VIRGINIA TECH

Virginia Tech

2017 Annual Financial Report

Contents

University Highlights

For the years ended June 30, 2010 - 2017

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Student admissions							
Total applications (including transfers)							
Undergraduate	22,942	23,736	23,101	21,738	23,504	25,095	27,890
Graduate	9,190	9,465	9,544	9,622	9,474	8,916	8,635
Offers, as a percentage of applications							
Undergraduate	65.1%	64.8%	69.0%	69.6%	70.2%	70.9%	68.7%
Graduate	33.4%	33.3%	31.2%	31.1%	29.4%	33.1%	31.8%
New enrollment, as a percentage of offers							
Undergraduate	41.6%	40.1%	40.7%	42.0%	39.1%	41.0%	36.2%
Graduate	60.9%	61.1%	62.5%	60.9%	60.3%	67.3%	68.9%
Student enrollment							
Enrollment by classification							
Undergraduate	23,690	23,700	23,859	24,034	24,247	25,384	25,791
Graduate and first professional	7,316	7,236	7,228	7,171	6,977	7,279	7,379
Enrollment by campus							
Blacksburg campus	28,687	28,650	28,836	29,071	29,173	30,598	31,090
Northern Virginia Center	1,078	1,040	1,018	925	884	861	842
Other off-campus locations	1,241	1,246	1,233	1,209	1,167	1,204	1,238
Enrollment by residence							
Virginia	21,475	21,371	21,478	21,319	21,145	21,583	22,093
Other states	7,198	7,198	6,975	7,038	7,066	7,521	7,370
Other countries	2,333	2,367	2,634	2,848	3,013	3,559	3,707
Degrees conferred							
Undergraduate	5,705	5,825	5,604	5,722	5,890	5,940	5,952
Graduate and first professional	2,045	2,163	2,041	2,163	2,021	1,973	2,149
Faculty and staff							
Full-time instructional faculty	1,306	1,368	1,422	1,427	1,443	1,479	1,520
Other faculty and research associates	1,826	1,954	2,083	2,263	2,418	2,505	2,554
P14 faculty/part-time faculty	273	264	249	238	218	236	220
Support staff	3,461	3,449	3,509	3,519	3,467	3,425	3,404
Total faculty and support staff	6,866	7,035	7,263	7,447	7,546	7,645	7,698
Percent of instructional faculty tenured	61.9%	61.7%	61.1%	62.0%	60.9%	59.8%	57.4%

Financial Highlights

For the years ended June 30, 2013—2017 *(all dollars in millions; square feet in thousands)*

	2012-13	2013-14	2014-15	2015-16	2016-17
Revenues, Expenses, and Changes in Net Position					
Operating revenues	$ 900.0	$ 937.5	$ 965.0	$ 1,020.6	$ 1,031.5
Operating expenses	1,157.6	1,227.2	1,259.5	1,315.4	1,364.7
Operating loss (1)	(257.6)	(289.7)	(294.5)	(294.8)	(333.2)
Non-operating revenues and expenses (1)	296.0	318.4	316.0	318.0	355.2
Other revenues, expenses, gains or losses	105.8	74.3	51.8	98.4	42.0
Net increase in net position	$ 144.2	$ 103.0	$ 73.3	$ 121.6	$ 64.0
University Net Position					
Net investment in capital assets	$ 992.2	$ 1,056.9	$ 1,112.1	$ 1,163.8	$ 1,201.3
Restricted	$ 158.3	$ 164.9	$ 178.9	$ 209.8	$ 224.5
Unrestricted (2)	$ 282.6	$ 314.3	$ (74.3)	$ (35.3)	$ (23.5)
Assets and Facilities					
Total university assets	$ 2,209.1	$ 2,284.1	$ 2,369.2	$ 2,503.3	$ 2,528.4
Capital assets, net of accumulated depreciation	$ 1,517.0	$ 1,559.3	$ 1,625.1	$ 1,666.9	$ 1,680.5
Facilities—owned gross square feet	10,078	11,139	11,209	11,394	11,374
Facilities—leased square feet	1,183	1,805	1,913	1,922	1,993
Sponsored Programs					
Number of awards received	2,272	2,443	2,189	2,291	2,423
Value of awards received	$ 271.1	$ 303.6	$ 296.6	$ 278.1	$ 304.3
Research expenditures reported to NSF (3)	$ 496.2	$ 513.1	$ 504.3	$ 521.8	N/A
Virginia Tech Foundation					
Gifts and bequests received	$ 77.0	$ 81.1	$ 98.5	$ 93.2	$ 145.1
Expended in support of the university	$ 146.0	$ 155.9	$ 166.5	$ 184.9	$ 164.6
Total assets and managed funds	$ 1,302.7	$ 1,488.7	$ 1,508.0	$ 1,510.6	$ 1,726.4
Endowments (at market value)					
Owned by Virginia Tech Foundation (VTF)	$ 594.1	$ 692.0	$ 713.7	$ 705.6	$ 795.7
Owned by Virginia Tech	59.6	96.8	96.5	130.2	191.9
Managed by VTF under agency agreements	7.0	8.0	7.9	7.5	8.6
Total endowments supporting the university	$ 660.7	$ 796.8	$ 818.1	$ 843.3	$ 996.2
Student Financial Aid					
Number of students receiving selected types of financial aid					
Loans	12,506	12,279	12,253	12,282	12,430
Grants, scholarships and waivers (4)	18,353	18,305	18,242	18,409	18,746
Employment opportunities	9,935	10,329	10,437	10,934	11,201
Total amounts by major category					
Loans	$ 154.5	$ 155.5	$ 161.5	$ 165.9	$ 171.4
Grants, scholarships and waivers (4)	168.7	177.4	182.0	194.8	203.6
Employment opportunities	76.7	80.3	81.3	85.5	87.2
Total financial aid	$ 399.9	$ 413.2	$ 424.8	$ 446.2	$ 462.2

(1) The university will always be expected to show an operating loss since significant recurring revenues are shown as non-operating. Major revenue sources reported as non-operating include state appropriations, gifts, and investment income. These revenue sources are used for general operations in support of the learning, discovery, and engagement missions of the university.
(2) Beginning in 2014-15, Unrestricted Net Position is negative due to the implementation of GASB Statement 68.
(3) Total research expenditures reported to the National Science Foundation for the current year were not available at publication date.
(4) Periods prior to 2014-15 have been restated to remove prepaid awards from the scholarships total.

From the Vice President for Finance and Chief Financial Officer

M. Dwight Shelton Jr.

On August 22, 2016, President Sands delivered the first State of the University address to faculty, staff, students, and stakeholders. Dr. Sands' remarks focused on the evolution of the university, which has been greatly enhanced by capitalizing on multitude of opportunities over the years to better serve the university's enduring mission. A few illustrations of the landmark decisions highlighted in his address include: the formation of the university through the Morrill Act in 1872; transition of the university from an all-male, military university to a comprehensive university of today; creation of research institutes; partnership to save Hotel Roanoke; and membership in the NCAA Atlantic Coast Conference. The spirit of innovation and courage inherent in realizing these opportunities has resulted in significant positive outcomes for the university and the community. This spirit continues today with the ambitious visioning project named Beyond Boundaries. In November 2016, Dr. Sands presented the university with the final "Envisioning Virginia Tech – Beyond Boundaries" document, which sets a trajectory for Virginia Tech to be a global top-100 university.

In fiscal year 2017, Virginia Tech continued to work on specific initiatives to pursue the broad vision established in the Beyond Boundaries document. The campus community has been focusing on four broad areas: experiential learning, inclusion and diversity, cross-sector partnerships, and philanthropy. These large-scale, broad initiatives are essential in the university's pursuit to become a top-100 global university. Years of strategic planning have well positioned Virginia Tech to grow these initiatives; the long-term success of these initiatives will require a continual effort of allocating traditional resources, implementing cost containment strategies, and diversifying and growing new revenue streams.

Efforts are underway to develop curricula and programs to prepare and graduate VT-shaped students who are purpose-driven and have a combination of disciplinary depth and interdisciplinary capabilities to tackle the complex global problems and seize opportunities of the future. The 2017 fall academic course catalog includes new undergraduate courses with broad themes crossing multiple disciplines. Thirty percent of the incoming class of 2021 are from underrepresented or under-served groups, including underrepresented minority, low income, and first-generation college students. This percentage is up 5 percent from a few years ago and provides opportunities for students to learn in a multidisciplinary team with people whose life experience and expertise are different than their own. The VT-shaped student aligns with the demographics of student applicants seeking unique experiences such as first-year experience courses, undergraduate research, internships, and education abroad opportunities.

Undergraduate applications reached a new high for fall 2017. The university received 27,423 freshman applications, an increase of 7.8 percent from the previous year. Demand is broad-based and includes several areas where Virginia Tech is in a strong or unique position to expand access to eligible students. The university aspires to grow undergraduate enrollment to as much as 30,000 by 2023. Growing full-time undergraduate enrollment will offer resources to scale costs and to reduce the pressure to increase tuition rates.

Affordable access for Virginia residents continues to be a vital commitment of the university. The university once again increased the number of Virginia resident undergraduates, now totaling more than 19,000. Pathway programs that provide student support and targeted financial aid are helping the university achieve enrollment growth from traditionally underrepresented urban and rural parts of the state, and student financial aid resources are being refocused to better support students from first generation families and those families with low- to middle-incomes. The total cost (including room and board) for a Virginia resident undergraduate at Virginia Tech for 2016-17 was $21,276. This placed the university 9th among Virginia four-year public institutions, and 17th among a SCHEV peer group of 24 public institutions across the nation. The university continued to assess the lowest non-instructional mandatory fees of any public four-year institution in the commonwealth, directing 85 percent of a resident undergraduate's tuition and mandatory fees to the instructional mission.

Slow revenue growth led the 2017 Virginia General Assembly to reduce appropriations to most state agencies, including institutions of higher education; this resulted in a reduction to the University Division of $8.6 million. However, the commonwealth was able to shelter the university's Cooperative Extension & Agricultural Experiment Station Division from this reduction; that decision was crucial to the avoidance of significant reductions in programs related to cooperative extension and agricultural research. In fiscal year 2017, Virginia Tech received approximately $265.3 million in General Fund appropriations for its academic, cooperative extension, student financial assistance, research, and Corps of Cadet programs. The commonwealth was also able to fund its share of salary increases in 2017-18 (2% for faculty and 3% for staff), and provide an increase in the Equipment Trust Fund to support technology and research equipment needs. The university was able to mitigate the negative impacts of the General Fund reduction through enrollment growth and strategic allocation of resources, while continuing the trend of moderating increases in tuition rates.

For 2016-17, 10,922 full-time Virginia Tech undergraduate students (43%) were determined to have financial need. The university continues to develop strategies to increase funding for scholarships and financial aid to reduce the net price (remaining cost to the student after all financial aid resources are applied) to these students. Total institutional financial aid resources for undergraduate students increased by $4.0 million in 2017 to a total of $36.7 million. The Beyond Boundaries Scholarship program, launched in November 2016, is an example of a new initiative designed to help reduce cost as a barrier to enrollment for underrepresented and high-achieving students by matching gifts made toward certain scholarships. More than 130 students of the class of 2021 will benefit from the new Beyond Boundaries scholarship program. These actions align with the university's InclusiveVT initiative to achieve a more diverse set of talented students.

Progress is underway in five Destination Areas and four Strategic Growth Areas needed to continue meeting student demand and position Virginia Tech to be responsive to complex and ever-changing 21st century problems. Allowing students and faculty to learn in a unique shared environment will result in long-term research and economic development in Blacksburg and across the commonwealth. The successful partnership between Virginia Tech and Carilion Clinic is a hallmark of such collaboration that has potential to have far reaching impact for the region. The ten-year private-public partnership which created the Virginia Tech Carilion School of Medicine (VTCSOM) and Virginia Tech Carilion Research Institute continues to evolve. The university plans to acquire the VTCSOM as the ninth college effective July 1, 2018, at which time the new college will be fully integrated into the university academic structure. This partnership contributes significantly to the region and the nation by graduating physicians with robust research experiences.

The university reported National Science Foundation research expenditures of $521.8 million for fiscal year 2016 (the most recent data available), which represents a $17.5 million (3.4%) increase from fiscal year 2015. This ranks the university as 43rd in research expenditures among the nation's top research universities. Preliminary totals for fiscal year 2017 indicate that total research expenditures have decreased slightly from the previous year. To continue growing the university mission of discovering and implementing new knowledge through interdisciplinary teaching, research, and outreach activities, the university must continue to invest in infrastructure requirements for collaborative research and continue growth in external funding from federal and private sources for research programs.

Companies conduct many different transactions with the university to include a variety of partnerships such as joint research, recruiting, and philanthropy, often requiring separate contacts and interactions with multiple Virginia Tech offices. To achieve greater efficiencies and program growth, the university created the Center for Advancing Industry Partnerships to simplify the process to expand agreements and integrate more effectively with industry partners. By reducing the barriers for engaging with industry, the university will be able to continue growing sponsored research from the private sector, which increased by 40.8 percent from FY2013-14 ($28.7 million) to FY2015-16 ($40.3 million).

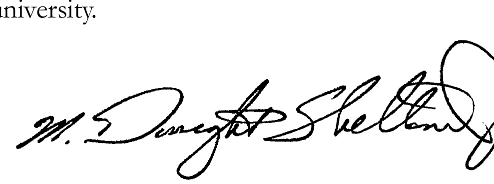
Over the past decade, Virginia Tech made significant investments to maintain intellectually stimulating academic and physical environments conducive to attracting talented and motivated students and faculty. In fiscal year 2017, the university updated the 2018-2024 Six-Year Capital Outlay Plan to ensure ongoing facility support of the tri-part mission through the successful execution of a comprehensive and forward-looking capital program.

The university's portfolio of active capital outlay projects during fiscal year 2017 included 30 items with a total budget of $600 million and $66 million in expenditures. Major facility improvements during the year include: renovations to three instruction buildings; completion of a high-performance data center; completion of a new 550 bed residence hall; major improvements to athletics baseball stadium, softball facilities and indoor track and field facilities; renovation of a 350 bed residence hall; a new power substation; and instillation of fire alarm systems in multiple campus buildings. The university's portfolio includes twelve major capital projects currently in the design phase that are expected to enter the construction phase during fiscal years 2018 and 2019. These projects include various renovations and new construction that support quality enhancements and growth of the instruction, research, extension, and auxiliary enterprise programs.

The management of debt is critical to the success of the university's capital program and is supported by strategic state investments for academic buildings, self-generated revenues from auxiliary enterprises, private support, judicious use of fees, and careful management of debt resources. The university reported a debt ratio of 3.67 percent for fiscal year 2017 with an outstanding principal balance of $494 million. The university's forward looking capital outlay planning and debt allocation planning processes ensure capacity will be available for high priority projects in the future while managing the debt program within our established performance measure of a 5 percent debt ratio and maintenance of target credit rating of AA- or better.

Our endowment continues to provide flexible financial support for university initiatives and expand financial aid resources to students. The value of the Virginia Tech Foundation's endowed assets as of June 30, 2017 was $995.8 million. This represents an increase of more than $152.8 million over the value of the endowment at June 30, 2016 of $843.0 million. As measured against the Cambridge Associates' peer group universe, the endowment's 13.3 percent return for 2016-17 outperformed its benchmark and ranked in the top 35th percentile. Over the previous five years, the endowment's return of 10.2 percent outperformed the benchmark and ranked in the top 3rd percentile. During the first quarter of fiscal year 2018-19, Virginia Tech's endowment grew to $1 billion, a monumental milestone which fewer than 100 colleges in the nation have obtained.

During the coming year, the university community will engage in a strategic planning process to transition the broad vision enumerated in the Beyond Boundaries document to establish strategic goals for the near term. As we embark upon the next phase in Virginia Tech's future, the university is in a strong financial position to support the academic, research, and outreach mission of the university.



M. Dwight Shelton, Jr

Management's Responsibility for Financial Reporting and Internal Controls

The information in this *Annual Financial Report*, including the accompanying basic financial statements, notes, management's discussion and analysis, and other information is the responsibility of Virginia Tech executive management. Responsibility for the accuracy of the financial information and fairness of its presentation, including all disclosures, rests with the management of the university. Management believes the information is accurate in all material respects and fairly presents the university's revenues, expenses, and changes in net position as well as its overall financial condition. This report was prepared in accordance with generally accepted accounting principles for public colleges and universities in the United States of America as prescribed by the Governmental Accounting Standards Board. Management is responsible for the objectivity and integrity of all representations herein. The *Annual Financial Report* includes all disclosures necessary for the reader of this report to gain a broad understanding of the university's operations for the year ended June 30, 2017.

The administration is responsible for establishing and maintaining the university's system of internal controls. Key elements of the university's system of internal controls include: careful selection and training of administrative personnel; organizational structure that provides appropriate division of duties; thorough and continuous monitoring, control, and reporting of operating budgets versus actual operating results; well communicated written policies and procedures; annual self-assessments led by the Office of the University Controller; a growing management services segment; and an extensive internal audit function. Although there are inherent limitations to the effectiveness of any system of accounting controls, management believes that the university's system provides reasonable, but not absolute, assurances that assets are safeguarded from unauthorized use or disposition, and accounting records are sufficiently reliable to permit preparation of financial statements and appropriate accountability for assets and liabilities.

The Finance and Audit Committee of the Virginia Tech Board of Visitors reviews and monitors the university's financial reporting and accounting practices. The committee meets with external independent auditors annually to review the *Annual Financial Report* and results of audit examinations. The committee also meets with internal auditors and university financial officers at least quarterly. These meetings include a review of the scope, quality, and results of the internal audit program, and a review of issues related to internal controls and quality of financial reporting.

The Auditor of Public Accounts (APA), the office of the Commonwealth of Virginia's auditors, has examined these annual financial statements and the report thereon appears on the facing page. The APA examination includes a study and evaluation of the university's system of internal controls, financial systems, policies, and procedures, resulting in the issuance of a management letter describing various issues considered worthy of management's attention. The university has implemented policies and procedures for the adequate and timely resolution of such issues. No material weaknesses were found on internal control matters by the APA for the fiscal year ended June 30, 2017.

M. Dwight Shelton, Jr.
Vice President for Finance and Chief Financial Officer

Commonwealth of Virginia

Auditor of Public Accounts

Martha S. Mavredes, CPA
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

November 3, 2017

The Honorable Terence R. McAuliffe, Governor of Virginia

The Honorable Robert D. Orrock, Sr., Chairman, Joint Legislative Audit and Review Commission

Board of Visitors, Virginia Polytechnic Institute and State 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 Virginia Polytechnic Institute and State University, a component unit of the Commonwealth of Virginia, as of and for the year ended June 30, 2017, 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 Notes 1 and 25. 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 Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. 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 Government Auditing Standards.

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 Virginia Polytechnic Institute and State University as of June 30, 2017, 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.

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Other Matters

Prior-Year Summarized Comparative Information

We have previously audited the University's 2016 financial statements, and we expressed an unmodified audit opinion on the respective financial statements in our report dated October 28, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 7 through 15, the Schedule of Virginia Tech's Share of Net Pension Liability on page 45, the Schedules of Employer Contributions on page 45, and the Notes to Required Supplementary Information on page 45 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of 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.

Supplementary and Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the University's basic financial statements. The supplementary information such as the Virginia Tech Foundation, Inc. information, Affiliated Corporations Financial Highlights, and Consolidating Schedules and the other information such as the University Highlights and Financial Highlights are presented for the purpose of additional analysis and are not a required part of the basic financial statements.

The Virginia Tech Foundation, Inc. information, Affiliated Corporations Financial Highlights, and Consolidating Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Virginia Tech Foundation, Inc. information, Affiliated Corporations Financial Highlights, and Consolidating Schedules are fairly stated, in all material respects, in relation to the basic financial statement taken as a whole.

The University Highlights and Financial Highlights have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated November 3, 2017, on our consideration of the 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 Government Auditing Standards in considering the University's internal control over financial reporting and compliance.

Martha S. Mavredes

AUDITOR OF PUBLIC ACCOUNTS

JMR/clj

Management's Discussion and Analysis

Virginia Polytechnic Institute and State University, popularly known as Virginia Tech, is a comprehensive, land-grant university located in Blacksburg, Virginia. The university offers 201 graduate, undergraduate, and professional degree programs through its eight academic colleges: Agriculture and Life Sciences, Architecture and Urban Studies, Engineering, Liberal Arts and Human Sciences, Natural Resources and Environment, Pamplin College of Business, Science, and the Virginia-Maryland College of Veterinary Medicine.

Virginia Tech has evolved into a position of increasing national prominence since its founding in 1872, consistently ranking among the nation's top universities for undergraduate and graduate programs. The university's research program was ranked 43rd among the top research institutions in the United States by the National Science Foundation in its latest survey measuring annual research expenditures.

The university is an agency of the Commonwealth of Virginia, and therefore included as a component unit in the Commonwealth of Virginia's *Comprehensive Annual Financial Report*. The 14 members of the Virginia Tech Board of Visitors govern university operations. Members of the board are appointed by the Governor of Virginia.

Overview

This unaudited *Management's Discussion and Analysis* (MD&A) is required supplemental information under the Governmental Accounting Standards Board's (GASB) reporting model. It is designed to assist readers in understanding the accompanying financial statements and provides an overall view of the university's financial activities based on currently known facts, decisions, and conditions. This discussion includes an analysis of the university's financial condition and results of operations for the fiscal year ended June 30, 2017. Comparative numbers are included for the fiscal year ended June 30, 2016. Since this presentation includes highly summarized data, it should be read in conjunction with the accompanying basic financial statements, including notes and other supplementary information. The university's management is responsible for all of the financial information presented, including this discussion and analysis.

The university's financial statements have been prepared in accordance with GASB Statement 35, *Basic Financial Statements—and Management's Discussion and Analysis—for Public Colleges and Universities*, as amended by GASB Statements 37, 38, and 63. The three required financial statements are the *Statement of Net Position* (balance sheet), the *Statement of Revenues, Expenses, and Changes in Net Position* (operating statement), and the *Statement of Cash Flows*. These statements are summarized and analyzed in the following sections. Combining schedules included in *Optional Supplementary Information* indicate how major fund groups were aggregated to arrive at the single column totals presented on the *Statement of Net Position* and the *Statement of Revenues, Expenses, and Changes in Net Position*.

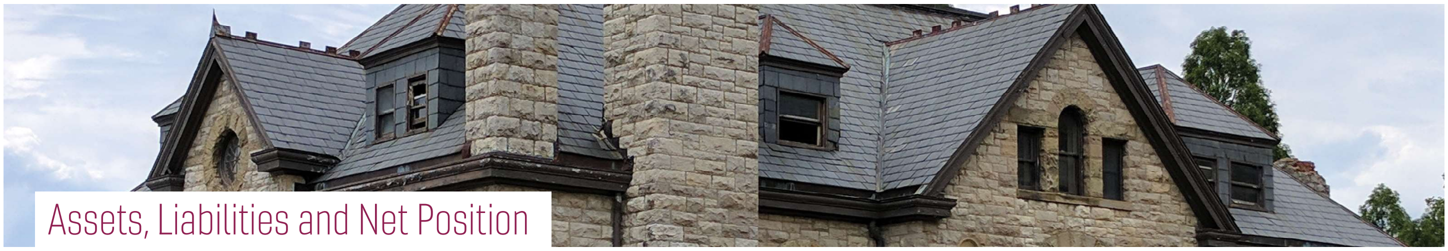
Using criteria provided in GASB Statement 39, *Determining Whether Certain Organizations Are Component Units*, and GASB Statement 60, *The Financial Reporting Entity: Omnibus,* amendments of GASB Statement 14, the university's eight affiliated corporations were evaluated on the nature and significance of their relationship to the university. The Virginia Tech Foundation Inc. (VTF or 'the foundation') and Virginia Tech Services Inc. (VTS) were determined to be component units and are presented in a separate column on the university's financial statements. VTF serves the university by generating significant funding from private sources and aggressively managing its assets to provide supplemental funding to the university. VTS operates the university bookstores and provides other services for the use and benefit of students, faculty and staff. The foundation and VTS are not part of this MD&A, but detail regarding their financial activities can be found in Note 25 of the *Notes to Financial Statements*. Transactions between the university and these component units have not been eliminated in this year's financial statements.

The following GASB statements of standards became effective in fiscal year 2017: Statement 73, *Accounting and Financial Reporting for Pension and Related Assets That Are Not Within the Scope of GASB Statement 68 and Amendments to Certain Provisions of GASB Statements 67 and 68*; Statement 74, *Financial Reporting for Postemployment and Benefits Plans Other Than Pension Plans*; Statement 77, *Tax Abatement Disclosures;* Statement 78, *Pensions Provided Through Certain Multiple-Employer Defined Benefit Pension Plans;* and Statement 80, *Blending Requirements for Certain Component Units – an amendment of GASB Statement 14*. Portions of both GASB Statement 73 and GASB Statement 79 were effective in the prior fiscal year. None of these GASB Statements had a significant effect upon the university's financial statements for the current year.

Statement of Net Position

The *Statement of Net Position* (SNP) presents the assets, liabilities and net position of the university as of the end of the fiscal year. The purpose of the statement is to present a snapshot of the university's financial position to the readers of the financial statements.

The data presented aids readers in determining the assets available to continue operations of the university. It also allows readers to determine how much the university owes to vendors, investors and lending institutions. Finally, the SNP provides a picture of the university's net position and the re-



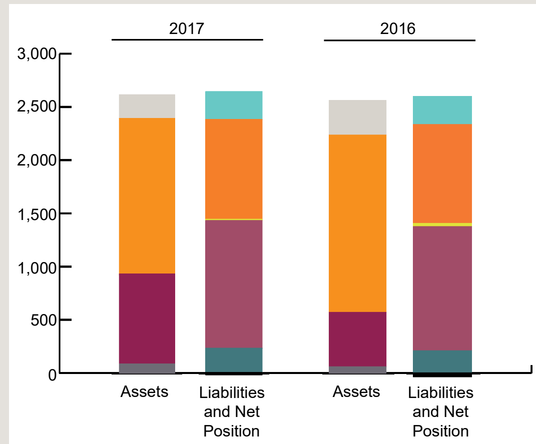
Assets, Liabilities and Net Position

Summary of Assets, Liabilities, and Net Posistion

For the years ended June 30, 2017 and 2016

(all dollars in millions)	2017	2016	Change Amount	Change Percent
Current assets	$ 220.6	$ 324.7	$ (104.1)	(32.1)%
Capital assets, net	1,680.5	1,666.9	13.6	0.8 %
Other assets	627.4	511.7	115.6	22.6 %
Total assets	2,528.5	2,503.3	25.1	1.0 %
Deferred outflow of resources (1)	84.6	58.1	26.5	45.6 %
Current liabilities	261.6	262.3	(0.6)	(0.2)%
Noncurrent liabilities	936.1	930.6	5.4	0.6 %
Total liabilities	1,197.7	1,192.9	4.8	0.4 %
Deferred inflow of resources (2)	13.0	30.2	(17.2)	(57.0)%
Net investment in capital assets	1,201.3	1,163.8	37.5	3.2 %
Restricted	224.5	209.8	14.7	7.0 %
Unrestricted	(23.5)	(35.3)	11.8	33.4 %
Total net position	$ 1,402.3	$ 1,338.3	$ 64.0	4.8 %

(1) Deferred outflows of resources are included with assets in the adjacent graph.
(2) Deferred inflows of resources are included with liabilities in the adjacent graph.



strictions for expenditure of the components of net position. Sustained increase in net position over time is one indicator of the financial health of the organization.

The university's net position is classified as follows:

Net investment in capital assets — Net investment in capital assets represents the university's total investment in capital assets, net of accumulated depreciation, amortization and outstanding debt obligations related to those capital assets. Debt incurred, but not yet expended for capital assets, is not included as a component of net investment in capital assets.

Restricted component of net position, expendable — The expendable category of the restricted component of net position includes resources the university is legally or contractually obligated to expend, with restrictions imposed by external third parties. This category partially consists of quasi-endowments totaling $67.1 million. The investment of quasi-endowments is managed by VTF.

Restricted component of net position, nonexpendable — The nonexpendable category of the restricted component of net position consists of endowment and similar type funds where donors or other outside sources have stipulated, 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 added to principal. The university's nonexpendable endowments of $0.4 million are included in its column on the SNP.

Unrestricted component of net position — The unrestricted component of net position represents resources used for transactions relating to academic departments and general operations of the university, and may be used at the discretion of the university's board of visitors to meet current expenses for any lawful purpose in support of the university's primary missions of instruction, research and outreach. These resources are derived from student tuition and fees, state appropriations, recoveries of facilities and administrative (indirect) costs, and sales and services of auxiliary enterprises and educational departments. The auxiliary enterprises are self-supporting entities that provide services for students, faculty and staff. Examples of the university's auxiliaries are intercollegiate athletics and student residential and dining programs.

Total university assets increased by $25.1 million or 1.0% during fiscal year 2017, bringing the total to $2,528.5 million at year-end. Growth in the major components of noncurrent assets (capital assets and long-term investments) and other assets were offset by a decrease in current assets. The increase in capital assets, net ($13.6 million) reflects the ongoing construction of university research and instructional facilities, and the capitalization of completed facilities discussed in detail in the following section, Capital Asset and Debt Administration. The increase in other assets ($115.6 million) and corresponding decrease in current assets ($104.1 million) were primarily due to the implementation of the university's strategy to invest more funds in long-term investments. The decrease current assets for cash and cash equivalents ($123.3 million) was offset by an increase in accounts receivable ($17.9 million).

Total university liabilities increased by $4.8 million or 0.4% during fiscal year 2017. The current liabilities category decreased $0.6 million and the noncurrent liabilities category increased $5.4 million. The decrease in current liabilities was largely the result of a decrease in funds held in custody for others ($3.2 million) offset by an increase in unearned revenue ($2.7 million). The increase in noncurrent liabilities is primarily due to an increase in the pension liability ($34.9 million), an increase in accrued compensated absences ($1.3 million) and a small addition in the other liabilities category ($0.4 million) offset by a reduction in long term debt payable ($31.1 million).

The increase in total assets along with the increase in total liabilities is reflected in the year-over-year increase of the university's net position of $64.0 million (4.8%). Net position in the categories of net investment in capital assets, unrestricted, and restricted net position increased $37.5 million, $11.8 million, and $14.7 million respectively. This reflects the university's continued investment in new facilities and equipment supporting the university's missions, as well as prudent management of the university's fiscal resources.

Capital Asset and Debt Administration

One of the critical factors in ensuring the quality of the university's academic, research and residential life functions is the development and renewal of its capital assets. The university continues to maintain and upgrade current structures, as well as pursue opportunities for additional facilities. Investment in new structures and the upgrade of current structures serve to enrich high-quality instructional programs, residential lifestyles and research activities.

Note 9 of the *Notes to Financial Statements* describes the university's significant investment in depreciable capital assets with gross additions of $108.8 million during fiscal year 2017. Major projects included the completion of the Classroom Building ($37.4 million) and the airport hangar replacement ($1.8 million). Ongoing investments in instructional, research, and computer equipment totaled $46.8 million. Depreciation and amortization expense related to capital assets was $101.3 million with net asset retirements of $3.5 million. The net increase in depreciable capital assets for this period was $3.9 million. The net increase in nondepreciable capital assets ($9.7 million) was primarily due to additions in construction in progress expenses during the current year for major building projects to be completed after fiscal year 2017. The major projects remaining in the construction-in-progress category include the construction of the Upper Quad residential facilities ($80.1 million); athletic facility improvements ($8.4 million); renovation of Sandy Hall, the Liberal Arts Building, and the front section of Davidson Hall ($6.8 million); improvement of door access in residence halls ($6.7 million); the Biocomplexity Institute's data center expansion in Steger Hall ($5.2 million); and on-going capital renovations throughout the university ($20.9 million). In addition, $4.3 million was withheld as retainage payable on the major projects under construction. This retainage amount will be moved to the building asset category once final payments are made to the construction contractors. Proceeds from the sale of commercial paper were used to provide temporary funding for some projects under construction. The majority of the temporary financing will be replaced with permanent debt through the issuance of long-term bonds and notes.

Noncurrent liabilities related to debt experienced a net decrease of $31.1 million during fiscal year 2017. The major cause of this decrease is a result of the reclassification of long-term debt from the noncurrent to current liabilities category ($30.6 million), offset by the refunding of long-term debt ($87.9 million). See Notes 12 and 14 of the *Notes to Financial Statements* for more details.

The educational and general (E&G) portion of the university's capital outlay program represents three projects currently under construction. These projects include the renovation of Sandy Hall, Liberal Arts Building, and the front of Davidson Hall ($31.9 million); a data center expansion at the Biocomplexity Institute of Virginia Tech ($5.9 million); and upgrades

Funding for Authorized Current and Future Capital Projects

As of June 30, 2017

(all dollars in millions)

	State Funds (1)	Other Funds (2)	University Debt Issued Before June 30, 2017	University Debt To Be Issued After June 30, 2017	Total Funding	Cash Basis Project-To-Date Expenses
Current education and general	$ 42.8	$ 10.9	$ -	$ -	$ 53.7	$ 19.3
Current auxiliary enterprise	-	101.0	65.2	12.6	178.8	114.5
Total current	42.8	111.9	65.2	12.6	232.5	133.8
Future education and general	154.5	42.7	-	51.1	248.3	3.6
Future auxiliary enterprise	-	-	-	47.1	47.1	0.8
Total future	154.5	42.7	-	98.2	295.4	4.4
Total authorized	$ 197.3	$ 154.6	$ 65.2	$ 110.8	$ 527.9	$ 138.2

(1) Includes the general fund, capital appropriations, and the general obligation bonds of the Commonwealth of Virginia

(2) Includes private gifts, auxiliary surpluses, student fees, and other customer revenues.

to fire alarm systems in several buildings on campus ($4.9 million). In addition to the capital projects underway, there were several new construction and renovation projects approved for instructional and research facilities. The new construction projects include a renovation and expansion of Holden Hall ($61.9 million), an upgrade to the university's chiller system ($40.8 million), improvements to agriculture production and research facilities near the main campus and at Kentland farm ($30.8 million), renovation of undergraduate science laboratories in Derring and Hahn Halls ($10.0 million), and a public-private partnership to construct a health sciences and technology building adjacent to the Virginia Tech Carilion School of Medicine and Research Institute in Roanoke ($89.9 million). The Commonwealth of Virginia will provide partial funding for several of these E&G projects. In addition to funding received from the commonwealth, the projects may also be funded from a combination of private gifts, student fees, other customer revenues, and debt financing.

The university's auxiliary enterprises have approval for three new capital projects. These future capital projects include the improvements to facilities housing student wellness services, a new residence hall to support a creativity and innovation district, and the continued expansion of the Oak Lane Phase IV housing community. Since auxiliaries are required to be self-supporting, no state general funds or capital appropriations are provided for these projects. These projects will be funded by a combination of private gifts, student fees, other customer revenues, and debt financing.

Virginia Tech had a total authorization of $527.9 million in capital building projects as of June 30, 2017, requiring approximately $110.8 million in additional debt financing. Capital projects in progress carried commitments to construction contractors, architects, and engineers totaling $54.2 million at June 30, 2017. These obligations are for future effort and as such have not been accrued as expenses or liabilities on the university's financial statements. The majority of the financial commitment is attributed to three projects: the renovation of Sandy Hall, Liberal Arts Building, and the front section of Davidson Hall ($22.0 million); improvement of athletic facilities ($17.3 million); and renovation of O'Shaughnessy Hall ($14.7 million). These commitments represent only a portion of the university's capital projects currently under construction or authorized by the commonwealth.

The university's bond ratings of Aa1 and AA from Moody's and Standard & Poor's, respectively, reflect strong student demand, balanced operating performance and adequate reserves to address unforeseen expenses.

Statement of Revenues, Expenses, and Changes in Net Position

Operating and non-operating activities creating changes in the university's total net position are presented in the *Statement of Revenues, Expenses, and Changes in Net Position*, found on page 17. The purpose of the statement is to present all revenues received and accrued, all expenses paid and accrued, and gains or losses from investments and capital assets.

Operating revenues are generally received through providing goods and services to the various customers and constituencies of the university. Operating expenses are expenditures made to acquire or produce the goods and services provided in return for the operating revenues, and to carry out the missions of the university. 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 directly provided. Included in this category are state appropriations and gifts which supplement the payment of operating expenses of the university and support student scholarships. Therefore, the university, like most public institutions, expects to show an operating loss.

Operating Revenues

Total operating revenues increased by $10.9 million or 1.1% from the prior fiscal year. The growth in operating revenues came predominantly from two categories: student tuition and fees, and auxiliary enterprise revenue. The increase in student tuition and fees ($12.5 million or 2.8%) was expected given an increasing student population and the rise in both in-state and out-of-state tuition and fees rates. The growth in auxiliary enterprise revenue ($7.6 million or 3.1%) follows the increasing student population and reflects the high level of satisfaction with the services provided by the auxiliaries. Overall,

Revenues, Expenses, and Changes in Net Position

For the years ended June 30, 2017 and 2016

(all dollars in millions)

	2017	2016	Change: Amount	Change: Percent
Operating revenues	$ 1,031.5	$ 1,020.6	$ 10.9	1.1 %
Operating expenses	1,364.7	1,315.4	49.3	3.7 %
Operating loss	(333.2)	(294.8)	(38.4)	13.0 %
Non-operating revenues and expenses	355.2	318.0	37.2	11.7 %
Income (loss) before other revenues, expenses, gains or losses	22.0	23.2	(1.2)	(5.2)%
Other revenues, expenses, gains or losses	42.0	98.4	(56.4)	(57.3)%
Increase in net position	64.0	121.6	(57.6)	(47.4)%
Net position - beginning of year	1,338.3	1,216.7	121.6	10.0%
Net position - end of year	$ 1,402.3	$ 1,338.3	$ 64.0	4.8%

Summary of Revenues

Increase (Decrease) in Revenue

For the years ended June 30, 2017 and 2016

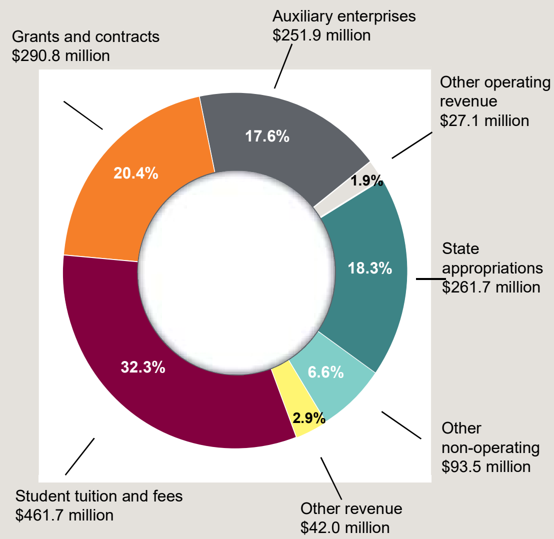
(all dollars in millions)

	2017	2016	Change Amount	Change Percent
Operating revenue				
Student tuition and fees, net	$ 461.7	$ 449.2	$ 12.5	2.8 %
Grants and contracts	290.8	301.9	(11.1)	(3.7)%
Auxiliary enterprises	251.9	244.3	7.6	3.1 %
Other operating revenue	27.1	25.2	1.9	7.5 %
Total operating revenue	1,031.5	1,020.6	10.9	1.1 %
Non-operating revenue				
State appropriations	261.7	250.7	11.0	4.4 %
Other non-operating revenue*	93.5	67.3	26.2	38.9 %
Total non-operating revenue	355.2	318.0	37.2	11.7 %
Other revenue				
Capital appropriations	-	36.9	(36.9)	(100.0)%
Capital grants and gifts	44.5	65.9	(21.4)	(32.5)%
Gain (loss) on disposal of capital assets	(2.5)	(4.4)	1.9	(43.2)%
Total other revenue	42.0	98.4	(56.4)	(57.3)%
Total revenue	$ 1,428.7	$ 1,437.0	$ (8.3)	(0.6)%

** Includes gifts, investment income, interest expense on debt related to capital assets, federal Pell grants, federal ARRA stabilization funds, and other non-operating revenue.*

Total Revenue by Source

For the year ended June 30, 2017



sponsored grants and contracts decreased by $11.1 million or 3.7%. Grants and contracts awarded by federal sponsors decreased by $14.8 million, including a $0.3 million reduction due to the ending of the American Recovery and Reinvestment Act (ARRA) funds. Additionally, federal appropriations supporting the university's land grant mission decreased by $2.0 million and state grants decreased by $0.7 million. These decreases were offset by a rise in nongovernmental grants and contracts ($6.2 million) along with a small increase in local grants ($0.2 million).

Overall, the university's operating revenues increased to $1,031.5 million in fiscal year 2017, compared to $1,020.6 million in fiscal year 2016.

Non-operating and Other Revenues and Expenses

Non-operating revenue and expenses totaled $355.2 million, an increase of $37.2 million from the previous year's total. Revenue increases in this category resulted primarily from increases in state appropriations ($11.0 million), and greater returns on investments ($17.6 million). Other non-operating revenue increased by $7.4 million primarily due to the special revenue allocation of $10.6 million from the Virginia Retirement System, offset by $4.1 million transferred to the Commonwealth of Virginia for the expedited repayment of deferred contributions to the Virginia Retirement System. Both non-operating grants and contracts and federal student financial aid saw small increases of $0.5 million and $0.4 million respectively while the interest expense on debt related to capital assets saw a decrease of $3.8 million, primarily due to debt refundings and amortization of bond premiums. Finally, gift funding transferred from the Virginia Tech Foundation was lower by $3.5 million this year.

Total other revenue, expenses, gains and losses declined by $56.4 million compared to the prior year. The prior year included capital appropriations of $36.9 million for the renovation of academic buildings, additional Kentland farm facilities, and maintenance reserve projects. The university did not receive any capital appropriations from the state in the current year. Additionally, there was a decrease of $21.4 million in capital grants and gifts, largely due a decrease in revenue from the 21st Century bond programs ($22.7 million), with a small decrease in the private gifts and capital grants and contracts. These decreases were partially offset by a decrease in the year-over-year loss on the disposal of capital assets ($1.9 million).

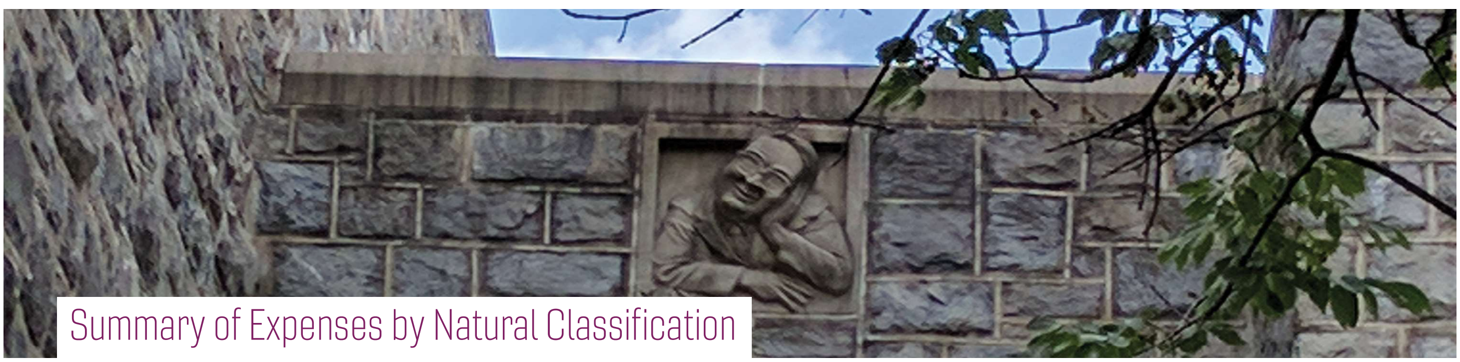
Revenues from all sources (operating, non-operating, and other) for fiscal year 2017 totaled $1,428.7 million, decreasing by $8.3 million from the prior year. Operating expenses (shown in the charts on the next page) totaled $1,364.7 million for fiscal year 2017, reflecting a year-over-year increase of $49.3 million. Total revenues less total operating expenses resulted in an increase to net position of $64.0 million.

Total Expenses

The university is committed to recruiting and retaining outstanding faculty and staff. The personnel compensation package is one way to successfully compete with peer institutions and nonacademic employers. The natural expense category, compensation and benefits, comprises $871.9 million or 63.9% of the university's total operating expenses. This category increased by $42.2 million (5.1%) over the previous year, with compensation growing by $26.5 million and benefits increasing by $15.7 million. Generally, changes to expenses in this category come from three sources: increases or reductions in the number of personnel, annual salary increases, and the general trends in the costs of fringe benefits. A second category with a significant increase over the prior year was contractual services ($14.5 million). The growth in this area was spread across various contractual services accounts. The sponsored program subcontract area declined $10.9 million for a decrease of 33.3%.

Operating expenses for fiscal year 2017 totaled $1,364.7 million, up $49.3 million from fiscal year 2016. The instruction category had the largest increase ($22.1 million). The majority of the increase was in the compensation and benefits category which reflects the university's commitment to maintaining a high quality faculty and staff. Auxiliary enterprises also saw a significant increase ($15.7 million). Salaries, wages and fringe benefits, along with an increase in contractual services, account for the majority of the expense increase in auxiliary enterprises. Research expenditures decreased by $5.5 million. This decrease is largely due to decreased funding from federal government grants and contracts.

In the functional categories for support activities, there were moderate increases in both institutional support ($7.2 million) and academic support ($5.7 million). The increase in institutional support is a result of increases in compensation and benefits and an increase in contractual services. The increase in academic support is spread across all categories with the largest growth being in compensation and benefits and supply expenses



Summary of Expenses by Natural Classification

Increase (Decrease) in Expenses by Natural Classification

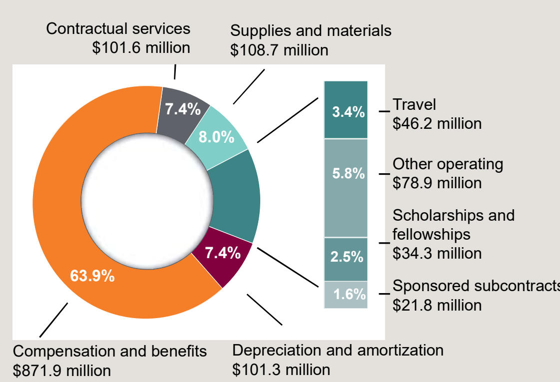
For the years ended June 30, 2017 and 2016

(all dollars in thousands)

	2017	2016	Change Amount	Change Percent
Compensation and benefits	$ 871.9	$ 829.7	$ 42.2	5.1 %
Contractual services	101.6	87.1	14.5	16.6 %
Supplies and materials	108.7	106.8	1.9	1.8 %
Travel	46.2	44.2	2.0	4.5 %
Other operating expenses	78.9	82.7	(3.8)	(4.6)%
Scholarships and fellowships	34.3	32.1	2.2	6.9 %
Sponsored program subcontracts	21.8	32.7	(10.9)	(33.3)%
Depreciation and amortization	101.3	100.1	1.2	1.2 %
Total operating expenses	$ 1,364.7	$ 1,315.4	$ 49.3	3.7 %

Total Expenses by Natural Classification

For the year ended June 30, 2017



Summary of Expenses by Function

Increase (Decrease) in Expenses by Function

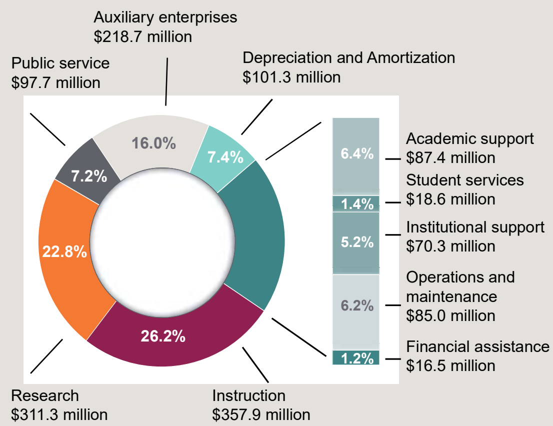
For the years ended June 30, 2017 and 2016

(all dollars in millions)	2017	2016	Change Amount	Change Percent
Instruction	$ 357.9	$ 335.8	$ 22.1	6.6 %
Research	311.3	316.8	(5.5)	(1.7)%
Public service	97.7	100.3	(2.6)	(2.6)%
Auxiliary enterprises	218.7	203.0	15.7	7.7 %
Depreciation and amortization	101.3	100.1	1.2	1.2 %
Subtotal	1,086.9	1,056.0	30.9	2.9 %
Support, maintenance, and other expenses				
Academic support	87.4	81.7	5.7	7.0 %
Student services	18.6	16.2	2.4	14.8 %
Institutional support	70.3	63.1	7.2	11.4 %
Operations and maintenance of plant	85.0	84.0	1.0	1.2 %
Student financial assistance*	16.5	14.4	2.1	14.6 %
Total support, maintenance and other	277.8	259.4	18.4	7.1 %
Total operating expenses	$ 1,364.7	$ 1,315.4	$ 49.3	3.7 %

**Includes loan administrative fees and collection costs.*

Total Expenses by Function

For the year ended June 30, 2017



In summary, the university's operating revenues grew by $10.9 million or 1.1% over the preceding year, while operating expenses increased by $49.3 million or 3.7%. This resulted in an operating loss for the current fiscal year of $333.2 million in comparison to the operating loss of $294.8 million generated during the previous year. The primary reason for the increase in the operating loss was the growth in expenses across most major operating areas with the largest increases occurring in the compensation and benefits category. State appropriations and other net non-operating revenues were used to meet operating expenses not offset by operating revenues.

Statement of Cash Flows

The *Statement of Cash Flows* presents detailed information about the cash activity of the university during the year. Cash flows from operating activities will always be different from the operating loss on the *Statement of Revenues, Expenses and Changes in Net Position* (SRECNP). This difference occurs because the SRECNP is prepared on the accrual basis of accounting and includes noncash items, such as depreciation expenses, whereas the *Statement of Cash Flows* presents cash inflows and outflows without regard to accrual items. The *Statement of Cash Flows* should help readers assess the ability of an institution to generate sufficient cash flows necessary to meet its obligations.

The statement is divided into five sections. The first section, *Cash flows from operating activities*, deals with operating cash flows and shows net cash used by operating activities of the university. The *Cash flows from noncapital financing activities* section reflects cash received and disbursed for purposes other than operating, investing and capital financing. GASB requires general appropriations from the commonwealth and noncapital gifts be shown as cash flows from noncapital financing activities. *Cash flows from capital and related financing activities* presents cash used for the acquisition and construction of capital and related items. Plant funds and related long-term debt activities (except depreciation and amortization), as well as gifts to endowments, are included in cash flows from capital financing activities. *Cash flows from investing activities* reflect the cash flows generated from investments which include purchases, proceeds, and interest. The last section reconciles the operating income or loss reflected on the *Statement of Revenues, Expenses, and Changes in Net Position* for fiscal year 2017 to net cash used by operating activities.

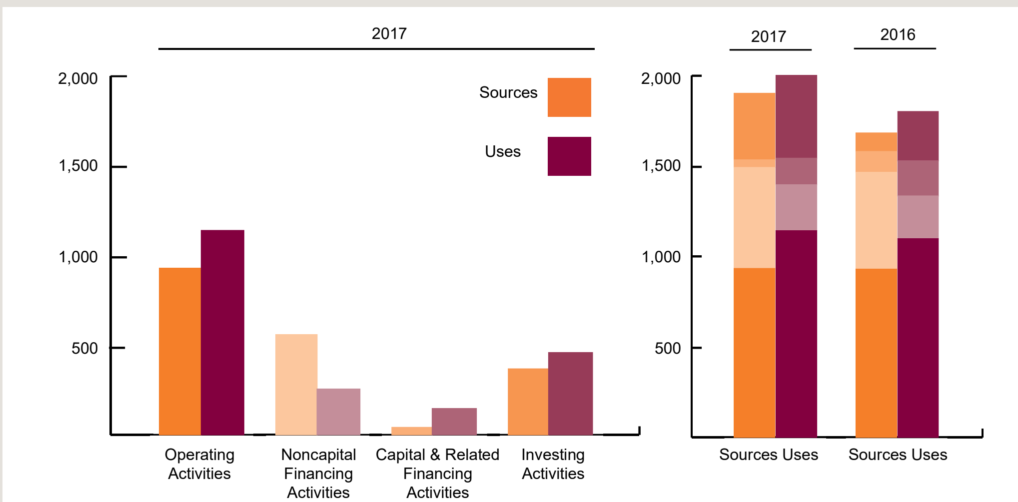
Summary of Cash Flows

Increase (Decrease) in Cash Flows

For the years ended June 30, 2017 and 2016

(all dollars in millions)

	2017	2016	Change Amount	Change Percent
Net cash used by operating activities	$ (233.8)	$ (186.2)	$ (47.6)	(25.6)%
Net cash provided by noncapital activities	335.9	330.4	5.5	1.7 %
Net cash provided (used) by capital and related financing activities	(115.6)	(89.4)	(26.2)	(29.3)%
Net cash provided (used) by investing activities	(99.2)	(185.6)	86.4	46.6 %
Net increase (decrease) in cash and cash equivalents	(112.7)	(130.8)	18.1	13.8 %
Cash and cash equivalents - beginning of year	264.1	394.9	(130.8)	(33.1)%
Cash and cash equivalents - end of year	$ 151.4	$ 264.1	$ (112.7)	(42.7)%



The graphs above demonstrate the relationship between sources and uses of cash. The graph on the left shows activity for fiscal year 2017 only, grouped by related sources and uses of cash, while the graph on the right displays that same activity for fiscal years 2017 and 2016 in a stacked format.

Major operating activity sources of cash for the university included student tuition and fees ($462.0 million), grants and contracts ($279.7 million), and auxiliary enterprise revenues ($238.6 million). Major operating activity uses of cash included compensation and benefits ($856.7 million) and operating expenses ($380.3 million). Operating activity uses of cash significantly exceeded operating activity sources of cash due to classification of state appropriations ($261.7 million) and gifts ($61.4 million) as noncapital financial activities.

Significant cash outflows in the capital financing area were for the acquisition and construction of capital assets ($110.5 million) and for principal ($30.9 million) and interest ($19.6 million) on capital-related debt. This reflects the university's continued investment in buildings, equipment, and infrastructure of the campus.

Economic Outlook

As a public institution, the university is subject to many of the macro-economic conditions that impact the nation and the Commonwealth of Virginia. Slow state revenue growth and growing nondiscretionary costs have limited the commonwealth's ability to make significant, sustaining investments in higher education. For example, advancements in state funding for higher education made in the 2016-18 biennium were later offset by statewide budget reductions to address state revenue shortfalls. This recurring pattern of economic uncertainty continues to produce fluctuations in state investment for operations. The commonwealth currently supports 17 percent of the university's budget through general fund appropriations. The state's uneven revenue growth has tempered the university's expected reliance upon general fund investment and prompted continuous evaluation of cost containment measures and strategies for revenue enhancement including increased philanthropy and enrollment growth to meet the needs of the university. The Virginia Tech Board of Visitors maintains its authority to establish tuition and fee rates, and significant national, state, and institutional emphasis continues to focus on slowing the rate of tuition growth for undergraduate students, particularly those from Virginia.

Demand for a Virginia Tech education continues to grow, providing a stable and growing source of revenue to support instructional activities. Tuition and fees now provide 34 percent of the total university budget. Once again, the university experienced the largest number of applications and enrolled the largest incoming class of first-year students in its history in the Fall 2017 semester, signaling continued demand from both resident and nonresident students across all colleges of the university. As the largest producer of STEM-H graduates in the commonwealth, Virginia Tech is well-positioned to leverage its excellence to further advance instruction and research in this growing domain, supporting the development of the commonwealth's workforce and economy.

An additional major input to the university budget is federal support. University leadership monitors the potential impact of the federal budget process on both the state and national economies as well as university program funding, including externally sponsored research, land-grant activities, and student financial aid.

While significant focus is placed on sustainable revenue sources, the university also continues to employ cost containment and innovative resource enhancement strategies to successfully advance the institution and its strategic priorities. As compared to peer institutions, internal benchmarking demonstrates that Virginia Tech operates an administratively lean organization, directing a larger share of overall resources towards instructional activities than peers, on average. The university will continue to employ strategic planning processes to advance its core missions of instruction, research, and public service and manage university resources to achieve critical priorities.

Virginia Tech, along with all other Virginia institutions of higher education, continues to benefit from significant decentralized authority from the Commonwealth of Virginia through the requested restructuring of higher education. Restructuring provides additional flexibility and authority to the participating institutions with the potential for increased efficiencies and cost savings. The university works to leverage existing authorities to drive efficiencies for cost savings. To build on the demonstrated success of restructuring, the university is working with state officials to explore opportunities to further expand and enhance the institution's authorities.

To manage its exposure to risk, the university's investment policy, established by the Board of Visitors and monitored by the board's Finance and Resource Management Committee, requires that its public funds be invested in accordance with the *Investment of Public Funds Act* (Section 2.2-4500 through 2.2-4516, et seq., *Code of Virginia*). The university has limited its investment in securities outside the scope of the *Investment in Public Funds Act* to restricted gift funds, local funds, and nongeneral fund reserves and balances designated by management as quasi-endowments. These funds are invested in the Virginia Tech Foundation's consolidated endowment fund and managed in accordance with the provisions of the *Uniform Prudent Management of Institutional Funds Act* (Section 64.2-1100, et seq., *Code of Virginia*). At the end of the fiscal year, the value of the university's quasi-endowments invested in the foundation totaled $193.2 million, an increase of $61.3 million over the preceding year.

The university continually monitors the valuation of its investments. At June 30, 2017, the market value for the university's non-endowed cash, cash equivalents, and investments totaled $426.5 million, including unrealized gains on investments of $0.4 million, compared to the market value of its investments at September 30, 2017 of $520.3 million and unrealized losses of $0.5 million. Growth of investments during this time period is due to the normal cyclical collections of tuition and fees.

Executive management believes that the university will maintain its solid financial foundation and is positioned to continue to advance excellence in teaching, research, and public service. Management's policies of cost containment and investing in strategic initiatives will ensure the university is well-prepared to manage the changing environment of higher education while continuing to advance the university's strategic plan. The financial position of the university is strong as evidenced by its diversified portfolio of research funding, National Science Foundation research ranking, strong student demand from increasingly talented students, auxiliary enterprises with high customer satisfaction, growing contributions to endowments, increased assets, and quality debt ratings from Moody's (Aa1) and Standard and Poor's (AA). These debt ratings allow the university to obtain funding for capital projects with advantageous terms.

The university's overall financial position remains strong. Management continues to maintain a close watch over university resources to ensure its ability to strategically respond to unknown internal and external issues and sustain its current high quality educational programs and favorable financial position.

With its thriving and engaged community of students, faculty, and staff, Virginia Tech's future remains bright as the commonwealth's largest public university.

Statement of Net Position

As of June 30, 2017, with comparative financial information as of June 30, 2016
(all dollars in thousands)

	2017		2016	
	Virginia Tech	Component Units	Virginia Tech	Component Units
Assets				
Current assets				
Cash and cash equivalents *(Notes 1, 4)*	$ 101,468	$ 20,668	$ 224,757	$ 2,650
Short-term investments *(Notes 1, 4, 25)*	-	9,820	-	11,056
Accounts and contributions receivable, net *(Notes 1, 5, 25)*	74,527	46,812	56,598	40,949
Notes receivable, net *(Notes 1, 7)*	1,187	645	1,215	1,659
Due from Commonwealth of Virginia *(Note 10)*	16,672	-	14,080	-
Inventories	10,149	5,697	10,681	5,848
Prepaid expenses *(Note 1)*	16,577	1,342	17,407	1,170
Other assets	-	3,838	-	4,021
Total current assets	220,580	88,822	324,738	67,353
Noncurrent assets				
Cash and cash equivalents *(Notes 1, 4)*	49,971	43,604	39,380	33,369
Due from Commonwealth of Virginia *(Note 10)*	30,333	-	39,645	-
Accounts and contributions receivable, net *(Notes 1, 5, 25)*	2,940	80,715	3,875	59,743
Notes receivable, net *(Notes 1, 7)*	19,078	22,685	19,813	21,782
Net investments in direct financing leases	-	67,956	-	69,792
Irrevocable trusts held by others, net	-	7,770	-	10,497
Long-term investments *(Notes 4, 25)*	524,962	1,130,429	408,691	959,668
Depreciable capital assets, net *(Notes 9, 25)*	1,471,443	204,198	1,467,502	211,382
Nondepreciable capital assets *(Notes 9, 25)*	209,070	83,939	199,354	80,945
Intangible assets, net	-	582	-	558
Other assets	93	3,805	290	6,892
Total noncurrent assets	2,307,890	1,645,683	2,178,550	1,454,628
Total assets	2,528,470	1,734,505	2,503,288	1,521,981
Deferred outflows of resources				
Deferred loss on long-term debt defeasance *(Notes 1, 14)*	9,747	-	7,137	-
Deferred outflow for VRS pension *(Notes 1, 18)*	74,837	-	50,941	-
Total deferred outflows	84,584	-	58,078	-
Liabilities				
Current liabilities				
Accounts payable and accrued liabilities *(Note 6)*	140,306	13,087	140,462	13,512
Accrued compensated absences *(Notes 1, 15)*	25,236	750	26,021	660
Unearned revenue *(Notes 1, 8)*	43,236	4,700	40,545	2,387
Funds held in custody for others *(Note 1)*	15,755	-	18,965	-
Commercial paper *(Note 11)*	6,520	-	5,425	-
Long-term debt payable *(Notes 12, 13, 25)*	30,605	28,820	30,832	12,813
Other liabilities	-	2,701	-	4,505
Total current liabilities	261,658	50,058	262,250	33,877
Noncurrent liabilities				
Pension liability *(Note 15)*	438,576	-	403,696	-
Accrued compensated absences *(Notes 1, 15)*	18,337	184	17,056	221
Federal student loan program contributions refundable *(Note 15)*	13,694	-	13,691	-
Unearned revenue	-	1,327	-	1,716
Long-term debt payable *(Notes 12, 13, 25)*	463,605	230,455	494,721	247,548
Liabilities under trust agreements	-	30,240	-	25,521
Agency deposits held in trust *(Note 25)*	-	204,154	-	142,709
Other liabilities	1,871	10,339	1,459	10,346
Total noncurrent liabilities	936,083	476,699	930,623	428,061
Total liabilities	1,197,741	526,757	1,192,873	461,938
Deferred inflows of resources				
Deferred gain on long-term debt defeasance *(Notes 1, 14)*	1,038	-	1,008	-
Deferred inflow for VRS pension *(Notes 1, 18)*	11,943	-	29,165	-
Total deferred inflows	12,981	-	30,173	-
Net position				
Investment in capital assets	1,201,333	123,661	1,163,773	124,679
Restricted, nonexpendable	355	522,131	357	479,190
Restricted, expendable				
Scholarships, research, instruction, and other	115,472	472,743	106,495	381,811
Capital projects	39,676	-	36,442	-
Debt service and auxiliary operations	69,008	-	66,557	-
Unrestricted	(23,512)	89,213	(35,304)	74,363
Total net position	$ 1,402,332	$ 1,207,748	$ 1,338,320	$ 1,060,043

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

Statement of Revenues, Expenses, and Changes in Net Position

For the year ended June 30, 2017 with comparative financial information for the year ended June 30, 2016
(all dollars in thousands)

	2017 Virginia Tech	2017 Component Units	2016 Virginia Tech	2016 Component Units
Operating revenues				
Student tuition and fees, net (Note 1)	$ 461,750	$ -	$ 449,176	$ -
Gifts and contributions	-	86,947	-	50,288
Federal appropriations	14,789	-	16,793	-
Federal grants and contracts	198,505	-	212,966	-
Federal ARRA grants and contracts	-	-	333	-
State grants and contracts	12,007	-	12,757	-
Local grants and contracts (Note 3)	14,234	-	14,045	-
Nongovernmental grants and contracts	51,238	-	45,006	-
Sales and services of educational activities	17,979	-	18,069	-
Auxiliary enterprise revenue, net (Note 1)	251,854	45,782	244,312	46,849
Other operating revenues	9,154	54,502	7,156	52,843
Total operating revenues	1,031,510	187,231	1,020,613	149,980
Operating expenses				
Instruction	357,871	5,254	335,793	5,023
Research	311,297	10,572	316,826	11,536
Public service	97,761	4,701	100,302	4,717
Academic support	87,416	24,519	81,731	28,735
Student services	18,627	-	16,203	-
Institutional support	70,276	35,545	63,085	47,439
Operation and maintenance of plant	84,917	13,238	83,931	13,512
Student financial assistance	16,488	24,165	14,287	26,715
Auxiliary enterprises	218,712	37,587	203,014	38,870
Depreciation and amortization (Note 9)	101,310	10,445	100,093	10,032
Other operating expenses	55	12,342	112	12,600
Total operating expenses	1,364,730	178,368	1,315,377	199,179
Operating revenue (loss)	(333,220)	8,863	(294,764)	(49,199)
Non-operating revenues (expenses)				
State appropriations (Note 22)	261,717	-	250,649	-
Gifts	61,640	-	65,156	-
Non-operating grants and contracts	2,509	-	2,009	-
Federal student financial aid (Pell)	17,620	-	17,214	-
Investment income, net	18,491	14,018	858	10,657
Net gain (loss) on investments	-	81,165	-	(7,072)
Other non-operating revenue	8,129	-	747	-
Interest expense on debt related to capital assets	(14,851)	(8,422)	(18,664)	(10,106)
Net non-operating revenues (expenses)	355,255	86,761	317,969	(6,521)
Income before other revenues, expenses, gains, or losses	22,035	95,624	23,205	(55,720)
Change in valuation of split interest agreements	-	27	-	(2,767)
Capital appropriations	-	-	36,966	-
Capital grants and gifts (Note 10)	44,507	14,149	65,910	16,480
Gain (loss) on disposal of capital assets	(2,530)	(79)	(4,440)	(1)
Additions to permanent endowments	-	43,994	-	26,482
Loss on extinguishment of debt	-	(5,266)	-	-
Other revenues (expenses)	-	(744)	-	(706)
Total other revenues, expenses, gains, and losses	41,977	52,081	98,436	39,488
Increase in net position	64,012	147,705	121,641	(16,232)
Net position—beginning of year	1,338,320	1,060,043	1,216,679	1,076,275
Net position—end of year	$ 1,402,332	$ 1,207,748	$ 1,338,320	$ 1,060,043

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

STATEMENT OF CASH FLOWS

As of June 30, 2017, with comparative financial information as of June 30, 2016
(all dollars in thousands)

	2017	2016
Cash flows from operating activities		
Tuition and fees	$ 461,976	$ 450,065
Federal Appropriations	9,368	13,999
Grants and contracts	279,682	289,818
Sales and services of education departments	17,979	18,069
Auxiliary enterprise charges	238,635	240,734
Other operating receipts	9,154	7,156
Payments for compensation and fringe benefits	(856,725)	(829,465)
Payments for operating expenses	(380,257)	(361,630)
Payments for scholarships and fellowships	(16,207)	(14,068)
Loans issued to students	(3,335)	(4,182)
Collection of loans to students	5,885	3,266
Net cash used by operating activities	(233,845)	(186,238)
Cash flows from noncapital financing activities		
State appropriations	261,706	250,510
Payment to Commonwealth of Virginia for VRS	(4,110)	-
Non-operating grants and contracts	2,509	2,009
Federal direct lending program receipts	132,701	130,464
Federal direct lending program disbursements	(132,733)	(130,438)
Funds held in custody for others - receipts	139,554	125,336
Funds held in custody for others - disbursements	(142,732)	(129,603)
Federal student financial aid (Pell)	17,620	17,214
Gifts for other than capital purposes	61,381	64,927
Net cash provided by noncapital financing activities	335,896	330,419
Cash flows from capital financing activities		
Capital appropriations	4,238	3,111
Gifts for capital assets	38,835	50,865
Proceeds from the issuance of capital debt	-	70,242
Proceeds from the sale of capital assets	1,361	1,502
Acquisition and construction of capital assets	(110,519)	(136,343)
Commercial paper	1,095	(24,365)
Principal paid on capital-related debt	(30,920)	(33,015)
Interest paid on capital-related debt	(19,635)	(21,366)
Net cash used by capital financing activities	(115,545)	(89,369)
Cash flows from investing activities		
Proceeds from sales and maturities of investments	401,714	112,298
Interest on investments	4,127	861
Purchases of investments	(505,045)	(298,758)
Net cash used by investing activities	(99,204)	(185,599)
Net decrease in cash and cash equivalents	(112,698)	(130,787)
Cash and cash equivalents - beginning of year	264,137	394,924
Cash and cash equivalents - end of year	$ 151,439	$ 264,137

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

	2017	2016
Reconciliation of operating loss to net cash used by operating activities		
Operating loss	$ (333,220)	$ (294,764)
Adjustments to reconcile net gain (loss) to net cash used by operating activities		
Depreciation expense	101,310	100,093
Changes in assets, deferred outflows, liabilities and deferred inflows		
Receivables, net	(17,407)	(2,290)
Inventories	532	1,260
Prepaid and other asset items	1,027	1,384
Notes receivable, net	763	1,014
Deferred outflows for VRS pension	(23,896)	(16,557)
Accounts payable and other liabilities	(4,677)	5,167
Accrued payroll	10,084	5,012
Compensated absences	496	79
Unearned revenue	2,691	1,688
Pension liability	45,671	46,074
Federal loan contributions refundable	3	12
Deferred inflows for VRS pension	(17,222)	(34.410)
Total adjustments	99,375	108,526
Net cash used by operating activities	$ (233,845)	$ (186,238)
Noncash investing, capital, and financing activities		
Change in accounts receivable related to non-operating income	$ (414)	$ 27
Capital assets acquired through in-kind donations as a component of capital gifts and grants income	$ 9,173	$ 11,243
Change in fair value of investments recognized as a component of investment income	$ 9,191	$ (2,582)
Change in value of interest payable affecting interest paid	$ (105)	$ 1,098
Capital assets acquired through the assumption of a liability	$ 186	$ -
Change in interest receivable affecting interest income	$ 336	$ 178
Loss on disposal of capital assets	$ (2,530)	$ (4,926)
Capitalization of interest revenue and expense (net)	$ (974)	$ (1,150)
Amortization of bond premium/discount and gain/loss on debt refunding	$ (3,447)	$ (2,624)
Change in pension liability recognized as a component of non-operating revenue	$ (10,791)	$ -

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

Notes To Financial Statements

1. Summary of Significant Accounting Policies

Reporting Entity

Virginia Polytechnic Institute and State University is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The discovery and dissemination of new knowledge are central to its mission. Through its focus on teaching and learning, research, and discovery, outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

The university includes all funds and entities over which the university exercises or has the ability to exercise oversight authority for financial reporting purposes.

Under Governmental Accounting Standards Board (GASB) Statement 39, Virginia Tech Foundation Inc. (VTF) and Virginia Tech Services Inc. (VTS) are included as component units 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 basic financial statements of the commonwealth.

Virginia Tech Foundation Inc.

The foundation is a legally separate, tax-exempt organization established in 1948 to receive, manage, and disburse private gifts in support of Virginia Tech programs. The foundation is governed by a 35-member board of directors. The bylaws of the foundation provide that the rector of the board of visitors, the president of the alumni association, the president of the athletic fund, and the president of the university shall serve as ex-officio members of the VTF board. The remainder of the board is composed of alumni and friends of the university who actively provide private support for university programs. Directors are elected by a vote of the membership of the foundation. Membership is obtained by making gifts at or above a specified level to the foundation.

The foundation serves the university by generating significant funding from private sources and aggressively managing its assets to provide funding which supplements state appropriations. It provides additional operating support to colleges and departments, assists in the funding of major building projects, and provides seed capital for new university initiatives. Although the university does not control the timing or amount of receipts from the foundation, the majority of resources, or income which the foundation holds and invests, is restricted to the activities of the university by the donors. Because these restricted resources held by the foundation can only be used by or for the benefit of the university, the foundation is considered a component unit of the university and is discretely presented in the financial statements. The administrative offices of Virginia Tech Foundation Inc. are located at University Gateway Center, 902 Prices Fork Road, Blacksburg, Virginia 24061.

During this fiscal year, the foundation distributed $76,289,000 to the university, for both restricted and unrestricted purposes.

Virginia Tech Services Inc.

Virginia Tech Services Inc. was formed as a separate nonprofit corporation to own and operate bookstores and provide other services for the use and benefit of the students, faculty, staff, and alumni of Virginia Tech. VTS transfers any surplus funds to the university or the foundation for allocation and use by the university as the president of the university and board of visitors deem appropriate. Although the university does not control the timing or amount of receipts from VTS, the majority of its resources or income is for the benefit of the university. Because these resources are for the benefit of the university, VTS is considered a component unit of the university and is discretely presented in the financial statements. The administrative offices of Virginia Tech Services Inc. are located at University Bookstore, Blacksburg, Virginia 24061.

During this fiscal year, VTS paid $896,000 to the university, primarily for the rental of facilities and sale of items benefiting the Student Government Association.

Financial Statement Presentation

GASB Statement 35, *Basic Financial Statements—and Management's Discussion and Analysis—for Public Colleges and Universities*, issued November 1999, establishes accounting and financial reporting standards for public colleges and universities within the financial reporting guidelines of GASB Statement 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments.* The standards are designed to provide financial information that responds to the needs of three groups of primary users of general-purpose external financial reports: the citizenry, legislative and oversight bodies, and investors and creditors. The university is required under this guidance to include *Management's Discussion and Analysis*, and basic financial statements, including notes, in its financial statement presentation.

In fiscal year 2017 the following GASB statements of standards were effective: Statement 73, *Accounting and Financial Reporting for Pension and Related Assets That Are Not Within the Scope of GASB Statement 68 and Amendments to Certain Provisions of GASB Statements 67 and 68*; Statement 74, *Financial Reporting for Postemployment and Benefits Plans Other Than Pension Plans*; Statement 77, *Tax Abatement Disclosures;* Statement 78, *Pensions Provided Through Certain Multiple-Employer Defined Benefit Pension Plans;* and Statement 80, *Blending Requirements for Certain Component Units – an amendment of GASB Statement 14*. Portions of both GASB Statement 73 and GASB Statement 79 were effective in the prior fiscal year. None of these GASB statements had a significant effect upon the university's financial statements for the current year.

Basis of Accounting

For financial reporting purposes, the university is considered a special-purpose government engaged only in business-type activities. Accordingly, the university's financial statements are being presented using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis, revenues are recognized when earned, and expenses are recorded when an obligation has been incurred. All significant intra-agency transactions have been eliminated.

Cash Equivalents

For purposes of the statements of net position and cash flows, the university considers all highly liquid investments with an original maturity of 90 days or less to be cash equivalents.

Short-term Investments

Short-term investments include securities that have an original maturity over 90 days but less than or equal to one year at the time of purchase.

Investments

GASB Statement 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*, as modified by GASB Statement 59, and GASB Statement 72, *Fair Value Measurement and Application,* require that purchased investments, interest-bearing temporary investments classified with cash, and investments received as gifts be recorded at fair value (see Note 4). Changes in unrealized gain or loss on the carrying value of the investments are reported as a part of investment income in the *Statement of Revenues, Expenses, and Changes in Net Position*.

Accounts Receivable

Accounts receivable consists of tuition and fee charges to students, and auxiliary enterprise services provided to students, faculty and staff. Accounts receivable also include amounts due from federal, state and local governments and nongovernmental sources, in connection with reimbursement of allowable expenses made pursuant to the university's grants and contracts. Accounts receivable are recorded net of allowance for doubtful accounts. See Note 5 for a detailed list of accounts receivable amounts by major categories.

Notes Receivable

Notes receivable consist of amounts due from the Federal Perkins Loan Program, the Health Professional Student Loan Program, other student loans, and loans to affiliated organizations. See Note 7 for a list of notes receivable amounts by major categories.

Inventories

Inventories are stated at the lower of cost or market (primarily first-in, first-out method) and consist mainly of expendable supplies for operations of auxiliary enterprises and fuel for the physical plant.

Prepaid Expenses

Prepaid expenses are expenses for future fiscal years that were paid in advance of June 30, 2017. Payments of expenses that extend beyond fiscal year 2018 are classified as noncurrent assets. Prepaid expenses consist primarily of library serial subscriptions, information technology contracts, property leases, and insurance.

Noncurrent Cash and Investments

Noncurrent cash and investments are reported as restricted because restrictions change the nature or normal understanding of the availability of the asset. This includes resources restricted for the acquisition or construction of capital assets, resources legally segregated for the payment of principal and interest as required by debt covenants, unspent debt proceeds and other restricted investments, to make debt service payments or purchase other noncurrent assets.

Capital Assets

Capital assets consisting of land, buildings, infrastructure and equipment are stated at appraised historical cost or actual cost where determinable. Construction in progress, equipment in process and software in development are capitalized at actual cost as expenses are incurred. Library materials are valued using published average prices for library acquisitions, and livestock is stated at estimated market value. All gifts of capital assets are recorded at acquisition value as of the date of donation.

Equipment is capitalized when the unit acquisition cost is $2,000 or greater and the estimated useful life is one year or more. Software is capitalized when the acquisition and/or the development costs exceed $100,000. Renovation costs are capitalized when expenses total more than $100,000, the asset value significantly increases, or the useful life is significantly extended. Routine repairs and maintenance are charged to operating expense in the year the expense is incurred.

Depreciation is computed using the straight-line method over the useful life of the assets. The useful life is 40 to 60 years for buildings, 10 to 50 years for infrastructure and land improvements, 10 years for library books, and 3 to 30 years for fixed and movable equipment. Livestock is not depreciated, as it tends to appreciate over the university's normal holding period.

Special collections are not capitalized due to the collections being: (1) held for public exhibition, education, or research in the furtherance of public service rather than financial gain; (2) protected, kept unencumbered, cared for, and preserved; and (3) subject to university policy requiring proceeds from the sales of collection items to be used to acquire other items for collections.

Interest Capitalization

Interest expense incurred during the construction of capital assets is capitalized, if material, net of interest income earned on resources set aside for this purpose. The university incurred and capitalized net interest expense related to the construction of capital assets totaling $974,000 for this fiscal year.

Pensions

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

Accrued Compensated Absences

Certain salaried employees' attendance and leave regulations make provisions for the granting of a specified number of days of leave with pay each year. The amount reflects all unused vacation leave, sabbatical leave and the amount payable upon termination under the Commonwealth of Virginia's sick leave pay out policy. The applicable share of employer related taxes payable on the eventual termination payments is also included. The university's liability and expense for the amount of leave earned by employees but not taken, as of June 30, 2017, is recorded in the *Statement of Net Position*, and is included in the various functional categories of operating expenses in the *Statement of Revenues, Expenses, and Changes in Net Position*.

Unearned Revenues

Unearned revenue represents revenue collected but not earned as of June 30, 2017, primarily composed of revenue for grants and contracts, prepaid athletic ticket sales, and prepaid student tuition and fees. Summer Session I tuition and fees received during the fiscal year are considered earned at the end of the refund period, approximately June 15th of each year. Tuition and fees received prior to year end for Summer Session II are unearned and recognized as revenue in the next fiscal year. See Note 8 for a detailed list of unearned revenue amounts.

Funds Held in Custody for Others

Funds held in custody for others represents funds held by the university on behalf of others as a result of agency relationships with various groups and organizations.

Noncurrent Liabilities

Noncurrent liabilities include: (1) the principal amounts of revenue bonds payable, notes payable and capital lease obligations with maturities greater than one year and (2) estimated amounts for accrued compensated absences and other liabilities that will not be paid within the next fiscal year.

Deferred Outflows of Resources

Deferred outflows of resources are defined as the consumption of net assets applicable to a future reporting period. The deferred outflows of resources have a positive effect on net position similar to assets.

Deferred Inflows of Resources

Deferred inflows of resources are defined as the acquisition of net assets applicable to a future reporting period. The deferred inflows of resources have a negative effect on net position similar to liabilities.

Net Position

The university's net position is classified as follows:

Net investment in capital assets — Net investment in capital assets represents the university's total investment in capital assets, net of accumulated depreciation and outstanding debt obligations related to those capital assets. To the extent debt has been incurred but not yet expended for capital assets, such amounts are not included as a component of net investment in capital assets.

Restricted component of net position, expendable — The expendable category of the restricted component of net position includes resources for which the university is legally or contractually obligated to spend in accordance with restrictions imposed by external third parties.

Restricted component of net position, nonexpendable — The nonexpendable category of the restricted component of net position is comprised of endowment and similar type funds where donors or other external sources have stipulated, as a condition of the gift instrument, that 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 added to principal.

Unrestricted component of net position — Unrestricted net position represents resources derived from student tuition and fees, state appropriations, recoveries of facilities and administrative (indirect) costs, and sales and services of educational departments and auxiliary enterprises. These resources are used for transactions relating to educational departments and general operations of the university, and may be used at the discretion of the university's board of visitors to meet current expenses for any lawful purpose.

When an expense is incurred that can be paid using either restricted or unrestricted resources, the university's policy is to apply the expense towards restricted resources before unrestricted resources.

Income Taxes

The university, as a political subdivision of the Commonwealth of Virginia, is excluded from federal income taxes under Section 115 (1) of the *Internal Revenue Code*, as amended.

Classifications of Revenues and Expenses

The university has classified its revenues as either operating or non-operating revenues according to the following criteria:

Operating revenues — Operating revenues include activities that have the characteristics of exchange transactions, such as (1) student tuition and fees, net of scholarship allowance; (2) sales and services of auxiliary enterprises, net of scholarship allowance; (3) most federal, state, local, and nongovernmental grants and contracts and federal appropriations; and (4) interest on institutional student loans.

Non-operating revenues — Non-operating revenues are revenues received for which goods and services are not provided. State appropriations, gifts, and other revenue sources that are defined as non-operating revenues by GASB Statement 9, *Reporting Cash Flows of Proprietary and Nonexpendable Trust Funds and Governmental Entities That Use Proprietary Fund Accounting*, and GASB Statement 34, *Basic Financial Statements-and Management's Discussion and Analysis—for State and Local Governments* are included in this category.

Operating and non-operating expenses **–** Non-operating expenses include interest on debt related to the purchase of capital assets and losses on disposal of capital assets. All other expenses are classified as operating expenses.

Scholarship Allowance

Student tuition and fees, certain auxiliary revenues and student financial assistance expenses are reported net of scholarship allowance in the *Statement of Revenues, Expenses, and Changes in Net Position*. Scholarship allowance is the difference between the stated charge for goods and services provided by the university and the amount paid by students and/or third parties making payments on the students' behalf. For the fiscal year ended June 30, 2017, the scholarship allowance for student tuition and fee revenue and auxiliary enterprise revenue totaled $107,524,000 and $23,979,000, respectively. Scholarship allowance to students is reported using the alternative method as prescribed by the National Association of College and University Business Officers (NACUBO). The alternative method is an algorithm that computes scholarship allowance on a university-wide basis rather than on an individual student basis.

Comparative Data

The university presents its financial information on a comparative basis. The basic financial statements include certain prior year summarized comparative information in total, but not at the level of detail required for a presentation in conformity with generally accepted accounting principles. Accordingly, the prior year information should be read in conjunction with the university's financial statements for the year ended June 30, 2016, from which the summarized information was derived.

2. Related parties

In addition to the component units discussed in Note 1, Virginia Tech also has related parties that were not considered significant. These financial statements do not include the assets, liabilities, and net position of the related parties that support university programs. The related parties of the university are: Virginia Tech Alumni Association, Virginia Tech Athletic Fund Inc., Virginia Tech Intellectual Properties Inc., Virginia Tech Corps of Cadets Alumni Inc., Virginia Tech Applied Research Corporations (VTARC), Virginia Tech Innovation Corporation, Virginia Tech India Research and Education Forum (VTIREF) and any of the subsidiaries of these corporations.

The organizations are related to the university by affiliation agreements. These agreements require an annual audit to be performed by independent auditors. Affiliated organizations that hold no financial assets and certify all financial activities or transactions through the Virginia Tech Foundation Inc. may be exempt from the independent audit requirement. Exemption requirements are met by Virginia Tech Alumni Association, Virginia Tech Athletic Fund Inc., and Virginia Tech Corp of Cadets Alumni Inc. They are therefore not required to have an annual audit. Virginia Tech Intellectual Properties Inc., Virginia Tech Applied Research Corporation, Virginia Tech Innovation Corporation, and Virginia Tech India Research and Education Forum (VTIREF) are required to have an annual audit. Auditors have examined the financial records of these organizations and a copy of their audit reports have or will be provided to the university.

3. Local government support

The university, through the operation of its Cooperative Extension Service, maintains offices in numerous cities and counties throughout the Commonwealth of Virginia. Personnel assigned to these locations receive a portion of their compensation from local governments. Also included in the expenses of these extension offices are unit support services, which include such items as rent, telephone, supplies, equipment, and extension program expenses. The estimated amount contributed by the various local governments totaled $12,322,000 in 2017, and has been included in revenues and expenses of the accompanying financial statements. The university received other local government support of $1,912,000 in 2017.

4. Cash, cash equivalents, and investments

The following information is provided with respect to the university's cash, cash equivalents, and investments as of June 30, 2017. The following risk disclosures are required by GASB Statement 40, *Deposit and Investment Risk Disclosures*:

Custodial credit risk (Category 3 deposits and investments) - The custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. The university had no category 3 deposits or investments for 2017.

Credit risk – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. GASB Statement 40 requires the disclosure of the credit quality rating on any investments 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 is referred to as concentration of credit risk. GASB Statement 40 requires disclosure of any issuer with more than 5% of total investments. The university's investment policy requires its investment pools and sub-portfolios be diversified so that no more than 3% of the value of the respective portfolios is invested in securities of any single issuer. The university does not have investments subject to risks due to the concentration of credit.

Interest rate risk – This is the risk that interest rate changes will adversely affect the fair value of an investment. GASB Statement 40 requires disclosure of maturities for any investments subject to interest rate risk. The university uses a duration methodology to measure the maturities of its investment portfolios. The university's *Statement of Policy Governing the Investment of University Funds* established two major allocations, Primary Liquidity and Extended Duration, managed by external investment firms. Asset allocations to Primary Liquidity are targeted at 50% of total investments with approximate maturities less than 60 days. The Extended Duration allocation may be structured into three sub-portfolios; a Short Duration Portfolio, an Intermediate Duration Portfolio and a Long Duration Portfolio.

Foreign currency risk – This risk refers to the possibility that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The university had no foreign investments or deposits for 2017.

Cash and Cash Equivalents

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 and cash equivalents represent cash with the treasurer, cash on hand, certificates of deposit and temporary investments with original maturities of 90 days or less, and cash equivalents with the Virginia State Non-Arbitrage Program® (SNAP®). This program offers a professionally-managed money market mutual fund, which provides a temporary pooled investment vehicle for proceeds pending expenditure, and with record keeping, depository and arbitrage rebate calculations. SNAP® complies with all standards of GASB Statement 79. SNAP® investments are reported using the net asset value (NAV) per share, which is calculated on an amortized cost basis that provides an NAV that approximates fair value. Cash and cash equivalents reporting requirements are defined by GASB Statement 9, *Reporting Cash Flows of Proprietary and Nonexpendable Trust Funds and Governmental Entities that Use Proprietary Fund Accounting*.

Investments

A categorization of university investments follows. Short-term investments have an original maturity of over 90 days but less than or equal to one year. Long-term investments have an original maturity greater than one year.

Summary of investments
As of June 30, 2017
(all dollars in thousands)

	Current Assets	Noncurrent Assets	Total
Cash and cash equivalents	$ 101,468	$ 49,971	$ 151,439
Long-term investments	-	524,962	524,962
Cash and investments	$ 101,468	$ 574,933	676,401
Less cash			34,129
Total investments			$ 642,272

The investment policy of the university is established by the board of visitors and monitored by the board's Finance and Audit Committee. Authorized investments are set forth in the *Investment of Public Funds Act*, Section 2.2-4500 through 2.2-4516, et seq., *Code of Virginia*. Authorized investments include: U.S. Treasury and agency securities, corporate debt securities, asset-backed securities, mortgage-backed securities, AAA rated obligations of foreign governments, bankers acceptances and bank notes, negotiable certificates of deposit, repurchase agreements and money market funds.

All gifts, local funds, and nongeneral fund reserves and balances the university determines appropriate and permitted by law may be invested in the VTF Consolidated Endowment Program. These funds are governed by the foundation's investment and spending policies, and managed in accordance with the provisions of the *Virginia Uniform Prudent Management of Institutional Funds Act*. See Note 25 for additional information on investments held with the Virginia Tech Foundation.

Investments Measured at Fair Value including categorization of credit quality and interest rate risk
Held on June 30, 2017
(all dollars in thousands)

	Credit Rating	Less than 1 Year	1-5 Years	6-10 Years	6/30/2017	Assets (Level 1)	Inputs (Level 2)
Investments by fair value level							
U.S. Treasury and Agency securities (1)	N/A	$ 11,939	$ 23,286	$ -	$ 35,225	$ 23,194	$ 12,031
Debt securities							
Corporate bonds & notes	A1	10,568	14,619	-	25,187	-	25,187
Corporate bonds & notes	A2	6,637	5,966	-	12,603	-	12,603
Corporate bonds & notes	A3	4,847	9,050	-	13,897	-	13,897
Corporate bonds & notes	Aa1	2,947	425	-	3,372	-	3,372
Corporate bonds & notes	Aa2	5,970	6,155	-	12,125	-	12,125
Corporate bonds & notes	Aa3	2,761	3,548	-	6,309	-	6,309
Corporate bonds & notes	Aaa	2,510	6,628	-	9,138	-	9,138
Corporate bonds & notes	Baa1	-	1,351	-	1,351	-	1,351
Repurchase agreements	N/A	12,662	-	-	12,662	-	12,662
Asset backed securities (2)	Aaa	10,733	14,709	-	25,442	-	25,442
Asset backed securities	A2	252	-	-	252	-	252
Asset backed securities	Aaa	8,925	16,410	-	25,335	-	25,335
Asset backed securities	Baa1	-	997	-	997	-	997
Federal agency securities							
Unsecured bonds and notes	Aaa	102,097	52,400	-	154,497	-	154,497
Mortgage backed securities (3)	Aaa	987	-	-	987	-	987
Mortgage backed securities (2)	AA+	-	689	-	689	-	689
Mortgage backed securities (2)	Aaa	76	-	-	76	-	76
Mortgage backed securities	Aaa	1,037	56,052	-	57,089	-	57,089
Money market & mutual funds	Aaa	31,788	-	-	31,788	31,788	-
Money market & mutual funds	Aa1	1,871	-	-	1,871	1,871	-
Money market & mutual funds (2)	AAA	16	-	-	16	16	-
Commercial Paper	P-1	7,364	-	-	7,364	-	7,364
Total investments by fair value level		225,987	212,285	-	438,272	$ 56,869	$ 381,403
Investments measured at net asset value (NAV)							
Deposits with VTF		1,665	-	-	1,665		
Dairymen's Equity		-	-	63	63		
Investments without specific maturities, held with VTF		-	-	-	191,507		
Total investments measured at NAV		1,665	-	63	193,235		
Investments not measured at fair value							
SNAP® (2)	AAAm	10,600	-	-	10,600		
Short-term investment fund (2)		165	-	-	165		
Total investments measured at fair value		10,765	-	-	10,765		
Total investments		$ 238,417	$ 212,285	$ 63	$ 642,272		

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

(1) Credit quality ratings are not required for U.S. Government securities that are explicitly guaranteed by the U.S. Government
(2) Rating provided by Standard & Poor's Financial Services. All other ratings provided by Moody's Investor Service unless noted otherwise.
(3) Rating provided by Fitch Ratings. All other ratings provided by Moody's Investor Service unless noted otherwise.

Additional Disclosures for Investments Measured using NAV Estimate
At June 30, 2017
(all dollars in thousands)

	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Deposits with VTF	$ 1,665	-	N/A	N/A
Dairymen's Equity	63	-	N/A	N/A
Investments without specific maturities, held with VTF	191,507	-	Quarterly	90 days
	$ 193,235			

5. Accounts Receivable

Accounts receivable as of June 30, 2017
(all dollars in thousands)

Current accounts receivable		
Grants and contracts	$	40,831
Federal appropriations		8,811
Accrued investment interest		726
Student tuition and fees		2,552
Auxiliary enterprises and other operating activities		23,501
Total current receivables before allowance		76,421
Less allowance for doubtful accounts		1,894
Net current accounts receivable		74,527
Noncurrent accounts receivable		
Capital gifts, grants, and other receivables		2,565
Build America Bond interest receivable		149
Accrued investment interest		226
Total noncurrent receivables		2,940
Total receivables	$	77,467

6. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities at June 30, 2017
(all dollars in thousands)

Accounts payable	$	41,496
Accounts payable, capital projects		13,065
Accrued salaries and wages payable		81,469
Retainage payable		4,276
Total current accounts payable and accrued liabilities	$	140,306

Retainage payable represents funds held by the university as retainage on various construction contracts for work performed. Funds retained will be remitted as agreed upon satisfactory completion of the projects.

7. Notes Receivable

Notes receivable as of June 30, 2017
(all dollars in thousands)

Current notes receivable		
Federal Perkins student loan program	$	1,026
Brookings student loan programs		138
Other short-term loans		90
Total current notes receivable		1,254
Less allowance for doubtful accounts		67
Net current notes receivable		1,187
Noncurrent notes receivable		
Federal Perkins student loan program		13,039
VTT LLC operating & equipment loan		4,000
Brookings student loan programs		1,596
Health Professional student loan program		510
Other long-term notes receivable		394
Total noncurrent notes receivable		19,539
Less allowance for doubtful accounts		461
Net noncurrent notes receivable		19,078
Total notes receivables	$	20,265

8. Unearned Revenue

Unearned revenue at June 30, 2017
(all dollars in thousands)

Grants and contracts	$	13,962
Prepaid athletic tickets		12,539
Prepaid tuition and fees		10,029
Other auxiliary enterprises		6,706
Total unearned revenue	$	43,236

9. Capital Assets

Changes in capital assets for the year ending June 30, 2017
(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Ending Balance
Depreciable capital assets				
Buildings	$ 1,737,279	$ 52,815	$ 2,224	$ 1,787,870
Moveable equipment	518,367	46,773	22,750	542,390
Software and intangible assets	22,296	4,437	112	26,621
Fixed equipment	132,463	2,529	3,510	131,482
Infrastructure	124,521	1,625	578	125,568
Library books	77,526	616	769	77,373
Total depreciable capital assets, at cost	2,612,452	108,795	29,943	2,691,304
Less accumulated depreciation and amortization				
Buildings	527,715	46,029	1,743	572,001
Moveable equipment	374,397	40,923	19,881	395,439
Software and intangible assets	12,294	4,092	112	16,274
Fixed equipment	66,288	5,656	3,413	68,531
Infrastructure	96,380	2,635	481	98,534
Library books	67,876	1,975	769	69,082
Total accumulated depreciation and amortization	1,144,950	101,310	26,399	1,219,861
Total depreciable capital assets, net of accumulated depreciation and amortization	1,467,502	7,485	3,544	1,471,443
Nondepreciable capital assets				
Land	46,452	370	-	46,822
Livestock	597	46	-	643
Construction in progress	148,382	62,343	53,232	157,493
Equipment in process	3,073	3,283	2,653	3,703
Software in development	850	10	451	409
Total nondepreciable capital assets	199,354	66,052	56,336	209,070
Total capital assets, net of accumulated depreciation and amortization	$ 1,666,856	$ 73,537	$ 59,880	$ 1,680,513

10. Commonwealth Capital Reimbursement Programs and Capital Gifts

The commonwealth has established several programs to provide state-supported institutions of higher education with bond proceeds for financing the acquisition and replacement of instructional and research equipment and facilities. During fiscal year 2017, funding has been provided to the university from three programs (21st Century program, Central Maintenance Reserve program and the Equipment Trust Fund program) managed by the Virginia College Building Authority (VCBA). The VCBA 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 university also receives capital funding for equipment and facilities from private gifts, grants, and contracts.

The *Statement of Revenues, Expenses, and Changes in Net Position* includes the amounts listed below for the year ended June 30, 2017, in "Capital Grants and Gifts" line item for equipment and facilities. Part of the funding for these programs is a receivable from the commonwealth at June 30, 2017 as shown in the subsequent paragraph *(all dollars in thousands)*:

VCBA 21st Century program	$ 8,976
VCBA Central Maintenance Reserve program	4,650
VCBA Equipment Trust Fund program	16,710
Private gifts	11,498
Grants and contracts	2,673
	$ 44,507

The line items, "Due from the Commonwealth of Virginia", on the *Statement of Net Position* for the year ended June 30, 2017, represent pending reimbursements from the following programs *(all dollars in thousands):*

	Current	Noncurrent
Capital appropriations receivable	$	$ 29,617
VCBA Equipment Trust Fund program	16,522	-
VCBA 21st Century program	-	716
Commonwealth Technology Research fund	150	-
	$ 16,672	$ 30,333

11. Short-term Debt

On March 31, 2008, the Virginia Tech Board of Visitors approved the short-term financing of capital projects with commercial paper issued through the Virginia Municipal League/Virginia Association of Counties (VML/VACo) commercial paper program. This tax-exempt commercial paper financing program gives the university access to a revolving facility to finance or refinance up to $50 million for capital projects under construction that have been previously approved for debt financing by either the board of visitors or the General Assembly of the Commonwealth of Virginia. At June 30, 2017, the amount outstanding was $6,520,000. The average days-to-maturity was 29 days with a weighted average effective interest rate of 1.38%.

12. Summary of Long-term Indebtedness

Bonds Payable

The university has issued two categories of bonds pursuant to section 9 of Article X of the *Constitution of Virginia*.

Section 9(d) bonds are revenue bonds which are limited obligations of the university, payable exclusively from pledged general revenues, and which are not legal or moral debts of the Commonwealth of Virginia. Pledged general revenues include general fund appropriations, student tuition and fees, facilities and administrative (indirect) cost recoveries, auxiliary enterprise revenues, and other revenues not required by law to be used for another purpose. The university has issued section 9(d) bonds directly through underwriters and also 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 issues section 9(d) bonds with the proceeds used to purchase debt obligations (notes) of the university and other institutions of higher education. The notes are secured by pledged general revenues of the university.

Section 9(c) bonds are general obligation revenue bonds issued by the Commonwealth of Virginia on behalf of the university and secured by the net revenues of the completed project and the full faith, credit, and taxing power of the Commonwealth of Virginia.

Bond covenants related to some of these bonds, both 9(c) and 9(d), require the use of established groups of funds called systems. The investment firms of Standish Mellon, Merganser, and Dana hold these systems in trust for managing the net revenues and debt service of certain university auxiliaries. The revenue bonds issued by the Dormitory and Dining Hall System, the University Services System (includes the Career and Professional Development, Center for the Arts, Health Services, Recreational Sports, Student Engagement and Campus Life, Student Organizations, and Rescue Squad auxiliaries), the Electric Service Utility System, and the Athletic Facility System are secured by a pledge of each system's net revenues generated from student or customer fees, and are further secured by the pledged general revenues of the university.

Notes Payable

Notes payable are debt obligations between the Virginia College Building Authority (VCBA) and the university. VCBA issues bonds through the Pooled Bond Program and uses the proceeds to purchase debt obligations (notes) of the university. The notes are secured by the pledged general revenues of the university.

Capital Leases

Capital leases represent the university's obligation primarily to the Virginia Tech Foundation Inc. for lease agreements related to facilities. The leased facilities include the Student Services building, the Public Safety building, the Hunter Andrews Information Systems building addition, the Integrated Life Sciences building (ILSB) which includes a separate lease for a vivarium located in the ILSB, the North End Center building and parking garage, the Prince Street building in Alexandria, Virginia, Kentland Dairy complex, and a jet propulsion lab. The leased equipment includes two shuttle buses. The assets under capital lease are recorded at the net present value of the minimum lease payments during the lease term.

Installment Purchase Obligations

The university may enter into various installment purchase contracts to finance the acquisition of equipment. The length of the purchase agreements ranges from two to five years with variable rates of interest. During fiscal year 2017, the university did not have any installment purchase obligations.

Long-term Debt Payable Activity

As of June 30, 2017
(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Ending Balance	Current Portion
Bonds payable					
Section 9(c) general obligation revenue bonds	$ 144,879	$ 53,102	$ 63,828	$ 134,153	$ 7,972
Section 9(d) revenue bonds	64,563	-	2,952	61,611	2,810
Notes payable	241,422	38,503	52,834	227,091	16,130
Capital lease obligations	74,689	186	3,520	71,355	3,693
Total long-term debt payable	$ 525,553	91,791	123,134	$ 494,210	$ 30,605
Current year debt defeasance		(91,605)	(87,914)		
Total additions/retirements, net of current year defeasance		$ 186	$ 35,220		

Future Principal Commitments

For fiscal years subsequent to 2017
(all dollars in thousands)

	Section 9(c) Bonds	Section 9(d) Bonds	Notes Payable	Capital Lease Obligations	Total Long-term Debt Payable
2018	$ 7,972	$ 2,810	$ 16,130	$ 3,693	$ 30,605
2019	8,032	2,910	16,915	3,798	31,655
2020	8,108	3,050	16,965	3,972	32,095
2021	8,442	2,440	14,715	4,236	29,833
2022	8,804	2,560	15,290	3,402	30,056
2023-2027	48,814	14,720	73,285	18,753	155,572
2028-2032	26,850	17,455	42,785	17,335	104,425
2033-2037	3,150	12,290	10,925	15,236	41,601
2038	-	-	-	930	930
Unamortized premiums (discounts)	13,981	3,376	20,081	-	37,438
Total future principal requirements	$ 134,153	$ 61,611	$ 227,091	$ 71,355	$ 494,210

Future Interest Commitments

For fiscal years subsequent to 2017
(all dollars in thousands)

	Section 9(c) Bonds	Section 9(d) Bonds	Notes Payable	Capital Lease Obligations	Total Long-term Debt Payable
2018	$ 5,126	$ 2,223	$ 8,743	$ 3,241	$ 19,333
2019	4,781	2,121	7,939	3,072	17,913
2020	4,431	1,994	7,122	2,898	16,445
2021	4,082	1,890	6,357	2,764	15,093
2022	3,707	1,772	5,619	2,511	13,609
2023-2027	12,303	7,161	18,484	9,896	47,844
2028-2032	2,748	4,155	6,139	5,318	18,360
2033-2037	143	932	1,118	1,739	3,932
2038	-	-	-	42	42
Total future interest requirements	$ 37,321	$ 22,248	$ 61,521	$ 31,481	$ 152,571

Future Principal Commitments by System

For fiscal years subsequent to 2017
(all dollars in thousands)

	Section 9(c) Bonds	Section 9(d) Bonds	Notes Payable	Capital Lease Obligations	Total Long-term Debt Payable
Athletic system					
Principal	$ -	$ 510	$ 43,690	$ -	$ 44,200
Unamortized premiums (discounts)	-	(3)	5,512	-	5,509
Total for athletic system	-	507	49,202	-	49,709
Dormitory and dining hall system					
Principal	97,757	48,525	12,980	-	159,262
Unamortized premiums (discounts)	11,172	3,109	714	-	14,995
Total for dormitory and dining hall system	108,929	51,634	13,694	-	174,257
Electric service utility system					
Principal	-	4,125	2,025	-	6,150
Unamortized premiums (discounts)	-	138	87	-	225
Total for utility system	-	4,263	2,112	-	6,375
University services system					
Principal	-	3,070	49,959	-	53,029
Unamortized premiums (discounts)	-	43	3,787	-	3,830
Total for university services system	-	3,113	53,746	-	56,859
All systems					
Principal	97,757	56,230	108,654	-	262,641
Unamortized premiums (discounts)	11,172	3,287	10,100	-	24,559
Total for all systems	108,929	59,517	118,754	-	287,200
Other nonsystem debt					
Principal	22,415	2,005	98,356	71,355	194,131
Unamortized premiums (discounts)	2,809	89	9,981	-	12,879
Total for other nonsystem debt	25,224	2,094	108,337	71,355	207,010
Total future principal requirements	$ 134,153	$ 61,611	$ 227,091	$ 71,355	$ 494,210

13. Detail of Long-term Indebtedness

As of June 30, 2017

(all dollars in thousands)

	Interest rates	Maturity	Principal	Unamortized Premium (Discount)	Ending Balance
Bonds Payable					
Revenue bonds - Section 9(d)					
Athletic system					
Series 2015B, issued $510	2.50% - 3.50%	2035	$ 510	$ (3)	$ 507
Dormitory and dining hall system					
Series 2015A, issued $51,425	2.00% - 5.00%	2035	48,525	3,109	51,634
Electric service utility system					
Series 2015D, issued $4,390	2.75% - 4.00%	2035	4,125	138	4,263
University services system					
Recreational Sports auxiliary					
Series 2015C, issued $3,280	2.00% - 4.00%	2035	3,070	43	3,113
Other nonsystem debt					
Northern Virginia Graduate Center					
Series 2015E, issued $2,635 - refunding series 2004A*	3.00%	2020	2,005	89	2,094
Total revenue bonds			58,235	3,376	61,611
General obligation revenue bonds - Section 9(c)					
Dormitory and dining hall system					
Series 2007A, issued $5,995	4.00% - 5.00%	2018	320	15	335
Series 2007A, issued $13,130	4.00% - 5.00%	2018	700	33	733
Series 2008B, issued $17,185	3.00% - 5.00%	2018	830	39	869
Series 2014B, issued $793 - partial refunding series 2004B*	2.00% - 5.00%	2018	227	21	248
Series 2014B, issued $587 - partial refunding series 2004B*	2.00% - 5.00%	2019	266	30	296
Series 2009B, issued $39,005	4.00% - 5.00%	2019	3,805	662	4,467
Series 2009B, issued $3,720	4.00% - 5.00%	2019	360	63	423
Series 2009D, issued $1,891 - partial refunding series 2004A*	5.00%	2022	1,500	158	1,658
Series 2012A, issued $942 - partial refunding series 2004A*	5.00%	2024	705	138	843
Series 2013B, issued $3,576 - partial refunding series 2007A*	4.00% - 5.00%	2027	3,576	472	4,048
Series 2013B, issued $7,842 - partial refunding series 2007A*	4.00% - 5.00%	2027	7,842	1,036	8,878
Series 2015B, issued $10,671 - partial refunding series 2008B*	4.00% - 5.00%	2028	10,671	1,942	12,613
Series 2016B, issued $24,200 - partial refunding series 2009B*	2.00% - 5.00%	2029	24,200	4,442	28,642
Series 2016B, issued $2,310 - partial refunding series 2009B*	2.00% - 5.00%	2029	2,310	424	2,734
Series 2010A, issued $34,650	3.00% - 5.00%	2030	25,375	427	25,802
Series 2011A, issued $18,860	4.34%	2031	15,070	1,270	16,340
Total dormitory and dining hall system			97,757	11,172	108,929
Other nonsystem general obligation revenue bonds					
Parking facilities					
Series 2008B, issued $1,545	3.00% - 5.00%	2018	70	3	73
Series 2009B, issued $24,590	4.00% - 5.00%	2019	1,630	293	1,923
Series 2009D, issued $190 - partial refunding series 2006B*	5.00%	2022	190	16	206
Series 2013B, issued $218 - partial refunding series 2006B*	4.00% - 5.00%	2026	184	25	209
Series 2015B, issued $921 - partial refunding series 2008B*	4.00% - 5.00%	2028	921	167	1,088
Series 2010A, issued $745	2.00% - 5.00%	2030	530	9	539
Series 2016B, issued $18,890 - partial refunding series 2009B*	2.00% - 5.00%	2034	18,890	2,296	21,186
Total other nonsystem general obligation revenue bonds			22,415	2,809	25,224
Total general obligation revenue bonds			120,172	13,981	134,153
Total bonds payable			$ 178,407	$ 17,357	$ 195,764
Notes Payable					
Athletic system					
Series 2007B, issued $2,860 - partial refunding series 2001A*	4.00% - 4.50%	2020	$ 2,775	$ -	$ 2,775
Series 2009B, issued $8,705	2.00% - 5.00%	2020	1,160	123	1,283
Series 2010B, issued $11,540 - partial refunding series 2001A*	4.00% - 5.00%	2027	7,625	624	8,249
Series 2012B, issued $32,365 - refunding series 2004D*	3.00% - 5.00%	2029	26,745	3,734	30,479
Series 2016A, issued $5,385 - partial refunding series 2009B*	3.00% - 5.00%	2030	5,385	1,031	6,416
Total athletic system			43,690	5,512	49,202
Dormitory and dining hall system					
Series 2007B, issued $3,395 - partial refunding 1998A*	4.00% - 4.50%	2019	1,440	-	1,440
Series 2014B, issued $3,695 - refunding series 2004B*	3.00% - 5.00%	2019	2,240	205	2,445
Series 2012A, issued $1,350 - partial refunding series 2005*	5.00%	2025	1,350	173	1,523
Series 2014B, issued $340 - partial refunding series 2005*	3.00% - 5.00%	2026	205	30	235
Series 2010A, issued $9,650	3.75% - 5.50%	2031	7,745	306	8,051
Total dormitory and dining hall system			12,980	714	13,694

Electric service utility system					
Series 2007B, issued $646 - partial refunding series 2000A*	4.00% - 5.00%	2020	630	-	630
Series 2007B, issued $1,060 - partial refunding series 2002A*	4.00% - 4.50%	2020	545	7	552
Series 2010B, issued $345 - partial refunding series 2000A*	5.00% - 5.75%	2021	215	17	232
Series 2010B, issued $770 - partial refunding series 2002A*	5.25%	2023	635	63	698
Total electric service utility system			2,025	87	2,112
University services system					
Career Services auxiliary					
Series 2007B, issued $1,621 - partial refunding series 2002A*	4.00% - 4.50%	2020	834	11	845
Series 2010B, issued $1,190 - partial refunding series 2002A*	5.25%	2023	975	97	1,072
Center for the Arts auxiliary					
Series 2010B, issued $19,445	3.75% - 5.60%	2036	16,700	480	17,180
Series 2011A, issued $19,375	3.00% - 5.00%	2037	17,400	752	18,152
Health Services auxiliary					
Series 2009B, issued $4,365	2.00% - 5.00%	2020	600	67	667
Series 2009B, issued $12,420	2.00% - 5.00%	2020	1,715	191	1,906
Series 2009A, issued $1,475	2.75% - 5.00%	2021	210	12	222
Series 20015B, issued $800 - partial refunding series 2009A*	3.00% - 5.00%	2029	800	123	923
Series 2016A, issued $2,780 - partial refunding series 2009B*	3.00% - 5.00%	2030	2,780	533	3,313
Series 2016A, issued $7,945 - partial refunding series 2009B*	3.00% - 5.00%	2030	7,945	1,521	9,466
Total university services system			49,959	3,787	53,746
Other nonsystem notes payable					
Boiler pollution controls					
Series 2014B, issued $720 - partial refunding series 2006A*	3.00% - 5.00%	2024	720	93	813
Series 2016A, issued $375 - partial refunding series 2006A*	3.00%	2027	375	37	412
Campus heating plant					
Series 2007A, issued $3,880	4.50% - 5.00%	2018	190	9	199
Series 2009B, issued $5,875	2.00% - 5.00%	2020	785	83	868
Series 2014B, issued $1,790 - partial refunding series 2007A*	3.00% - 5.00%	2026	1,790	256	2,046
Series 2016A, issued $575 - partial refunding series 2007A*	3.00% - 5.00%	2028	575	109	684
Series 2016A, issued $3,625 - partial refunding series 2009B*	3.00% - 5.00%	2030	3,625	693	4,318
Chiller plant					
Series 2011A, issued $12,695	3.00% - 5.00%	2032	6,420	436	6,856
Infectious waste facility					
Series 2007B, issued $359 - partial refunding series 2000A*	4.00% - 4.50%	2020	350	-	350
Series 2010B, issued $190 - partial refunding series 2000A*	5.00% - 5.75%	2021	120	9	129
Goodwin Hall					
Series 2011A, issued $13,410	5.00%	2020	6,325	677	7,002
Series 2011A, issued $12,695	3.00% - 5.00%	2032	10,850	737	11,587
Holtzman Alumni Center and Skelton Conference Center					
Series 2010B, issued $3,215 - partial refunding series 2003A*	4.38% - 5.00%	2021	3,215	244	3,459
Series 2012A, issued $12,320 - partial refunding series 2003A*	4.75%	2031	10,115	867	10,982
ICTAS II					
Series 2009B, issued $13,045	2.00% - 5.00%	2020	1,800	200	2,000
Series 2016A, issued $8,345 - partial refunding series 2009B*	3.00% - 5.00%	2030	8,345	1,597	9,942
Kelly Hall					
Series 2014B, issued $6,040 - partial refunding series 2006A*	3.00% - 5.00%	2024	6,040	778	6,818
Series 2016A, issued $3,180 - partial refunding series 2006A*	3.00%	2027	3,180	315	3,495
Life Sciences I Facility					
Series 2012A, issued $3,985 - partial refunding series 2005*	5.00%	2025	3,985	509	4,494
Series 2014B, issued $1,005 - partial refunding series 2005*	3.00% - 5.00%	2026	615	88	703
Steger Hall					
Series 2007B, issued $5,649 - partial refunding series 2002A*	4.00% - 4.50%	2020	2,906	38	2,944
Series 2010B, issued $10,155 - partial refunding series 2002A*	4.00% - 5.25%	2028	9,405	384	9,789
Surge space building					
Series 2014B, issued $2,730 - partial refunding series 2006A*	3.00% - 5.00%	2022	2,730	289	3,019
Unified Communications					
Series 2015A, issued $6,160	5.00%	2023	5,405	620	6,025
Veterinary medicine instruction addition					
Series 2012B, issued $9,820	3.00% - 5.00%	2033	8,490	913	9,403
Total other nonsystem notes payable			98,356	9,981	108,337
Total notes payable			$ 207,010	$ 20,081	$ 227,091

Capital Leases Payable

North End Center building and parking garage	$ 38,753	$ -	$ 38,753
Kentland Farm dairy complex	13,230	-	13,230
Integrated Life Sciences (ILSB) building and vivarium	12,336	-	12,336
Student Services building, Public Safety building, Hunter Andrews addition, Prince Street building, and shuttle buses	7,036	-	7,036
Total capital leases payable	$ 71,355	$ -	$ 71,355

14. Long-term Debt Defeasance

Current Year

During fiscal year 2017 the university and the Commonwealth of Virginia, on behalf of the university, issued $52,964,000 of 9(c) general obligation revenue bonds and $38,383,000 of notes payable to refund $52,909,000 of 9(c) general obligation revenue bonds and $35,005,000 of notes payable. The resulting net loss of $3,433,000 will be amortized over the life of the new debt. For financial reporting purposes, these bonds are considered an in-substance defeasance and have therefore been removed from the long-term debt payable line item of the *Statement of Net Position*. The assets in escrow have similarly been excluded. The details of each refunded debt issue are presented below.

Long-term Debt Defeasance

Debt issues refunded as of June 30, 2017
(all dollars in thousands)

	Debt Refunded	Refunding Debt Issued	Accounting Gain (Loss)	Present Value Rate	Reduction in Debt Service	Reduction in Debt Service Discounted at Present Value
Section 9(c) general obligation revenue bonds						
Series 2009B, issued $3,720*	$ 2,455	$ 2,310	$ 145	1.67%	$ 393	$ 355
Series 2009B, issued $39,005*	25,725	24,200	1,525	1.67%	4,110	3,724
Series 2009B, issued $24,590*	18,905	18,890	15	2.20%	3,577	3,038
Premiums (Discounts)	5,824	7,702	(1,878)		-	-
Other accounting activity related to debt refunding	-	(138)	138		-	-
Total for general obligation revenue bonds	52,909	52,964	(55)		8,080	7,117
Notes payable						
Series 2006A, issued $16,145*	3,490	3,180	310	1.73%	537	477
Series 2006A, issued $1,925*	420	375	45	1.73%	74	66
Series 2007A, issued $3,880*	595	575	20	2.06%	65	58
Series 2009B, issued $4,365*	2,800	2,780	20	1.85%	216	198
Series 2009B, issued $12,420*	7,960	7,945	15	1.85%	558	513
Series 2009B, issued $5,875*	3,650	3,625	25	1.85%	281	257
Series 2009B, issued $8,705*	5,415	5,385	30	1.85%	407	373
Series 2009B, issued $13,045*	8,360	8,345	15	1.85%	586	538
Premiums (Discounts)	2,315	6,293	(3,978)		-	-
Other accounting activity related to debt refunding	-	(120)	120		-	-
Total for notes payable	35,005	38,383	(3,378)		2,724	2,480
Total for all debt	$ 87,914	91,347	$ (3,433)		$ 10,804	$ 9,597
Debt issuance costs		258				
Total refunding debt issued		$ 91,605				

*Partial refunding

Previous Years

During previous fiscal years in accordance with GASB Statement 7, *Advance Refundings Resulting in the Defeasance of Debt*, the university has excluded from its financial statements the assets in escrow and the debt payable that was defeased in-substance. For the year ended June 30, 2017, bonds and notes payable considered defeased in previous years totaled $16,705,000.

Debt Defeasance – Gains (Losses)

Prior to fiscal year 2014, gains and losses from the defeasance of long-term debt were netted and included in the long-term debt payable (current and noncurrent) and depreciable capital assets, net categories on the *Statement of Net Position*. Beginning in fiscal year 2014, GASB Statement 65, *Items Previously Reported as Assets and Liabilities*, reclassifies gains and losses on defeased debt to deferred outflows of resources or deferred inflows of resources. The tables below provide detail on the unamortized gains and losses included in the deferred outflows of resources and deferred inflows of resources by bond category for defeased outstanding debt from the current and prior years.

Deferred Outflows for Debt Defeasance

As of June 30, 2017
(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Ending Balance
Bonds payable				
Section 9(c) general obligation revenue bonds	$ (3,046)	$ (165)	$ 282	$ (2,929)
Section 9(d) revenue bonds	(112)	-	28	(84)
Notes payable	(3,979)	(3,438)	683	(6,734)
Total deferred outflows for debt defeasance	$ (7,137)	$ (3,603)	$ 993	$ (9,747)

Deferred Inflows for Debt Defeasance

As of June 30, 2017
(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Ending Balance
Bonds payable				
Section 9(c) general obligation revenue bonds	$ 118	$ 109	$ (67)	$ 160
Section 9(d) revenue bonds	-	-	-	-
Notes payable	890	61	(73)	878
Total deferred inflows for debt defeasance	$ 1,008	$ 170	$ (140)	$ 1,038

15. Change in other liabilities

For the year ended June 30, 2017
(all dollars in thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Current Portion
Accrued compensated absences	$ 43,077	$ 35,347	$ 34,851	$ 43,573	$ 25,236
Federal student loan program contribution refundable	13,691	243	240	13,694	-
Net pension liability	403,696	34,880	-	438,576	-
Total other liabilities	$ 460,464	$ 70,470	$ 35,091	$ 495,843	$ 25,236

16. Lease commitments

The university has entered into numerous agreements to lease land, buildings, and equipment. With some of these agreements, the university is committed under various operating leases for equipment and space. In general, the leases are for three- to ten-year terms with renewal options. The university expects similar leases to replace these leases during the normal course of business. The total lease expense was approximately $21,167,000 for the year ended June 30, 2017. This amount includes approximately $15,105,000 in lease payments to the Virginia Tech Foundation Inc. for office and laboratory space. In addition, the total lease expense includes approximately $2,644,000 of short-term equipment rentals that can be terminated at any time. The short-term equipment rental costs are not included in the summary of future lease payments listed in the table below.

A summary of future minimum lease payments under operating leases as of June 30, 2017, follows *(all dollars in thousands)*:

2018	$ 20,020
2019	16,305
2020	13,123
2021	10,569
2022	3,757
2023 – 2027	7,751
2028 – 2032	3,699
2033 – 2037	2,195
2038 – 2042	1,833
2043 – 2047	1,833
2048 – 2052	1,833
2053 – 2057	1,800
2058 – 2062	1,579
2063	233
Total	$ 86,530

17. Capital improvement commitments

The amounts listed in the following tables represent the value of obligations remaining on capital improvement project contracts. These obligations are for future effort and as such have not been accrued as expenses or liabilities on the university's financial statements. Outstanding contractual commitments for capital improvement projects at June 30, 2017, are listed below.

Capital Commitments by Project
(all dollars in thousands)

Renovate/Renew Academic Buildings	$ 21,970
O'Shaughnessy Hall Renovation	14,653
Baseball Facility Improvements	10,824
Rector Field House Improvements	6,517
Other projects	199
Total	$ 54,163

Capital Commitments by Funding Source
(all dollars in thousands)

Capital appropriations	$ 21,970
Bonds and notes payable	198
University cost recoveries and education and general funds	1
Auxiliary enterprise funds	31,994
Total	$ 54,163

18. Pension Plan

Plan description

All full-time, salaried permanent employees of state institutions are automatically covered by the VRS State Employee Retirement Plan (SERP) or the VaLORS Retirement Plan upon employment, unless they are eligible faculty and choose to enroll in the optional retirement program described in Note 19. These plans are single-employer plans treated as cost-sharing plans for financial reporting purposes. They are administered by the Virginia Retirement System (VRS, or 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 are 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 a different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are described below:

Retirement plan provisions by plan structure

Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.

Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for 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.

The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window (see "Eligible Members").

• The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.

• The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions.

• In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

Eligible Members

Eligible Members - Plan 1 Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.

VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.

Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.

Eligible Members – Plan 2 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 Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan. Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.

Eligible Members – Hybrid Plan State employees, with some exceptions described in the next paragraph, are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. In addition, members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014

Some employees are not eligible to participate in the Hybrid Retirement Plan. They include members of the Virginia Law Officers' Retirement System (VaLORS), and employees eligible for an optional retirement plan (ORP) who have prior service under Plan 1 or Plan 2. These employees must select Plan 1 or Plan 2 (as applicable) or the ORP plan.

Retirement Contributions

Retirement Contributions – Plan 1 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 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 – Plan 2 State employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction.

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

Creditable Service

Creditable Service - Plan 1 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 - Plan 2 Same as Plan 1.

Creditable Service - Hybrid Plan

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.

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 - Plan 1 Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.

Members are always 100% vested in the contributions that they make.

Vesting - Plan 2 Same as Plan 1.

Vesting Hybrid Plan

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: 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 they make.

Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service.

• After two years, a member is 50% vested and may withdraw 50% of employer contributions.

• After three years, a member is 75% vested and may withdraw 75% of employer contributions.

• After four or more years, a member is 100% vested and may withdraw 100% of employer contributions.

Distribution is not required by law until age 70½.

Calculating the Benefit

Calculating the Benefit - Plan 1 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 - Plan 2 See definition under Plan 1.

Calculating the Benefit - Hybrid Plan

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.

Average Final Compensation

Average Final Compensation - Plan 1 A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.

Average Final Compensation - Plan 2 A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.

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

Service Retirement Multiplier

Service Retirement Multiplier - Plan 1 For SERP, 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%. For VaLORS the retirement multiplier for VaLORS employees is 1.70% or 2.00%.

Service Retirement Multiplier - Plan 2 For SERP, 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. For VaLORS, the retirement multiplier is 2.00%.

Service Retirement Multiplier - Hybrid Plan

Defined Benefit Component: For SERP, 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. For VaLORS, the retirement multiplier is not applicable.

The retirement multiplier is not applicable for the defined contribution component.

Normal Retirement Age

Normal Retirement Age - Plan 1 For SERP, the normal retirement age is 65. For Valors, age 60.

Normal Retirement Age - Plan 2 For SERP, the normal retirement age is normal Social Security retirement age. For VaLORS, age 60.

Normal Retirement Age - Hybrid Plan

Defined Benefit Component: For SERP, same as Plan 2. For VaLORS, the normal retirement age is not applicable.

Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Unreduced Retirement Eligibility

Earliest Unreduced Retirement Eligibility - Plan 1 For SERP, age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service. For VaLORS, age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.

Earliest Unreduced Retirement Eligibility - Plan 2 For SERP, normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90. For VaLORS, same as Plan 1.

Earliest Unreduced Retirement Eligibility - Hybrid Plan

Defined Benefit Component: For SERP, same as Plan 2. For VaLORS, not applicable.

Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Earliest Reduced Retirement Eligibility

Earliest Reduced Retirement Eligibility - Plan 1 For SERP, age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service. For VaLORS, age 50 with at least five years of creditable service.

Earliest Reduced Retirement Eligibility - Plan 2 For SERP, age 60 with at least five years (60 months) of creditable service. For VaLORS, same as Plan 1.

Earliest Unreduced Retirement Eligibility - Hybrid Plan

Defined Benefit Component: For SERP, members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service. For VaLORS, not applicable.

Defined Contribution Component: Members are eligible to receive distributions upon leaving employment, subject to restrictions.

Cost-of-Living Adjustment (COLA) in Retirement

Cost-of-Living Adjustment (COLA) in Retirement - Plan 1
The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) to a maximum COLA of 5%.

Eligibility rules:

For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date.

For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.

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.

Cost-of-Living Adjustment (COLA) in Retirement - Plan 2

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

Cost-of-Living Adjustment (COLA) in Retirement - Hybrid Plan

Defined Benefit Component: The COLA is the same as Plan 2, the eligibility rules and exceptions are the same as Plan 1.

Defined Contribution Component: Not applicable.

Disability Coverage

Disability Coverage - Plan 1 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. Most state employees are covered under the Virginia Sickness and 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 Coverage - Plan 2 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. Most state employees are covered under the Virginia Sickness and 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 Coverage - Hybrid Plan 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. Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VSDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.

Purchase of Prior Service

Purchase of Prior Service - Plan 1 Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. Members also may be eligible to purchase periods of leave without pay.

Purchase of Prior Service - Plan 2 Same as Plan 1.

Purchase of Prior Service - Hybrid Plan

Defined Benefit Component: Same as Plan 1, with the following exceptions. Hybrid Retirement Plan members are ineligible for ported service. The cost for purchasing refunded service is the higher of 4% of creditable compensation or average final compensation. Plan members have one year from their date of hire or return from leave to purchase all but refunded prior service at approximate normal cost. After that one-year period, the rate for most categories of service will change to actuarial cost.

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. Prior to July 1, 2012, the 5.00% member contribution was paid by the employer. Beginning July 1, 2012 state employees were required to pay the 5.00% member contribution and the employer was required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution. Each state agency's contractually required contribution rate for the year ended June 30, 2017 was 13.49% of covered employee compensation for employees in the VRS SERP plan. For employees in the VaLORS plan, the contribution rate was 21.05% of covered employee compensation. These rates were based on an actuarially determined rates from an actuarial valuation as of June 30, 2015. The contribution rate for the VRS SERP plan also reflects the transfer in June 2016 of $162,406,273 as an accelerated payback of the deferred contribution in the 2010-12 biennium. The contribution rate for the VaLORS plan also reflects the transfer in June 2016 of $16,491,559 as an accelerated payback of the deferred contribution in the 2010-12 biennium. 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 Virginia Tech to the VRS SERP plan were $35,348,000 and $36,931,000 for the years ended June 30, 2017 and June 30, 2016, respectively. Contributions from Virginia Tech to the VaLORS plan were $487,000 and $439,000 for the years ended June 30, 2017 and June 30, 2016, respectively.

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

At June 30, 2017, Virginia Tech reported a liability of $433,375,000 for its proportionate share of the VRS SERP plan Net Pension Liability and a liability of $5,201,000 for its proportionate share of the VaLORS plan Net Pension Liability. The Net Pension Liability was measured as of June 30, 2016 and the total pension liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date. Virginia Tech's proportion of the Net Pension Liability was based on Virginia Tech's actuarially determined employer contributions to the pension plan for the year ended June 30, 2016 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2016, Virginia Tech's proportion of the VRS SERP plan was 6.576% as compared to 6.517% at June 30, 2015. At June 30, 2016, the Virginia Tech's proportion of the VaLORS plan was 0.672% as compared to 0.664% at June 30, 2015.

For the year ended June 30, 2017, Virginia Tech recognized pension expense of $39,857,000 for the VRS SERP plan and $420,000 for the VaLORS plan. Since there was a change in proportionate share between June 30, 2015 and June 30, 2016, 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, 2017, Virginia Tech reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources (*all dollars in thousands*):

	SERP		VALORS	
	Deferred Outflows	Deferred Inflows	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	$ 1,855	$ 11,798	$ 23	$ 13
Change in assumptions	-	-	-	-
Net difference between projected and actual earnings on pension plan investments	27,625	-	213	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	9,243	-	43	132
Employer contributions subsequent to the measurement date	35,348	-	487	-
Total	$ 74,071	$ 11,798	$ 766	$ 145

A total of $35,835,000 ($35,348,000 for SERP and $487,000 for VaLORS) reported as deferred outflows of resources related to pensions resulting from Virginia Tech's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (*all dollars in thousands*):

Year ended June 30	SERP	VaLORS	Total
FY 2018	1,798	(73)	1,725
FY 2019	(215)	(6)	(221)
FY2020	14,032	129	14,161
FY2021	11,310	84	11,394

Actuarial Assumptions

VRS State Employee Retirement Plan

The total pension liability for the VRS State Employee Retirement Plan was based on an actuarial valuation as of June 30, 2015, 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, 2016.

Inflation	2.5 %
Salary increases, including inflation	3.5 - 5.35 %
Investment rate of return	7.0 % net of pension plan investment expense, including inflation*

Mortality rates (SERP)

Pre-Retirement - RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 2 years and females were set back 3 years.

Post-Retirement - RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with females set back 1 year.

Post-Disablement - RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period from July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

Update mortality table

Decrease in rates of service retirement

Decrease in rates of withdrawals for less than 10 years of service

Decrease in rates of male disability retirement

Reduce rates of salary increase by 0.25% per year

VaLORS Retirement Plan

The total pension liability for the VaLORS Retirement Plan was based on an actuarial valuation as of June 30, 2015, 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, 2016.

Inflation	2.5 %
Salary increases, including inflation	3.5 - 4.75 %
Investment rate of return	7.0 % net of pension plan investment expense, including inflation*

Mortality rates (VaLORS)

Pre-Retirement: RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 5 years and females were set back 3 years.

Post-Retirement: RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with females set back 1 year.

Post-Disablement: RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period from July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

Update mortality table

Adjustments to the rates of service retirement

Decrease in rates of withdrawals for females under 10 years of service

Increase in rates of disability

Decrease service related disability rate from 60% to 50%

* 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.

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 67, less that system's fiduciary net position. As of June 30, 2016, NPL amounts for the VRS State Employee Retirement Plan and the VaLORS Retirement Plan are as follows *(amounts expressed in thousands):*

	SERP	VaLORS
Total Pension Liability	$ 22,958,593	$ 1,985,618
Plan Fiduciary Net Position	16,367,842	1,211,446
Employers' Net Pension Liability (Asset)	$ 6,590,751	$ 774,172
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	71.29%	61.01%

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 Statement 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 table on the next page.

Asset Class (Strategy)	Target Allocation	Arithmetic Long-term Expected Rate of Return	Weighted Average Long-term Expected Rate of Return
U.S. Equity	19.50%	6.46%	1.26%
Developed Non-U.S. Equity	16.50%	6.28%	1.04%
Emerging Market Equity	6.00%	10.00%	0.60%
Fixed Income	15.00%	0.09%	0.01%
Emerging Debt	3.00%	3.51%	0.11%
Rate-sensitive Credit	4.50%	3.51%	0.16%
Non-rate-sensitive Credit	4.50%	5.00%	0.23%
Convertibles	3.00%	4.81%	0.14%
Public Real Estate	2.25%	6.12%	0.14%
Private Real Estate	12.75%	7.10%	0.91%
Private Equity	12.00%	10.41%	1.25%
Cash	1.00%	(1.50)%	(0.02)%
Total	100.00%		5.83%
Inflation			2.50%
*Expected arithmetic nominal return			8.33%

* Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real return of 8.33% but also has a high standard deviation, which means there is high volatility. Over larger time horizons the volatility declines significantly and provides a median return of 7.44%, 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 Virginia Tech 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. 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 Virginia Tech's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents Virginia Tech's proportionate share of the VRS State Employee Retirement Plan and the VaLORS Retirement Plan net pension liability using the discount rate of 7.00%, as well as what Virginia Tech'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 (6.00%)	Current Discount Rate (7.00%)	1.00% Increase (8.00%)
Virginia Tech's proportionate share of the SERP net pension liability	$ 609,899	$ 433,375	$ 285,173
Virginia Tech's proportionate share of the VaLORS net pension liability	$ 6,961	$ 5,201	$ 3,751

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 2016 Comprehensive Annual Financial Report (CAFR). A copy of the 2016 VRS CAFR may be downloaded from the VRS website at *http://www.varetire.org/Pdf/Publications/2016-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

The amount of payables outstanding to the VRS State Employee Retirement Plan (SERP) and the VaLORS Retirement Plan at June 30, 2017, was approximately $2.0 million for legally required contributions into the plans.

19. Defined Contribution Plans

Optional Retirement Plan

Full-time faculty and certain administrative staff may participate in optional retirement plans as authorized by the *Code of Virginia* rather than the VRS retirement plan. These optional retirement plans are defined contribution plans offered through Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF), and Fidelity Investments Tax-Exempt Services Company. There are two defined contribution plans. Plan 1 is for employees hired prior to July 1, 2010, and retirement benefits received are based upon the employer's 10.4 percent, plus net investment gains or losses. Plan 2 is for employees hired on or after July 1, 2010, and retirement benefits received are based upon the employer's 8.5 percent contribution and the employee's 5.0 percent contribution plus net investment gains or losses. Individual contracts issued under the plan provide for full and immediate vesting of both the university's and the employees' contributions. Total pension costs under this plan were approximately $25,591,000 for year ended June 30, 2017. Contributions to the optional retirement plan were calculated using the base salary amount of approximately $291,240,000 for this fiscal year.

Deferred Compensation Plan

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 Deferred Compensation Plan is a qualified defined contribution plan under section 401(a) of the *Internal Revenue Code*. The university expense for matching contributions to this plan, assessed by the commonwealth, was approximately $2,330,000 for fiscal year 2017.

Federal Pension Plans

Certain Cooperative Extension Service (CES) professional employees are participants in either the Federal Employee Retirement System (FERS) or the Federal Civil Service Retirement System (CSRS). The FERS and CSRS are defined benefit plans in which benefits are based upon the highest base pay over any three consecutive years and the years of creditable service. The costs under these plans were approximately $114,000 for the year ended June 30, 2017. Contributions to the FERS and CSRS were calculated using the base salary amount of approximately $1,006,000 for the fiscal year 2017.

In addition, the university contributed $32,000 in employer contributions to the Thrift Savings Plan for the year ended June 30, 2017. The Thrift Savings Plan is a defined contribution plan in which the university matches employee contributions within certain limitations.

20. 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, Virginia Sickness and Disability Program, Retiree Health Insurance Credit Program, and Line of Duty Act Program.

The Group Life Insurance Program provides members basic group life insurance upon employment. In addition to benefits provided to active members during employment, the Virginia Sickness and Disability Program provides inactive members with long-term disability and long-term care benefits. The Retiree Health Insurance Credit Program provides members health insurance credits to offset the monthly health insurance premiums for retirees who have at least 15 years of service. The Line of Duty Act Program provides death and health insurance reimbursement benefits to eligible state employees, such as campus police, who die or become disabled as a result of the performance of their duties as a public safety officer. The university is required to contribute to the costs of participating in these programs.

The university also participates in the Pre-Medicare Retiree Healthcare Plan, sponsored by the commonwealth and administered by the Department of Human Resources Management. The plan provides the option for retirees who are not yet eligible for Medicare to participate in the commonwealth's healthcare plan for active employees. 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 premiums for active employees.

Additional information related to all of these plans is available in Virginia's Comprehensive Annual Financial Report.

21. Grants, contracts and other contingencies

The university has received federal grants for specific purposes that are subject to review and audit by the grantor agencies. Claims against these resources are generally conditional upon compliance with the terms and conditions of grant agreements and applicable federal regulations, including the outlay of resources for allowable purposes. Any disallowance resulting from a federal audit may become a liability of the university.

In addition, the university is required to comply with various federal regulations issued by the Office of Management and Budget. Failure to comply with certain system requirements of these regulations may result in questions concerning the allowance of related direct and indirect charges pursuant to such agreements. As of June 30, 2017, the university estimates that no material liabilities will result from such audits or questions.

22. Appropriations

The *Appropriation Act* specifies that unexpended general fund appropriations remaining on the last day of the current year, ending on June 30, 2017, shall be reappropriated for expenditure in the first month of the next year, beginning on July 1, 2017, except as may be specifically provided otherwise by the Virginia General Assembly. The governor may, at his discretion, unallot funds from the reappropriated balances that relate to unexpended appropriations for payments to individuals, aid to localities, or any pass-through grants.

Adjustments made to the university's original appropriation during this fiscal year are as follows (*all dollars in thousands*):

Original legislative appropriation	
(per Chapter 806)	
Education and general programs	$ 230,563
Student financial assistance	20,801
Commonwealth research initiative	5,389
Unique military activities	2,284
Total appropriation	259,037
Adjustments	
Central appropriation	3
Commonwealth Research Initiative and Federal Action Contingency Trust	19
Commonwealth Research Commercialization Fund	40
Student financial assistance	401
Virginia Department of Agriculture and Customer Services reversion	(1)
Other adjustments	2,218
Total adjustments	2,680
Adjusted appropriation	$ 261,717

23. Federal Direct Lending Program

The university participates in the Federal Direct Lending Program. Under this program, the university receives funds from the U.S. Department of Education for Stafford and Parent PLUS Loan Programs and disburses these funds to eligible students. The funds can be applied to outstanding student tuition and fee charges or refunded directly to the student.

These loan proceeds are treated as student payments with the university acting as a fiduciary agent for the student. Therefore, the receipt of the funds from the federal government is not reflected in the federal government grants and contracts total on the *Statement of Revenues, Expenses, and Changes in Net Position*. The activity is included in the noncapital financing section of the *Statement of Cash Flows*. For the fiscal year ended June 30, 2017, cash provided by the program totaled $132,701,000 and cash used by the program totaled $132,733,000.

24. Expenses by Natural Classification within Functional Classification

The university's operating expenses by functional classification for the year ended June 30, 2017 *(all dollars in thousands)*

	Compensation and Benefits	Contractual Services	Supplies and Materials	Travel	Other Operating Expenses	Scholarships and Fellowships	Sponsored Program Subcontracts	Total
Instruction	$ 325,956	$ 12,986	$ 8,366	$ 6,842	$ 2,350	$ 1,352	$ 19	$ 357,871
Research	211,467	24,841	22,001	13,163	4,344	14,347	21,134	311,297
Public service	67,223	16,964	2,721	6,626	3,249	341	637	97,761
Academic support	61,735	4,910	15,500	1,676	3,307	288	-	87,416
Student services	13,417	2,754	1,067	1,143	198	27	21	18,627
Institutional support	55,841	8,851	1,960	2,914	26	673	11	70,276
Operation and maintenance of plant	28,908	9,866	15,945	295	29,886	16	1	84,917
Student financial assistance	281	3	-	177	86	15,941	-	16,488
Auxiliary enterprises	107,030	20,468	41,142	13,334	35,392	1,329	17	218,712
Subtotal before other costs	$ 871,858	$ 101,643	$ 108,702	$ 46,170	$ 78,838	$ 34,314	$ 21,840	1,263,365
Depreciation and amortization expense								101,310
Loan administrative fees and collection costs								55
Total operating expenses								$ 1,364,730

25. COMPONENT UNITS

The component units' statements and subsequent notes comply with the Governmental Accounting Standards Board (GASB) presentation format. Both Virginia Tech Foundation Inc. and Virginia Tech Services Inc. follow the Financial Accounting Standards Board (FASB) presentation format in their audited financial statements. Consequently, reclassifications have been made to convert their statements to the GASB format.

Consolidating Statement of Net Position

The financial position for the university's component units as of June 30, 2017
(all dollars in thousands)

	Virginia Tech Foundation	Virginia Tech Services	Total Component Units
Assets			
Current assets			
Cash and cash equivalents	$ 19,549	$ 1,119	$ 20,668
Short-term investments	8,000	1,820	9,820
Accounts and contributions receivable, net	46,321	491	46,812
Notes receivable, net	645	-	645
Inventories	375	5,322	5,697
Prepaid expenses	900	442	1,342
Other assets	3,838	-	3,838
Total current assets	79,628	9,194	88,822
Noncurrent assets			
Cash and cash equivalents	43,604	-	43,604
Accounts and contributions receivable, net	80,715	-	80,715
Notes and deeds of trust receivable, net	22,685	-	22,685
Net investments in direct financing leases	67,956	-	67,956
Irrevocable trusts held by others, net	7,770	-	7,770
Long-term investments	1,130,429	-	1,130,429
Depreciable capital assets, net	202,797	1,401	204,198
Nondepreciable capital assets	83,939	-	83,939
Intangible assets, net	582	-	582
Other assets	3,805	-	3,805
Total noncurrent assets	1,644,282	1,401	1,645,683
Total assets	1,723,910	10,595	1,734,505
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	9,464	3,623	1-3,087
Accrued compensated absences	435	315	750
Unearned revenue	3,605	1,095	4,700
Long-term debt payable	28,608	212	28,820
Other liabilities	2,339	362	2,701
Total current liabilities	44,451	5,607	50,058
Noncurrent liabilities			
Accrued compensated absences	184	-	184
Unearned revenue	1,327	-	1,327
Long-term debt payable	229,717	738	230,455
Liabilities under trust agreements	30,240	-	30,240
Agency deposits held in trust	204,154	-	204,154
Other liabilities	10,239	100	10,339
Total noncurrent liabilities	475,861	838	476,699
Total liabilities	520,312	6,445	526,757
Net position			
Invested in capital assets, net of related debt	122,260	1,401	123,661
Restricted, nonexpendable	522,131	-	522,131
Restricted, expendable			
Scholarships, research, instruction, and other	472,743	-	472,743
Capital projects	-	-	-
Unrestricted	86,464	2,749	89,213
Total net position	$ 1,203,598	$ 4,150	$ 1,207,748

Consolidating Statement of Revenues, Expenses, and Changes in Net Position

The university's component unit activity for the year ended June 30, 2017
(all dollars in thousands)

	Virginia Tech Foundation	Virginia Tech Services	Total Component Units
Operating revenues			
Gifts and contributions	$ 86,947	$ -	$ 86,947
Auxiliary enterprise revenue			
Hotel Roanoke	22,049	-	22,049
River Course	1,546	-	1,546
Bookstore	-	22,187	22,187
Other revenues			
Rental income	37,430	-	37,430
Other	17,072	-	17,072
Total operating revenues	165,044	22,187	187,231
Operating Expenses			
Instruction	5,254	-	5,254
Research	10,572	-	10,572
Public service	4,701	-	4,701
Academic support	24,519	-	24,519
Institutional support			
Other university programs	18,035	-	18,035
Fund-raising	10,466	-	10,466
Management and general	7,044	-	7,044
Operation and maintenance of plant			
Operation and maintenance of plant	6,404	-	6,404
Research cost centers	6,834	-	6,834
Student financial assistance	24,165	-	24,165
Auxiliary enterprises			
Hotel Roanoke	12,961	-	12,961
River Course	2,146	-	2,146
Bookstore	-	22,480	22,480
Depreciation expense	10,445	-	10,445
Other expenses	12,342	-	12,342
Total operating expenses	155,888	22,480	178,368
Operating income (loss)	9,156	(293)	8,863
Non-operating revenues (expenses)			
Investment income, net	14,018	-	14,018
Net gains (losses) on investments	81,165	-	81,165
Interest expense on debt related to capital assets	(8,422)	-	(8,422)
Net non-operating revenues	86,761	-	86,761
Income before other revenues, expenses, gains or losses	95,917	(293)	95,624
Change in valuation of split interest agreements	27	-	27
Capital grants and gifts	14,149	-	14,149
Gain (loss) on disposal of capital assets	(79)	-	(79)
Additions to permanent endowments	43,994	-	43,994
Loss on extinguishment of debt	(5,266)		(5,266)
Other revenues (expenses)	(744)	-	(744)
Total other revenues, expenses, gains, or losses	52,081	-	52,081
Increase in net position	147,998	(293)	147,705
Net position - beginning of year	1,055,600	4,443	1,060,043
Net position - end of year	$ 1,203,598	$ 4,150	$ 1,207,748

Contributions Receivable – Virginia Tech Foundation Inc.

The following summarizes unconditional promises to give at June 30, 2017 *(all dollars in thousands)*:

Current receivables	
Receivable in less than one year	$ 42,526
Noncurrent receivables	
Receivable in one to five years	67,665
Receivable in more than five years	19,484
Total noncurrent receivables before allowance	87,149
Less allowance for uncollectible contributions	(8,327)
Net noncurrent contributions receivable	78,822
Total contributions receivable	$ 121,348

The discount rates ranged from 1.33% to 2.53% in 2017. As of June 30, 2017, there were no conditional promises to give.

Investments – Virginia Tech Foundation Inc.

The overall investment objective of the Foundation is to invest its operating funds in a prudent manner that will achieve a long-term rate of return sufficient to fund a portion of its annual operating activities, and to invest its endowed funds in a manner that maintains the purchasing power of the endowment. The Foundation diversifies its investments among various asset classes incorporating multiple strategies and managers. The Foundation Board's Investment Committee, which oversees the Foundation's investment program in accordance with established guidelines, authorizes major investment decisions such as asset allocation and spending.

In addition to traditional equity and fixed-income securities, the Foundation may also hold shares or units in traditional institutional funds, as well as in alternative investment funds involving hedged strategies, private equity and real asset strategies. Hedged strategies involve funds whose managers have the authority to invest in various asset classes at their discretion, including the ability to invest long and short. Funds with hedged strategies generally hold securities or other financial instruments for which a ready market exists and may include stocks, bonds, put or call options, swaps, currency hedges and other instruments, and are valued accordingly. Private equity funds primarily employ buyout and venture capital strategies. Real asset funds generally hold interest in public real estate investment trusts (REITS), public natural resource equities, private commercial real estate, and private natural resources such as power plants and oil and gas companies. Private equity and real asset strategies therefore often require the estimation of fair values by the fund managers in the absence of readily determinable market values. Because of the inherent uncertainties of valuation, these estimated fair values may differ significantly from values that would have been used had a ready market existed, and the differences could be material. Such valuations are determined by fund managers and generally consider variables such as operating results, comparable public earnings multiples, projected cash flows, recent sales prices, and other pertinent information, and Foundation's interests in shares or units of these funds, because of liquidity and capital commitment terms that vary depending on the specific fund or partnership agreement, may differ from the fair value of the funds' underlying net assets.

The following tabulation summarizes changes in relationships between cost and fair value of investments *(all dollars in thousands)*:

	Fair Value	Cost	Net gains (losses)
June 30, 2017	$ 1,138,429	$ 949,802	$ 188,627
June 30, 2016	968,313	843,549	124,764
Unrealized net gain for the year, including net gain on agency deposits held in trust of $10,705			63,863
Realized net gain for the year, including net gain on agency deposits held in trust of $6,148			34,076
Total net gain for the year, including net gain on agency deposits held in trust of $16,853			$ 97,939

Investment management fees incurred in 2017 totaled $1,879.

As of June 30, 2017, long-term investments include investment assets held in internally managed trust funds with a carrying value totaling $53,893.

The foundation is required by Maryland state law to maintain segregated assets for all annuities issued in an amount at least equal to the sum of its outstanding deferred giving arrangements liability discounted to present value. As of June 30, 2017, the foundation had recorded annuity obligations of $6,543. As of June 30, 2017, the foundation had separately invested cash reserves of $11,553, and has met its minimum reserve requirement under Maryland state law.

Fair Value Hierarchy – Virginia Tech Foundation Inc.

ASC Topic 820 established a three-tier 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 lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are as follows:

Level 1 – Inputs that utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that the Foundation has the ability to access.

Level 2 – Inputs that include quoted prices for similar assets and liabilities in active markets and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument. Fair values for these instruments are estimated using pricing models, quoted prices of securities with similar characteristics, or discounted cash flows.

The fair values of the Foundation's corporate debt securities and state, county and municipal securities are obtained from a third-party pricing service provider. The fair values provided by the pricing service provider are estimated using pricing models, where the inputs to those models are based on observable market inputs including credit spreads and broker-dealer quotes, among other inputs. The Foundation classifies the prices obtained from the pricing services with Level 2 of the fair value hierarchy because the underlying inputs are directly observable from active markets. However, the pricing models used do entail a certain amount of subjectivity and therefore differing judgments in how the underlying inputs are modeled could result in different estimates of fair value.

Level 3 – Inputs that are unobservable inputs for the asset or liability, which are typically based on an entity's own assumptions, as there is little, if any, related market activity.

In instances where the determination of fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety.

The assets and liabilities measured at fair value on a recurring basis at June 30, 2017 are presented in the first table on the next page.

The second table on the next page summarizes the Foundation's investments in entities that calculate net asset value as a practical expedient to estimate fair value, as well as liquidity and funding commitments.

Assets Measured at Fair Value - Virginia Tech Foundation Inc.
At June 30, 2017
(all dollars in thousands)

		Fair value measurements at reporting date using			
	Total	Level 1	Level 2	Level 3	NAV *
Assets:					
Contributions Receivable	$ 121,348	$ -	$ -	$ 121,348	$ -
Short-term investments:					
Corporate debt securities	4,283	4,283	-	-	-
U.S. government treasuries	1,514	1,514	-	-	-
U.S. government agencies	2,203	2,203	-	-	-
Total short-term investments	8,000	8,000	-	-	-
Long-term investments:					
Cash and cash equivalents	87,299	87,299	-	-	-
U.S. government treasuries	10,389	10,389	-	-	-
U.S. government agencies	40,324	32,060	8,264	-	-
State, county, and municipal securities	109	-	109	-	-
Corporate debt securities	47,033	29,006	18,027	-	-
Equity securities	242,108	75,403	-	1,613	165,092
Partnerships and other joint ventures	561,985	-	-	-	561,985
Foreign securities	100,569	86,731	-	-	13,838
Real Estate	33,109	-	-	33,109	-
Other	7,504	-	-	7,504	-
Total long-term investments	1,130,429	320,888	26,400	42,226	740,915
Irrevocable trusts held by others	7,770	-	-	7,770	-
Total	$ 1,267,547	$ 328,888	$ 26,400	$ 171,344	$ 740,915

**Certain investments that are measured at fair value using the net asset value per share (or its equivalent) 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 financial statements.*

Assets Measured using NAV Estimate - Virginia Tech Foundation Inc.
At June 30, 2017
(all dollars in thousands)

	Fair value	Uncalled commitments	Remaining life	Redemption frequency	Trade to settle-ment terms	Redemption notice period
Public equity funds [1]	$ 81,957	$ -	N/A	<= Quarterly	5-15 days	30-60 days
Public equity funds [2]	130,358	-	N/A	> Quarterly	5-15 days	30-90 days
Hedge funds [3]	72,315	-	N/A	<= Quarterly	5-15 days	30-90 days
Hedge funds [3]	190,267	-	N/A	> Quarterly	5-15 days	30-180 days
Private credit funds [4]	98,355	47,393	1-10 years	N/A	N/A	N/A
Private equity funds [5]	81,986	40,477	1-10 years	N/A	N/A	N/A
Private real assets funds [6]	85,677	38,783	1-10 years	N/A	N/A	N/A
	$ 740,915	$ 126,653				

1 The amount represents funds that invest in publicly traded equity securities and can be liquidated at each quarter-end or more frequently. There are currently no restrictions on redemption of these investments. The managers invest directly primarily in long equity securities although at times they do opportunistically short equity securities and management seeks to achieve a return in excess of their appropriate equity benchmark such as the MSCI ACWI.

2 The amount represents funds that invest in publicly traded equity securities and can be liquidated at times longer than quarter-end. The longest time to liquidation is 30 months. There are currently no restrictions on redemption of these investments. The managers invest directly primarily in long equity securities although at times they do opportunistically short equity securities and management seeks to achieve a return in excess of their appropriate equity benchmark such as the MSCI ACWI.

3 The amount represents investments in funds that invest in hedge fund strategies such as long/short, event-driven, and global macro. Management of the funds seeks to achieve an annualized return that is at least 7% in excess of the 91-day U.S. Treasury Bill rate. The funds invest both long and short equity and fixed income securities and there is no restriction on the types of securities and financial instruments they are allowed to invest in.

4 The amount represents investments in funds that invest in credit related securities and have a liquidity structure similar to private equity These investments can never be redeemed from the funds and it is estimated that the underlying assets of the fund will be liquidated over the next 1-10 years.

5 The amount represents investments in funds that invest in private equity in buyouts and venture capital and both domestically and internationally. The allocation to buyouts is 93% and to venture capital 7%. Uncalled commitments are approximately $33,500 to buyouts and $6,900 to venture capital. These investments can never be redeemed from the funds and it is estimated that the underlying assets of the fund will be liquidated over the next 1-10 years.

6 The amount represents investments in funds that invest in private real assets in real estate and natural resources primarily domestically. The allocation to real estate is 8% and to natural resources 92%. Uncalled commitments are approximately $100 to real estate and $38,800 to natural resources. These investments can never be redeemed from the funds and it is estimated that the underlying assets of the fund will be liquidated over the next 1-10 years.

Land, Buildings, and Equipment – Virginia Tech Foundation Inc.

A summary of land, buildings, and equipment at cost, less accumulated depreciation for the year ending June 30, 2017 is presented as follows *(all dollars in thousands)*:

Depreciable capital assets	
Buildings	$ 258,211
Equipment and other	35,080
Land improvements	22,935
Total depreciable capital assets, at cost	316,226
Less accumulated depreciation	(113,429)
Total depreciable capital assets, net of accumulated depreciation	202,797
Nondepreciable capital assets	
Land	70,722
Vintage and other collection items	5,686
Livestock	2,212
Construction in progress	5,319
Total nondepreciable capital assets	83,939
Total capital assets, net of accumulated depreciation	$ 286,736

As of June 30, 2017, outstanding contractual commitments for projects under construction approximated $3,400.

Long-Term Debt Payable – Virginia Tech Foundation Inc.

Notes payable

The following is a summary of outstanding notes payable at June 30, 2017 *(all dollars in thousands)*:

Unsecured line of credit note payable due August 1, 2018, plus variable interest at LIBOR plus 0.65% (1.874% as of June 30, 2017)	7,592
Unsecured note payable upon the sale of the hotel and repayment of all debt of the hotel and the Hotel Roanoke Foundation (HRF)	1,775
Secured fixed rate promissory note payable, due in monthly installments of $55 (including interest) with a lump sum payment of $7,602 due October 10, 2017,plus interest at 7.00%, collateralized by certain real properties by Virginia Tech Real Estate Foundation, Inc. (VTREF)	7,571
Total notes payable	$ 16,938

The aggregate annual maturities of notes payable for each of the five years and thereafter subsequent to June 30, 2017, are *(all dollars in thousands)*:

2018	$ 15,163
Upon the sale of the Hotel and repayment of all debt of the Hotel and HRF	1,775
Total notes payable	$ 16,938

During 2003, the foundation used proceeds from borrowings on notes payable totaling $13,800 to provide a loan to an unrelated party through a promissory note receivable. The unrelated party used the proceeds to purchase the University Mall building located in Blacksburg, Virginia. The promissory note receivable, which requires interest payments only until maturity, earns interest at a fixed rate of 6.18% through June 30, 2013 and 6.96% thereafter through June 30, 2023, the maturity date. The promissory note receivable is secured by a first deed of trust in the real property of the University Mall building, as well as the assignment of leases and rents, security agreements and fixture filing statements.

Bonds payable

During fiscal year June 30, 2017, the foundation used the proceeds from Series 2017 bond issuances to refinance all of its Series 2005 and Series 2009A bonds in the amount of $12,065 and $16,495, respectively. The foundation also partially refunded $44,190 of Series 2010A, $5,620 of its Series 2010B and $14,515 of its Series 2011A bonds as well. The foundation defeased or partially refunded these bonds payable by placing the proceeds of new bonds in an irrevocable trust to provide for future debt service payments on the old bonds. Accordingly, the trust account assets and the liability for the defeased or partially refunded bonds are not reflected in the foundation's component unit statements. In connection with the current year bond transactions, the foundation recorded a loss on early extinguishment of debt of $5,266 for the year ended June 30, 2017.

Principal amounts outstanding for these bonds as of June 30, 2017, are as follows *(all dollars in thousands)*:

Bond Series:	
Series 2010A	$ 1,125
Series 2010B	8,970
Series 2011A	33,730
Series 2011B	41,875
Series 2012A	2,316
Series 2012B	5,890
Series 2013A	15,800
Series 2013B	21,090
Series 2017A	38,475
Series 2017B	45,380
Series 2017C	23,750
Unamortized premium on Series 2010A	97
Unamortized premium on Series 2011A	849
Unamortized premium on Series 2013A	642
Unamortized premium on Series 2017A	3,415
Unamortized bond issuance cost	(2,039)
Total bonds payable	$ 241,365

The aggregate annual maturities of bonds payable for each of the five years and thereafter subsequent to June 30, 2017, are as follows *(all dollars in thousands)*:

2018	$ 15,469
2019	16,239
2020	16,863
2021	17,689
2022	15,454
Later years	161,690
Total	$ 243,404

Total interest expense incurred in the aggregate related to notes payable and bonds payable in 2017 totaled $8,452.

The foundation is obligated under Industrial Development Authority of Montgomery County, Virginia Variable Rate Revenue Bonds dated August 25, 2005 (Series 2005). Bond proceeds were used to refinance previously outstanding Series 2001A and Series 2002A bonds. The remainder was used to finance the construction of and equipment purchases for three facilities to be used in support of the university. On June 1, 2017, the Series 2005 bonds, which were to mature on June 1, 2035, were fully refunded in conjunction with the issuance of the Series 2017A and 2017B bonds.

The foundation previously issued Industrial Development Authority of Montgomery County, Virginia Revenue Bonds (Series 2009A) and Taxable Revenue Bonds (Series 2009B) dated February 12, 2009. The Series 2009B bonds, which originally matured on February 1, 2039, were paid off on June 27, 2013, but the Series 2009A bonds remain outstanding. Bond proceeds were used to refinance the previously outstanding Series 2007 bonds, the unsecured variable rate promissory note payable, and an unsecured variable rate commercial note payable, as well as finance the construction of several facilities, primarily for the National Capital Region facility, to be used in support of the university. On June 1, 2017, the Series 2009A bonds, which were to mature on February 1, 2039, were fully refunded in conjunction with the issuance of the Series 2017A and 2017B bonds.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Revenue Refunding Bonds (Series 2010A) and Taxable Revenue Refunding Bonds (Series 2010B) dated August 3, 2010. Proceeds were used to refinance a portion of the outstanding Series 2009A, Series 2009B and Series 2005 bonds and to retire certain interest rate swaps. The original Series 2010A and 2010B bonds, which bear a weighted average fixed interest rate of 4.23% and 4.52%, respectively, had annual serial and sinking fund maturities beginning June 1. 2011 and concluding June 1, 2039 in varying amounts ranging from $1,320 to $3,400. The Series 2017A and 2017B bonds refunded portions of both the Series 2010A and 2010B bonds.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Revenue and Refunding Bonds (Series 2011A) and Taxable Revenue and Refunding Bonds (Series 2011B) dated November 17, 2011. Proceeds were used to refinance all or a portion of the outstanding Series 2000, Series 2005, Series 2009A and Series 2009B bonds, two notes payable, retire certain interest rate swaps, as well as finance the construction of several commercial facilities and several facilities to be used in support of the university. The original Series 2011A and Series 2011B bonds, which bear a weighted average fixed interest rate of 3.69% and 4.03%, respectively, had annual serial and sinking fund maturities beginning June 1, 2012 and concluding June 1, 2039 in varying amounts ranging from $1,505 to $5,200. The Series 2017A and Series 2017B bonds, refunded portions of the Series 2011A.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Tax-Exempt Revenue and Refunding Bonds (Series 2012A) and Taxable Revenue and Refunding Bonds (Series 2012B) dated December 1, 2012. Proceeds were used to refinance a portion of the outstanding Series 2009B bonds and to finance the construction of several facilities to be used in support of the University. During 2014, an additional $1,817 was borrowed on the Series 2012B bonds to finance the construction of a facility to be used in support of the University. The Series 2012A bonds, which bear a fixed interest rate of 1.99%, have monthly payments of principal and interest beginning February 1, 2013 and concluding June 1, 2022. The Series 2012B bonds, bore a variable interest rate of LIBOR plus 125 basis points (1.44% at June 30, 2013), until the final advance date of October 1, 2013, and thereafter bear a fixed interest rate of 3.05%, have monthly interest commencing on February 1, 2013 and have monthly payments of principal and interest beginning November 1, 2013 and concluding on January 1, 2033. The Series 2012B bonds are subject to mandatory tender on December 27, 2022 at the bondholder's option.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Revenue and Refunding Bonds (Series 2013A) and Taxable Revenue and Refunding Bonds (series 2013B) dated October 30, 2013. Proceeds were used to finance the construction of several commercial facilities and several facilities to be used in support of the University. The bonds, which bear a weighted average fixed interest rate of 3.95% and 3.87%, have annual serial and sinking fund maturities beginning June 1, 2014 and concluding June 1, 2038 in varying amounts ranging from $280 to $4,010.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Revenue and Refunding Bonds (Series 2017A) and Taxable Revenue and Refunding Bonds (series 2017B) dated May 17, 2017. Proceeds were used to refinance all or a portion of the outstanding Series 2009A, Series 2010A, Series 2010B, and Series 2011A bonds, refinance the outstanding VTREF notes payable, and renovate a facility used in support of the University. The bonds, which bear a weighted average fixed interest rate of 2.93% and 3.43%, have annual serial and sinking fund maturities beginning June 1, 2018 and concluding June 1, 2039 in varying amounts ranging from $580 to $4,670. At June 30, 2017, unspent bond proceeds of $10,763 are included in restricted cash and cash equivalents.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Revenue and Refunding Bonds (Series 2017C) dated May 17, 2017. Proceeds were used to refinance all or a portion of the outstanding Series 2005 and Series 2009A bonds. The bonds, which bear a variable interest rate, have annual serial maturities beginning June 1, 2018 and concluding June 1, 2027 in varying amounts ranging from $1,340 to $3,380.

Interest Rate Swaps

Effective September 1, 2005, the foundation entered into an interest rate swap agreement (Swap 1) with a lending institution. This agreement was based on the principal balances of the Series 2001A and Series 2002A bond issues, which were refinanced by the Series 2005 bonds and most recently by the Series 2017C bonds. The foundation participates as a fixed rate payer, with a fixed rate of 3.265% for a 17-year term ending June 1, 2022. The lending institution participates as a floating rate payer, with a floating interest rate, which is calculated based on the weighted average of 70% of USD-LIBOR-BBA and was 0.803% at June 30, 2017.

Effective September 1, 2006, the foundation entered into an interest rate swap agreement (Swap 2) with a lending institution. This agreement was based on the principal balances of the Series 2005 bond issue, which were refinanced by the Series 2017C bonds. The foundation participates as a fixed rate payer, with a fixed rate of 3.213% ending June 1, 2025. The lending institution participates as a floating rate payer, with a floating interest rate, which is calculated based on the weighted average of 70% of USD-LIBOR-BBA and was 0.794% at June 30, 2017.

Effective March 14, 2007, the foundation entered into an interest rate swap agreement (Swap 3) with a lending institution. This agreement was based on the principal balances of the Series 2007 bond issue, which were refinanced by the Series 2009 bonds and more recently by the 2017C bonds. The foundation participates as a fixed rate payer, with a fixed rate of 3.737% ending June 1, 2027. The lending institution participates as a floating rate payer, with a floating interest rate, which is calculated based on the weighted average of SIFMA Municipal Swap Index and was 0.803% at June 30, 2017.

The following table summarizes the fair values of the foundation's interest rate swaps and changes in the fair values of the swaps (*all dollars in thousands*):

	Fair Values	Change in Fair Value
Swap 1	$ 311	$ 284
Swap 2	561	385
Swap 3	1,401	841
Total	$ 2,273	$ 1,510

Agency Deposits Held in Trust – Virginia Tech Foundation Inc.

Under an agreement between the university and the foundation, the foundation serves as agent in connection with the investment, management, and administration of the Pratt Estate. In addition, the foundation serves as agent and maintains investments for the Virginia Tech Alumni Association Inc., Virginia Tech Services Inc., and certain other associations.

A summary of agency deposits held in trust for the year ending June 30, 2017 is presented as follows *(all dollars in thousands)*:

University—Pratt Estate	$ 46,650
University—Other	146,522
Virginia Tech Alumni Association, Inc.	4,494
Virginia Tech Services, Inc.	1,817
Other	4,671
Total agency deposits held in trust	$ 204,154

26. Joint Ventures

The Hotel Roanoke Conference Center Commission was created by a joint resolution of the university and the City of Roanoke. The purpose of the commission is to establish and operate a publicly owned conference center in Roanoke adjacent to the renovated Hotel Roanoke. The powers of the commission are vested in commissioners. Each participating governing body appoints three commissioners for a total of six commissioners. The commission has the authority to issue debt, and such debt is the responsibility of the commission. The intention of the commission is to be self-supporting through its user fees. The university and the City of Roanoke equally share in any operating deficit or additional funding needed for capital expenditures. The university made contributions of $80,000 using private funds to the commission for the fiscal year ended June 30, 2017.

The Virginia Tech Carilion School of Medicine was established as a 501(c)(3) nonprofit organization. This joint venture receives oversight from a board of directors. Virginia Tech and Carilion Clinic (formerly known as Carilion Health System) each appoint two members to the board of directors. The board then appoints six additional independent board members. The commonwealth provided the capital funds to construct a facility on land owned by Carilion Clinic under a public-private partnership. This facility provides space for the Virginia Tech Carilion School of Medicine and the Virginia Tech Carilion Research Institute, a part of Virginia Tech. Approximately one-third of the facility is occupied by the school of medicine with the remaining space allocated to the research institute. The university contributed approximately $2.7 million towards the expenses for this joint venture in fiscal year 2017.

27. Jointly Governed Organizations

NRV Regional Water Authority

Created by a concurrent resolution of the university, the towns of Blacksburg and Christiansburg and joined by the county of Montgomery in fiscal year 2013, the authority operates and maintains the water supply system for the university and the other participating governing bodies. A six-member board governs the authority with one member appointed by each governing body and two at-large members appointed by the joint resolution of each of the governing bodies. The authority's indebtedness is not an obligation of the university and is payable solely from the revenues of the authority. The university paid $1,073,000 to the authority for the purchase of water for the fiscal year ended June 30, 2017.

Blacksburg-VPI Sanitation Authority

Created by a concurrent resolution of the university and the town of Blacksburg, the authority operates and maintains the wastewater treatment system for the participating governing bodies. Each participating governing body appoints one member of the five-member board of directors. Three at-large members are appointed by the joint resolution of each of the governing bodies. The authority's indebtedness is not an obligation of the university and is payable solely from the revenues of the authority. The university paid $935,000 to the authority for the purchase of sewer services for the fiscal year ended June 30, 2017.

Montgomery Regional Solid Waste Authority

Created by a joint resolution of the university, the towns of Blacksburg and Christiansburg, and the county of Montgomery, the authority represents its members in solid waste and recycling issues, as well as operating a recycling facility. The authority is governed by its board with each participating governing body appointing one board member, and all governing bodies jointly appointing the fifth at-large member. Each governing body provides collection of solid waste and recyclables from within its jurisdiction and delivers the collected materials to the authority for disposal of the waste, and the processing and marketing of the recyclables. All indebtedness is the obligation of the authority and payable from its revenues. The university paid $218,000 to the authority for tipping fees for the fiscal year ended June 30, 2017.

Virginia Tech/Montgomery Regional Airport Authority

Created by a joint resolution of the university, the towns of Blacksburg and Christiansburg, and the county of Montgomery, this authority serves to develop a regional airport based on the mission of servicing corporate executive markets and other general aviation markets; obtaining grants, loans and other funding for airport improvements and other activities; and in promoting and assisting in regional economic development. The authority is governed by its board, which consists of five members. Each participating governing body appoints one member of the board, and jointly all governing bodies appoint the fifth member. All indebtedness is the obligation of the authority and payable from its revenues. The university's funding commitment for fiscal year 2017 was $50,000, all of which Virginia Tech paid to the authority.

New River Valley Emergency Communications Regional Authority

Created by a joint resolution of the university, towns of Blacksburg and Christiansburg, and the county of Montgomery, this authority supports the formation of a regional authority to provide 911 dispatch and emergency communication services to the people of each jurisdiction and campus. The authority is governed by its board, which consists of five members. Each participating governing body appoints one member of the board, and jointly all governing bodies appoint the fifth member. The university paid $779,000 to the authority as its 25% Operating Budget contribution for the fiscal year ended June 30, 2017.

28. Risk Management and Employee Health Care Plans

The university is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; nonperformance of duty; injuries to employees; and natural disasters. The university participates in insurance plans maintained by the Commonwealth of Virginia. The state employee health care and worker's compensation plans are administered by the Department of Human Resource Management and the risk management insurance plans are administered by the Department of Treasury, Division of Risk Management. Risk management insurance includes property, general liability, medical malpractice, faithful performance of duty bond, automobile, boiler and machinery, and air and watercraft plans. The university pays premiums to the Commonwealth of Virginia for the aforementioned insurance coverage. In addition, the university contracts with private insurers to provide additional fidelity bonding coverage, automobile physical damage coverage, business interruption coverage for the Equine Medical Center and overseas liability coverage. Information relating to the commonwealth's insurance plans is available in the Commonwealth of Virginia's *Comprehensive Annual Financial Report.*

29. Pending Litigation

The university has been named as a defendant in a number of lawsuits. The final outcome of the lawsuits cannot be determined at this time. However, management is of the opinion that any ultimate liability to which the university may be exposed will not have a material effect upon the university's financial position.

Required Supplementary Information

Schedule of Virginia Tech's Share of Net Pension Liability*

For the year ended June 30
(all dollars in thousands)

	2017		2016		2015	
	SERP	VaLORS	SERP	VaLORS	SERP	VaLORS
Proportion of net pension liability	6.58%	0.67%	6.52%	0.66%	6.30%	0.70%
Proportionate share of net pension liability	$ 433,375	$ 5,201	$ 398,980	$ 4,716	$ 352,916	$ 4,706
Covered payroll	$ 263,416	$ 2,328	$ 246,888	$ 2,247	$ 243,099	$ 2,461
Proportionate share of net pension liability as a percentage of covered payroll	164.52%	223.41%	161.60%	209.88%	145.17%	191.22%
Plan fiduciary net position as a percentage of total pension liability	71.29%	61.01%	72.81%	62.64%	74.28%	63.05%

**The amounts presented have a measurement date of the previous fiscal year end.*

Schedule of Employer Contributions (SERP)

For the years ended June 30, 2015 - 2017
(all dollars in thousands)

	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a percentage of covered payroll
2017	$ 35,348	$ 35,348	$ -	$ 262,376	13.47%
2016	$ 36,931	$ 36,931	$ -	$ 263,416	14.00%
2015	$ 30,392	$ 30,392	$ -	$ 246,488	12.30%

Schedule of Employer Contributions (VaLORS)

For the years ended June 30, 2015 - 2017
(all dollars in thousands)

	Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a percentage of covered payroll
2017	$ 487	$ 487	$ -	$ 2,315	21.04%
2016	$ 439	$ 439	$ -	$ 2,328	18.86%
2015	$ 397	$ 397	$ -	$ 2,247	17.67%

The schedules above are intended to show information for 10 years. Since 2015 was the first year for this presentation, only three years are available.

Notes to Required Supplementary Information

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this is still a fairly new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2016 are not material. The following changes in actuarial assumptions were made for the retirement plans effective June 30, 2013 based on the most recent experience study of the System for the four-year period ending June 30, 2012:

VRS - State Employee Retirement Plan (SERP)
- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of withdrawals for less than 10 years of service
- Decrease in rates of male disability retirement
- Reduce rates of salary increase by 0.25% per year

VaLORS Retirement Plan
- Update mortality table
- Adjustments to the rates of service retirement
- Decrease in rates of withdrawals for females under 10 years of service
- Increase in rates of disability
- Decrease service related disability rate from 60% to 50%

Optional Supplementary Information

Virginia Tech Foundation Inc.

The purpose of Virginia Tech Foundation Inc. is to receive, invest, and manage private funds given for the support of programs at Virginia Tech and to foster and promote the growth, progress, and general welfare of the university.

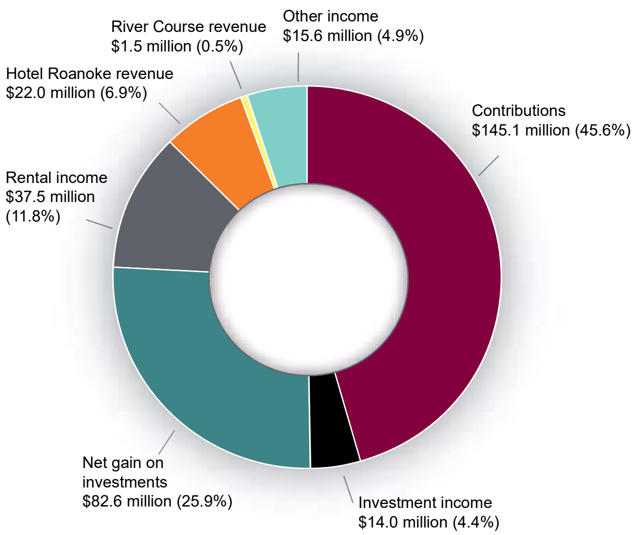
During the current fiscal year, the foundation recognized $145.1 million in contributions for support of the university. Investment income of $14.0 million, along with net gain on investments of $82.6 million, resulted in a $96.6 million net gain on investment activity. Property rental, hotel operating, and golf course income totaled $61.0 million. Other income accounted for $15.6 million.

Total income of $318.3 million was offset by $164.3 million in expenses that supported the university and its programs. Direct support to various university programs aggregated $104.5 million, which included $24.2 million in scholarship support to students and faculty and $12.6 million towards university capital projects. Additional expenses such as fund-raising, management and general, research center, hotel operating, golf course, and other costs totaled $59.8 million. Total net position increased by $148 million over the previous year.

The graphs below are categorized as presented in the audited financial statements for the foundation that follows the Financial Accounting Standards Board (FASB) presentation requirements.

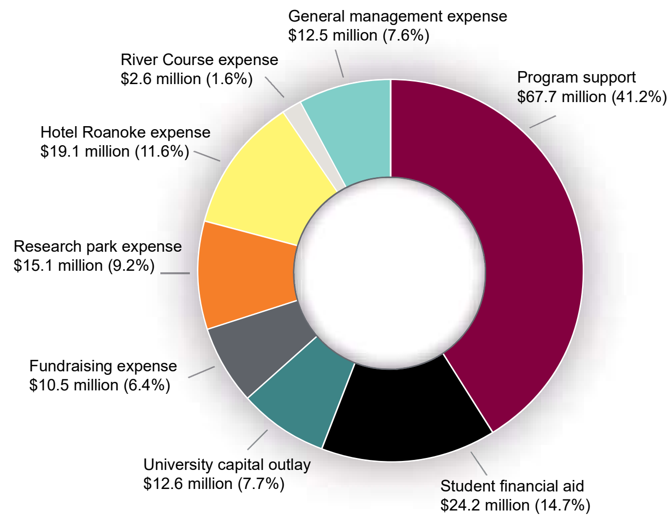
Virginia Tech Foundation Revenues and Investment Gains

For the year ended June 30, 2017
(*all dollars in millions*)



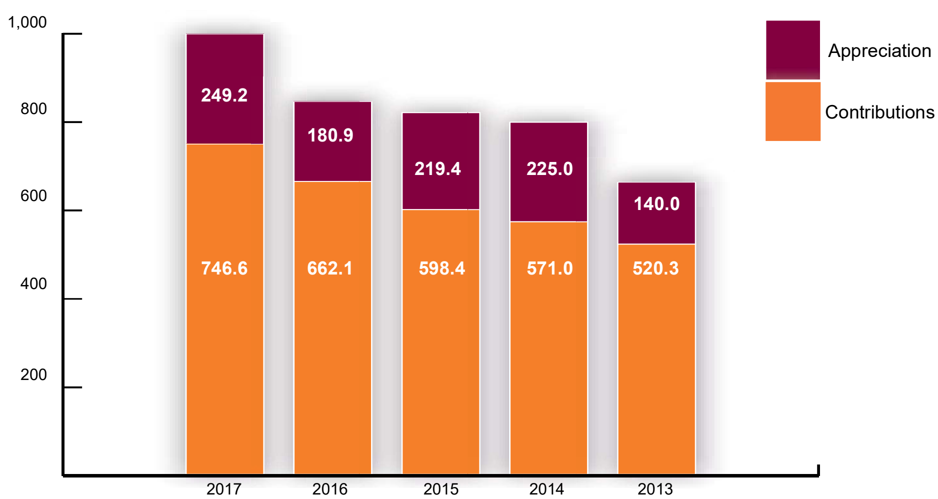
Virginia Tech Foundation Expenses

For the year ended June 30, 2017
(*all dollars in millions*)



Virginia Tech Foundation Endowment Market Value*

For the year ended June 30, 2017
(*all dollars in millions*)



*Market value of Endowment Funds includes agency deposits held in trust of $204.2 million.

Affiliated Corporations Financial Highlights

For the years ended June 30, 2017-2013

(all dollars in thousands)

	2017	2016	2015	2014	2013
Assets					
Virginia Tech Foundation Inc.	$ 1,723,910	$ 1,510,647	$ 1,507,958	$ 1,488,766	$ 1,302,619
Virginia Tech Innovation Corporation	11,956	12,645	-	-	-
Virginia Tech Services Inc.	10,595	11,334	12,786	10,513	12,416
Virginia Tech Applied Research Corporation	3,696	3,357	4,318	5,128	5,557
Virginia Tech Intellectual Properties Inc.	933	1,405	1,384	1,894	1,795
Total Assets	$ 1,751,090	$ 1,539,388	$ 1,526,446	$ 1,506,301	$ 1,322,387
Revenues					
Virginia Tech Foundation Inc.	$ 318,291	$ 172,130	$ 212,851	$ 273,176	$ 225,897
Virginia Tech Innovation Corporation	5,401	4,348	-	-	-
Virginia Tech Services Inc.	22,187	24,398	22,791	23,481	24,139
Virginia Tech Applied Research Corporation	9,233	6,284	6,785	8,184	2,765
Virginia Tech Intellectual Properties Inc.	2,016	2,366	2,190	2,280	2,202
Total Revenues	$ 357,128	$ 209,526	$ 244,617	$ 307,121	$ 255,003
Expenses					
Virginia Tech Foundation Inc.	$ 164,310	$ 184,904	$ 166,523	$ 155,857	$ 143,303
Virginia Tech Innovation Corporation	4,993	4,321	-	-	-
Virginia Tech Services Inc.	22,480	24,383	22,790	23,451	24,047
Virginia Tech Applied Research Corporation	8,640	7,919	8,856	10,187	7,638
Virginia Tech Intellectual Properties Inc.	2,235	2,389	2,481	2,169	2,162
Total Expenses	$ 202,658	$ 223,916	$ 200,650	$ 191,664	$ 177,150

The organizations included above are related to the university by affiliation agreements. These agreements, approved by the Virginia Tech Board of Visitors, require an annual audit to be performed by independent auditors. These auditors have examined the financial records of the organizations presented in the table above and copies of their audit reports have been provided to the university. Values presented in this table are based solely upon these audit reports and do not include any consolidation entries to alter these amounts. Affiliated organizations that hold no financial assets and certify all financial activities or transactions through the Virginia Tech Foundation Inc. may be exempt from the independent audit requirement. Virginia Tech Athletic Fund Inc., Virginia Tech Corps of Cadets Alumni Inc., and Virginia Tech Alumni Association meet exemption requirements and are not presented separately in this table. Additionally, Virginia Tech India Research and Education Forum (VTIREF) is not presented in this table due to the immateriality of its financial figures in comparison with the organizations included.

Consolidating Schedule of Net Position

As of June 30, 2017

(all dollars in thousands)

	Current Funds Unrestricted	Current Funds Restricted	Loan Funds	Endowment & Similar Funds	Plant Funds	Agency Funds	Total
Assets							
Current Assets							
Cash and cash equivalents *(Notes 1, 4)*	$ 55,937	$ 26,777	$ 2,176	$ -	$ -	$ 16,578	$ 101,468
Short-term investments *(Notes 1, 4, 25)*	-	-	-	-	-	-	-
Accounts and contributions receivable, net *(Notes 1, 5, 25)*	24,968	49,559	-	-	-	-	74,527
Notes receivable, net *(Notes 1, 7)*	-	-	1,187	-	-	-	1,187
Due from Commonwealth of Virginia *(Note 10)*	16,522	150	-	-	-	-	16,672
Inventories	10,149	-	-	-	-	-	10,149
Prepaid expenses *(Note 1)*	16,469	108	-	-	-	-	16,577
Due to (from) other funds	(7,050)	7,220	(70)	(542)	442	-	-
Total current assets	116,995	83,814	3,293	(542)	442	16,578	220,580
Noncurrent assets							
Cash and cash equivalents *(Notes 1, 4)*	-	-	-	6	49,965	-	49,971
Due from Commonwealth of Virginia *(Note 10)*	-	-	-	-	30,333	-	30,333
Accounts and contributions receivable, net *(Notes 1, 5, 25)*	-	-	-	-	2,940	-	2,940
Notes receivable, net *(Notes 1, 7)*	4,170	-	14,908	-	-	-	19,078
Net investments in direct financing leases	-	-	-	-	-	-	-
Irrevocable trusts held by others, net	-	-	-	-	-	-	-
Long-term investments *(Notes 4, 25)*	401,723	-	-	68,026	55,213	-	524,962
Depreciable capital assets, net *(Notes 9, 25)*	25	-	-	-	1,471,418	-	1,471,443
Nondepreciable capital assets *(Notes 9, 25)*	-	-	-	-	209,070	-	209,070
Other assets	93	-	-	-	-	-	93
Total noncurrent assets	406,011	-	14,908	68,032	1,818,939	-	2,307,890
Total assets	523,006	83,814	18,201	67,490	1,819,381	16,578	2,528,470
Deferred outflows of resources							
Deferred loss on long-term debt defeasance *(Notes 1, 14)*	-	-	-	-	9,747	-	9,747
Deferred outflow for VRS pension *(Notes 1, 18)*	71,294	3,543	-	-	-	-	74,837
Total deferred outflows	71,294	3,543	-	-	9,747	-	84,584
Liabilities							
Current liabilities							
Accounts payable and accrued liabilities *(Note 6)*	104,139	18,001	-	-	17,343	823	140,306
Accrued compensated absences *(Notes 1, 15)*	20,858	4,378	-	-	-	-	25,236
Unearned revenue *(Notes 1, 8)*	27,049	16,187	-	-	-	-	43,236
Funds held in custody for others *(Note 1)*	-	-	-	-	-	15,755	15,755
Commercial paper *(Note 11)*	-	-	-	-	6,520	-	6,520
Long-term debt payable *(Notes 12, 13, 25)*	-	-	-	-	30,605	-	30,605
Other liabilities	-	-	-	-	-	-	-
Total current liabilities	152,046	38,566	-	-	54,468	16,578	261,658
Noncurrent liabilities							
Pension liability *(Note 15)*	436,686	1,890	-	-	-	-	438,576
Accrued compensated absences *(Notes 1, 15)*	15,266	3,071	-	-	-	-	18,337
Federal student loan program contributions refundable *(Note 15)*	-	-	13,694	-	-	-	13,694
Long-term debt payable *(Notes 12, 13, 25)*	-	-	-	-	463,605	-	463,605
Other liabilities	1,871	-	-	-	-	-	1,871
Total noncurrent liabilities	453,823	4,961	13,694	-	463,605	-	936,083
Total liabilities	605,869	43,527	13,694	-	518,073	16,578	1,197,741
Deferred inflows of resources							
Deferred gain on long-term debt defeasance *(Notes 1, 14)*	-	-	-	-	1,038	-	1,038
Deferred inflow for VRS pension *(Notes 1, 18)*	11,943	-	-	-	-	-	11,943
Total deferred outflows	11,943	-	-	-	1,038	-	12,981
Net Position							
Net investment in capital assets	-	-	-	-	1,201,333	-	1,201,333
Restricted, nonexpendable	-	-	-	355	-	-	355
Restricted, expendable							
Scholarships, research, instruction, and other	-	43,830	4,507	67,135	-	-	115,472
Capital projects	-	-	-	-	39,676	-	39,676
Debt service and auxiliary operations	-	-	-	-	69,008	-	69,008
Unrestricted	(23,512)	-	-	-	-	-	(23,512)
Total net position	$ (23,512)	$ 43,830	$ 4,507	$ 67,490	$ 1,310,017	$ -	$ 1,402,332

Consolidating Schedule of Revenues, Expenses, and Changes in Net Position

As of June 30, 2017
(all dollars in thousands)

	Current Funds		Loan	Endowment &	Plant	
	Unrestricted	Restricted	Funds	Similar Funds	Funds	Total
Operating revenues						
Student tuition and fees	$ 458,392	$ 3,358	$ -	$ -	$ -	$ 461,750
Federal appropriations	-	14,789	-	-	-	14,789
Federal grants and contracts	48,320	149,493	-	-	692	198,505
Federal ARRA grants and contracts	-	-	-	-	-	-
State grants and contracts	782	11,225	-	-	-	12,007
Local grants and contracts	296	13,938	-	-	-	14,234
Nongovernmental grants and contracts	9,809	41,428	-	-	1	51,238
Sales and services of educational departments	17,965	14	-	-	-	17,979
Auxiliary enterprise revenue	251,854	-	-	-	-	251,854
Other operating revenues	6,718	2,354	82	-	-	9,154
Total operating revenues	794,136	236,599	82	-	693	1,031,510
Operating expenses						
Instruction	350,795	7,076	-	-	-	357,871
Research	121,047	190,250	-	-	-	311,297
Public service	55,660	42,101	-	-	-	97,761
Academic support	84,570	2,846	-	-	-	87,416
Student services	17,415	1,212	-	-	-	18,627
Institutional support	62,174	8,102	-	-	-	70,276
Operation and maintenance of plant	77,178	3	-	-	7,736	84,917
Student financial assistance	1,925	14,563	-	-	-	16,488
Auxiliary enterprises	218,712	-	-	-	-	218,712
Depreciation and amortization	-	-	-	-	101,310	101,310
Other operating expenses	-	-	55	-	-	55
Total operating expenses	989,476	266,153	55	-	109,046	1,364,730
Operating loss	(195,340)	(29,554)	27	-	(108,353)	(333,220)
Non-operating revenues (expenses)						
State appropriations	232,784	28,933	-	-	-	261,717
Gifts	19,968	41,557	115	-	-	61,640
Non-operating grants and contracts	-	2,509	-	-	-	2,509
Federal student financial aid (Pell)	-	17,620	-	-	-	17,620
Investment income, net of investment expense	2,334	(697)	-	15,869	985	18,491
Other additions	6,121	560	-	-	1,448	8,129
Nongeneral fund reversion	-	-	-	-	-	-
Interest expense on debt related to capital assets	-	-	-	-	(14,851)	(14,851)
Net non-operating revenues (expenses)	261,207	90,482	115	15,869	(12,418)	355,255
Income (loss) before other revenues, expenses, gains, or losses	65,867	60,928	142	15,869	(120,771)	22,035
Capital appropriations	-	-	-	-	-	-
Capital grants and gifts	16,700	2,671	-	-	25,136	44,507
Loss on disposal of capital assets	-	-	-	-	(2,530)	(2,530)
Total other revenues, expenses, gains, and losses	16,700	2,671	-	-	22,606	41,977
Increase in net position	82,567	63,599	142	15,869	(98,165)	64,012
Mandatory transfers	(31,172)	(685)	-	-	31,857	-
Nonmandatory transfers	(60,301)	2,875	-	(10,391)	67,817	-
Equipment and library book transfers	(36,998)	(4,738)	-	-	41,736	-
Scholarship allowance transfer	57,696	(57,696)	-	-	-	-
Total transfers	(70,775)	(60,244)	-	(10,391)	141,410	-
Increase in net position after transfers	11,792	3,355	142	5,478	43,245	64,012
Net position - beginning of year	(35,304)	40,475	4,365	62,012	1,266,772	1,338,320
Net position - end of year	$ (23,512)	$ 43,830	$ 4,507	$ 67,490	$ 1,310,017	$ 1,402,332

Commonwealth of Virginia

Auditor of Public Accounts

Martha S. Mavredes, CPA
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

November 3, 2017

The Honorable Terence R. McAuliffe
Governor of Virginia

The Honorable Robert D. Orrock, Sr.
Chairman, Joint Legislative Audit
and Review Commission

Board of Visitors
Virginia Polytechnic Institute and State University

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, the financial statements of the business-type activities and aggregate discretely presented component units of Virginia Polytechnic Institute and State University as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the University's basic financial statements and have issued our report thereon dated November 3, 2017. Our report includes a reference to other auditors. We did not consider internal controls over financial reporting or test compliance with certain provisions of laws, regulations, contracts, and grant agreements for the financial statements of the component units of the University, which were audited by other auditors in accordance with auditing standards generally accepted in the United States of America, but not in accordance with Government Auditing Standards.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the University's internal control over financial reporting to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over financial reporting.

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

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

Compliance and Other Matters

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

Purpose of this Report

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

AUDITOR OF PUBLIC ACCOUNTS

JMR/clj

Administrative Officers

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Mehmood S. Kazmi

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Deborah L. Petrine

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Mehul P. Sanghani

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Associate Vice President and Chief Facilities Officer

Kenneth E. Miller
Assistant Vice President for Finance and University Controller

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Director, University Internal Audit

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A. Jack Davis
College of Architecture and Urban Studies

G. Don Taylor, interim
College of Engineering

Rosemary Blieszner, interim
College of Liberal Arts and Human Sciences

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College of Science

Cyril R. Clarke
Virginia-Maryland College of Veterinary Medicine

Cynda Ann Johnson
Virginia Tech Carilion School of Medicine

Tyler O. Walters
University Libraries

* As of June 30, 2017

Prepared by the Virginia Tech Office of the University Controller, Blacksburg, VA 24061. Published January 2018.
This report and reports from prior years are available at www.controller.vt.edu/resources/financialreporting.html.
For more information, contact the Financial Reporting department at 540.231.6418.