008, the Fairfax County Economic Development Agency ("EDA") issued \$39,760,000 of variable rate bonds (the Bonds) in order to provide financing for the development of Mason Housing. Bank of America (the Bond Purchaser) purchased these bonds and the proceeds received from the purchase were deposited to U.S. Bank National Association (the Trustee). Concurrently, the Organization entered into a loan agreement with EDA to borrow the proceeds received from the sale of the bonds. EDA entered into a trust indenture with the

Trustee to secure the repayment of the bonds by the assignment of its rights under the loan agreement. In addition, the Organization entered into two interest rate swap agreements with Bank of America which exchanged the variable rate borne by the Organization with a fixed rate.

Principal payments are due annually on August 1 from 2011 to 2039. The Bonds bear interest at a variable rate, not to exceed 12%, which is determined by the remarketing agent, Bank of America Securities LLC, on a weekly index floating rate and flexible rate basis. The Bonds bear interest at an index floating rate, which is 1.10% plus the Securities Industries and Financial Market Association (SIFMA) through October 1, 2016. On November 1, 2016, the agreement was amended to change the interest to 1.15% plus 70% of the London Interbank Offered Rate (LIBOR) monthly floating rate through January 1, 2018. On January 1, 2018, the current interest being charged was extended through January 31, 2022. Commencing February 1, 2022, the Bond Purchaser may select an interest rate, as defined, pursuant to the terms of the trust indenture. The interest rate on the Bonds as of March 31, 2019 was 1.15%. The Bonds are secured by a Trust Indenture dated October 1, 2008. The trust indenture was supplemented on October 1, 2013 to reflect the Bonds as directly held by the bond purchaser.

In October 2008, an interest rate swap agreement was entered into on a notional amount of \$38,400,000. The swap went into effect December 1, 2008, and is set to expire on August 1, 2039. Per the agreement, the Organization pays a fixed rate of 3.97% and Bank of America pays a variable rate of the one-month LIBOR-BBA for each month (1.74307% at March 31, 2019).

In October 2008, an interest rate swap agreement was entered into on a notional amount of \$1,360,000. The swap went into effect December 1, 2008, and is set to expire on August 1, 2039. Per the agreement, the Organization pays a fixed rate of 3.035% and Bank of America pays a variable rate of the one-month LIBOR-BBA for each month (1.74307% at March 31, 2018).

The loan payable is secured by the Organization's building and improvements and future rental income. Interest is payable monthly on the loan payable, commencing in November 2008. Annual principal payments commenced in August 2011. Pursuant to the master covenant agreement with the bond purchaser, the Organization is required to maintain a debt service coverage ratio of at least 1.20.

During the year ended March 31, 2019, interest expense of \$1,923,111 was incurred and was included in interest expense on the statement of activities and changes in net deficit without donor restrictions. As of March 31, 2019, the outstanding principal balance was \$38,485,000. As of March 31, 2019, accrued interest payable was \$164,024.

Debt issuance costs on the above note are being amortized using an imputed rate of 5.34% at March 31, 2019. Amortization expense included in interest expense during 2019 totaled \$75,713. As of March 31, 2019, unamortized debt issuance costs were \$1,083,096.

Aggregate maturities of the loan payable over the next five years and thereafter is as follows:

Year Ended March 31	Total
2020	\$406,667
2021	505,000
2022	598,333
2023	706,667
2024	815,000
Thereafter	35,453,333
Total	\$38,485,000
Less: Debt Issuance Costs	1,083,096
Total long-term debt	\$37,401,904

G. LONG-TERM DEBT - GMU INSTRUCTIONAL FOUNDATION

GMUIF has a note payable with a bank, in the original amount of \$2,850,000 that commenced on March 1, 2010; collateralized by a deed of trust on 50 acres of land owned by GMUIF. The note bears interest at a fixed rate of 4.75% per annum with monthly payments of principal and interest of \$17,686. The note matures on March 1, 2025.

The minimum five years payments for the years ending March 31 are as follow:

Year Ended March 31	Total
2020	\$163,026
2021	170,940
2022	179,239
2023	187,941
2024	197,065
Thereafter	212,294
Total	\$1,110,505

H. SUBSEQUENT EVENTS - COMPONENT UNITS

GMUF entered into an arrangement on November 16, 2016 with a commercial development entity to sell approximately 36.7 acres of land in Loudon County, Virginia. On September 16, 2019 GMUF closed on phase one of the sale of 26.4 acres. Proceeds realized of approximately \$10,900,000 will support Foundation funding of university initiatives. Phase two of the sale of the remaining 10.3 acres is expected to close in September 2020.

The financial impact of the COVID-19 global outbreak has affected all corners of the equity and fixed income markets and the George Mason University Foundation's investments, included in the Component Units – Combined Statement of Financial Position as of June 30, 2019 have not been immune. Foundation management estimates that the Foundation's investment portfolio has incurred losses of 10%, or \$19.1 million. These losses have been offset by additions to the investment portfolio of \$48.8 million, resulting in an overall increase in the value of the Foundation's investments of 15%, or \$29.7 million, as of March 24, 2020.

20. SUBSEQUENT EVENTS

In August 2019, the Commonwealth Treasury Board completed the sale of the General Obligation Refunding Bonds, Series 2019B. The University's share of the principal amount of the bonds is \$15.6 million. The proceeds of these bonds were used to refund \$16.6 million of outstanding bonds. Interest payments on the bonds will be made semi-annually, with coupon ranging from 2 to 5 percent. Principal payments are made annually with the final payment due June 1, 2024. The refunding generated \$1.3 million in present value savings.

REQUIRED SUPPLEMENTARY INFORMATION

Required Supplementary Information (RSI) Cost-Sharing Employer Plans – VRS State Employee Retirement Plan and VaLORS Retirement Plan For the Fiscal Year Ended June 30, 2019

Schedule of George Mason University's Share of Net Pension Liability VRS State Employee Retirement Plan

For the Measurement Dates of June 30, 2018-2014

	Proportion of Net Pension Liability (Asset)	Proportionate Share of Net Pension Liability (Asset)	Covered Payroll	Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
2018	3.19%	\$172,885,000	\$127,464,144	135.63%	77.39%
2017	3.15%	\$183,719,000	\$123,376,471	148.91%	75.33%
2016	3.25%	\$214,498,000	\$126,225,866	169.93%	71.29%
2015	3.28%	\$200,645,000	\$124,140,373	161.63%	72.81%
2014	3.27%	\$182,878,000	\$126,146,921	144.97%	74.28%

Schedule in intended to show information for 10 years. Since 2018 is the fifth year for this presentation, there are only five years available. However, additional years will be included as they become available.

Schedule of George Mason University's Share of Net Pension Liability VaLORS Retirement Plan

For the Measurement Dates of June 30, 2018-2014

	Proportion of Net Pension Liability (Asset)	Proportionate Share of Net Pension Liability (Asset)	Covered Payroll	Proportionate Share of the Net Pension Liability (Asset) as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of Total Pension Liability
2018	0.8431%	\$5,254,000	\$2,917,834	180.07%	69.56%
2017	0.7310%	\$4,798,000	\$2,513,696	190.87%	67.22%
2016	0.7456%	\$5,772,000	\$2,577,844	223.91%	61.01%
2015	0.7670%	\$5,451,000	\$2,595,671	210.00%	62.64%
2014	0.7099%	\$4,785,000	\$2,502,219	191.23%	63.05%

Schedule in intended to show information for 10 years. Since 2018 is the fifth year for this presentation, there are only five years available. However, additional years will be included as they become available.

Schedule of George Mason University's Contributions VRS State Employee Retirement Plan For the Years Ended June 30, 2010 through 2019

		Contributions in			
	Contractually Required Contribution	Relation to Contractually Required Contribution	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a % of Covered Payroll
2019	\$17,627,449	\$17,627,449	\$0	\$130,380,539	13.52%
2018	17,194,913	17,194,913	0	127,464,144	13.49%
2017	16,643,486	16,643,486	0	123,376,471	13.49%
2016	17,646,376	17,646,376	0	126,225,866	13.98%
2015	15,306,508	15,306,508	0	124,140,373	12.33%
2014	11,050,470	11,050,470	0	126,146,921	8.76%
2013	10,404,379	10,404,379	0	118,771,449	8.76%
2012	3,663,572	3,663,572	0	114,127,310	3.21%
2011	2,149,857	2,149,857	0	100,932,263	2.13%
2010	4,819,167	4,819,167	0	97,458,101	4.94%

Schedule of George Mason University's Contributions
VaLORS Retirement Plan

For the Years Ended June 30, 2010 through 2019

		Contributions in Relation to			
	Contractually	Contractually	Contribution	Employer's	Contributions as
	Required	Required	Deficiency	Covered	a % of Covered
	Contribution	Contribution	(Excess)	Payroll	Payroll
2019	\$595,024	\$595,024	\$0	\$2,753,465	21.61%
2018	614,204	614,204	0	2,917,834	21.05%
2017	529,133	529,133	0	2,513,696	21.05%
2016	485,408	485,408	0	2,577,844	18.83%
2015	458,655	458,655	0	2,595,671	17.67%
2014	370,328	370,328	0	2,502,219	14.80%
2013	445,945	445,945	0	3,013,140	14.80%
2012	213,333	213,333	0	3,013,181	7.08%
2011	136,739	136,739	0	2,670,676	5.12%
2010	328,465	328,465	0	2,883,746	11.39%

Notes to Required Supplementary Information For the Year Ended June 30, 2019

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

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

Mortality Rates (Pre-retirement, post- retirement healthy, and disabled)	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 25%

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

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

Required Supplementary Information (RSI) OPEB Programs For the Fiscal Year Ended June 30, 2019

Schedule of George Mason University's Share of Net OPEB Liability (Asset) For the Measurement Dates of June 30, 2018 and 2017

		Proportion of Net OPEB Liability	Proportionate Share of Net OPEB Liability	Employer's Covered	Proportionate Share of Net OPEB Liability (Asset) as a Percentage of	Plan Fiduciary Net Position as a Percentage of Total OPEB
Plan	Date	(Asset)	(Asset)	Payroll	Covered Payroll*	Liability*
GLI	2018	1.71%	\$25,915,000	\$324,279,275	7.99%	51.22%
GLI	2017	1.66%	\$25,016,000	\$305,005,397	8.20%	48.86%
HIC	2018	4.80%	\$43,766,000	\$322,852,386	13.56%	9.51%
HIC	2017	4.71%	\$42,921,000	\$331,193,685	12.96%	8.03%
LODA	2018	0.22%	\$685,000	\$3,176,375	21.57%	0.60%
LODA	2017	0.22%	\$580,000	\$2,636,694	22.00%	1.30%
VSDP	2018	(3.04)%	\$(6,856,000)	\$117,039,982	(5.86)%	194.74%
VSDP	2017	(2.98)%	\$(6,127,000)	\$116,138,459	(5.28)%	186.63%

^{*} The contributions for the Line of Duty Act Program (LODA) are based on the number of participants in the program using a per capita-based contribution versus a payroll-based contribution.

Schedule in intended to show information for 10 years. Since 2018 is the second year for this presentation, there are only two years of data available. However, additional years will be included as they become available.

Schedule of George Mason University's Share of Total PMRH Liability For the Measurement Dates of June 30, 2018 and 2017						
Plan	Date	Proportion of Total OPEB Liability (Asset)	Proportionate Share of Total OPEB Liability (Asset)	Covered- Employee Payroll	Proportionate Share of Total PMRH Liability as a Percentage of Covered- Employee Payroll	Plan Fiduciary Net Position as a Percentage of Total OPEB Liability
PMRH PMRH	2018 2017	3.97% 3.89%	\$39,956,061 \$50,512,033	\$316,551,467 \$304,037,694	12.6% 16.6%	N/A N/A

Schedule in intended to show information for 10 years. Since 2018 is the second year for this presentation, there are only two years of data available. However, additional years will be included as they become available.

Schedule of George Mason University's OPEB Contributions For the Years Ended June 30, 2018 through 2019

			Contributions in Relation to			Contributions
		Contractually	Contractually	Contribution	Employer's	as a % of
	_	Required	Required	Deficiency	Covered	Covered
Plan	Date	Contribution	Contribution	(Excess)	Payroll*	Payroll*
GLI	2019	\$1,739,638	\$1,739,638	\$0	\$334,545,691	0.52%
GLI	2018	\$1,686,252	\$1,686,252	\$0	\$324,279,275	0.52%
HIC	2019	\$3,896,135	\$3,896,135	\$0	\$333,003,029	1.17%
HIC	2018	\$3,809,658	\$3,809,658	\$0	\$322,852,386	1.18%
LODA	2019	\$33,171	\$33,171	\$0	\$2,903,883	1.14%
LODA	2018	\$23,262	\$23,262	\$0	\$3,176,375	0.73%
VSDP	2019	\$777,972	\$777,972	\$0	\$125,479,347	0.62%
VSDP	2018	\$772,464	\$772,464	\$0	\$117,039,982	0.66%

^{*} The contributions for the Line of Duty Act Program are based on the number of participants in the Program using a per capita-based contribution versus a payroll-based contribution.

Schedule in intended to show information for 10 years. Since 2019 is the second year for this presentation, only two years of data are available. However, additional years will be included as they become available.

Notes to Required Supplementary Information For the Fiscal Year Ended June 30, 2019

GLI, HIC, LODA and VSDP Programs:

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

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

General State Employees (GLI, HIC, LODA, VSDP):

Mortality Rates (Pre-retirement, post	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement
	from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and
	service through 9 years of service
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 25%

Teachers (GLI):

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

SPORS Employees (GLI, HIC, LODA, VSDP):

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

VaLORS Employees (GLI, HIC, LODA, VSDP):

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

JRS Employees (GLI, HIC):

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

Largest Ten Locality Employers - General Employees (GLI):

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

	age and service year
Disability Rates	Lowered disability rates
Salary Scale	No change
Line of Duty Disability	Increased rate from 14% to 20%

Non-Largest Ten Locality Employers - General Employees (GLI):

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

Largest Ten Locality Employers – Hazardous Duty Employees (GLI, LODA):

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

Non-Largest Ten Locality Employers – Hazardous Duty Employees (GLI, LODA):

Mortality Rates (Pre-retirement, post-	Updated to a more current mortality table – RP-2014
retirement healthy, and disabled)	projected to 2020
Retirement Rates	Increased age 50 rates and lowered rates at older ages
Withdrawal Rates	Adjusted termination rates to better fit experience at each
	age and service year
Disability Rates	Adjusted rates to better match experience
Salary Scale	No change
Line of Duty Disability	Decreased rate from 60% to 45%

PMRH Program:

There are no assets accumulated in a trust to pay related benefits.

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

Changes of assumptions – The following actuarial assumptions were updated since the June 30, 2017 valuation based on recent experience:

- Spousal Coverage reduced the rate from 50% to 35%
- Retiree Participation reduced the rate from 70% to 60%

Spousal coverage and retiree participation were both reduced based on a blend of recent experience and the prior year assumptions. The mortality assumption was modified slightly to reflect mortality improvement projection scale BB to 2020. Additionally, the discount rate was increased from 3.58% to 3.87% based on the Bond Buyers GO 20 Municipal Bond Index.

INDEPENDENT AUDITOR'S REPORT

Martha S. Mavredes, CPA Auditor of Public Accounts

Commonwealth of Birginia

Auditor of Public Accounts

P.O. Box 1295 Richmond, Virginia 23218

March 26, 2020

The Honorable Ralph S. Northam Governor of Virginia

The Honorable Thomas K. Norment, Jr. Chairman, Joint Legislative Audit and Review Commission

Board of Visitors George Mason University

INDEPENDENT AUDITOR'S REPORT

Report on Financial Statements

We have audited the accompanying financial statements of the business-type activities and aggregate discretely presented component units of George Mason University, a component unit of the Commonwealth of Virginia, as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the University's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We did not audit the financial statements of the aggregate discretely presented component units of the University, which are discussed in Note 1 and Note 19. Those financial statements were audited by other auditors whose reports thereon have been furnished to us, and our opinion, insofar as it relates to the amounts included for the component units of the University, is based on the reports of the other auditors

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in <u>Government Auditing Standards</u>, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The financial statements of the component units of the University that were audited by other auditors upon whose reports we are relying were audited in accordance with auditing standards generally accepted in the United States of America, but not in accordance with <u>Government Auditing Standards</u>.

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

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

Opinion

In our opinion, based on our audit and the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities and aggregate discretely presented component units of George Mason University as of June 30, 2019, and the respective changes in financial position and cash flows, where applicable, thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the following be presented to supplement the basic financial statements: Management's Discussion and Analysis on pages 1 through 11; the Schedule of George Mason University's Share of Net Pension Liability, the Schedule of George Mason University's Contributions, and the Notes to the Required Supplementary Information on pages 81 through 83; the Schedule of George Mason University's Share of Net OPEB Liability (Asset), the Schedule of George Mason University's OPEB Contributions, and the Notes to the Required Supplementary Information for the Health Insurance Credit, Group Life Insurance, Disability Insurance, and Line of Duty programs on pages 84 through 87; the Schedule of George Mason

University's Share of Total OPEB Liability and the Notes to the Required Supplementary Information for the Pre-Medicare Retiree Healthcare program on pages 84 and 87 through 88. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Reporting Required by Government Auditing Standards

In accordance with <u>Government Auditing Standards</u>, we have also issued our report dated March 26, 2020, on our consideration of George Mason University's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with <u>Government Auditing Standards</u> in considering the University's internal control over financial reporting and compliance.

Martha S. Mavredes
AUDITOR OF PUBLIC ACCOUNTS

UNIVERSITY OFFICIALS

GEORGE MASON UNIVERSITY

Fairfax, Virginia
As of June 30, 2019

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