

## Committee Minutes

### COMPLIANCE, AUDIT, AND RISK COMMITTEE

March 19, 2023

#### Closed Session

**Board Members Present:** Sharon Brickhouse Martin (Chair), David Calhoun, Carrie Chenery, Sandy Davis, Tish Long (Rector), Chris Petersen

**Virginia Tech Personnel:** Suzanne Griffin, Ryan Hamilton, Kay Heidbreder, Sharon Kurek, Randy Marchany, Scott Midkiff, Ken Miller, Justin Noble, Kim O'Rourke, Ryan Orren, Zo Qazi, Timothy Sands, Amy Sebring, Dan Sui, Don Taylor

1. **Motion to Begin Closed Session:** Motion to begin closed session.
2. **Internal Audit Reports:** The following confidential internal audit reports were issued by the Office of Audit, Risk, and Compliance (OARC) since the November board meeting. Where applicable, management developed action plans to effectively address the issues in the report with a reasonable implementation timeframe. OARC conducts follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations.
  - a. IT: Advanced Research Computing: The audit received a rating of improvements are recommended. An observation was noted regarding processes related to cluster security and management. A low priority observation was noted related to environmental controls.
  - b. IT: Cybersecurity Incident Response: The audit received a rating of improvements are recommended. Observations were noted to enhance incident response guidelines and address lessons learned during a recent cybersecurity incident. An additional low-priority recommendation of a less significant nature was also noted to improve awareness of the university's incident response guidelines.
  - c. College of Engineering Policy Compliance Review: The audit received a rating of improvements are recommended. Audit recommendations were issued to management where opportunities for further improvement were noted in the

areas of fiscal responsibility, wage payroll, fixed asset management, information technology, and emergency preparedness.

3. **Partnership of IT Risk Assessment and Audit Assurance:** The Committee received an update on the university IT transformation efforts regarding the IT risk assessment process as units work to improve the university's information security posture. The results from an inventory and classification of university-owned IT systems and developed software conducted by Virginia Tech departments were shared. The third and final step of the IT risk assessment will be to complete a questionnaire on controls and risks by May 5, 2023, which will allow the university and units to better understand and mitigate the IT security risks faced. Internal Audit's approach to providing assurance on information technology risks, utilizing information captured in the IT risk assessment process, was also discussed. The Committee Chair expressed appreciation to leadership for the accelerated due dates for Phase 1 to ensure the university understood its inventory and classification of university-owned IT systems and developed software.
4. **Update on Fraud, Waste, and Abuse Cases:** The Committee received an update on outstanding fraud, waste, and abuse cases.
5. **Discussion on Legal Compliance Risk:** The Committee discussed legal and compliance risks related to an investigation.
6. **Discussion with the Director of Internal Audit:** The Director discussed employee performance and evaluation of performance of departments or schools of public institutions of higher education where such evaluation will involve discussion of the performance of specific individuals.
7. **Discussion with the Executive Director of Audit, Risk, and Compliance:** The Executive Director discussed employee performance and evaluation of performance of departments or schools of public institutions of higher education where such evaluation will involve discussion of the performance of specific individuals.
8. **Motion to End Closed Session:** Motion to end closed session.

## **Open Session**

**Board Members Present:** Sharon Brickhouse Martin (Chair), David Calhoun, Carrie Chenery, Sandy Davis, Tish Long (Rector), Chris Petersen, Serena Young (Staff Rep)

**Virginia Tech Personnel:** Laura Belmonte, Brock Burroughs, Al Cooper, Alisha Ebert, Emily Gibson, Suzanne Griffin, Ryan Hamilton, Kay Heidbreder, Matt Holt, Chris Kiwus, Sharon Kurek, Jack Leff, Randy Marchany, Ken McCrery, Scott Midkiff, Ken Miller, Justin Noble, Kim O'Rourke, Ryan Orren, Mark Owczarski, James Perkins, Zo Qazi, Timothy Sands, Amy Sebring, Don Taylor, Dwyn Taylor, Jon Clark Teglas, Tracy Vosburgh, Melinda West

**Guests:** Riley DeHority, Andrew Gunsch, Theresa Zeigler

1. **Welcome and Introductory Remarks:** The chair of the Compliance, Audit, and Risk Committee provided opening remarks.
2. **Consent Agenda:** The Committee considered and approved the items listed on the Consent Agenda.
  - a. **Minutes from the November 14, 2022 Meeting:** The Committee reviewed and approved the minutes of the November 14, 2022 meeting.
  - b. **Update of Responses to Open Internal Audit Comments:** The Committee reviewed the university's update of responses to all previously issued internal audit reports. As of September 30, 2022, the university had 18 open recommendations. Four audit comments were issued during the second quarter of the fiscal year. As of December 31, 2022, the university had addressed four comments, leaving 18 open recommendations in progress.
  - c. **Audit Plan Status Report:** The committee reviewed the Audit Plan Status Report. The Office of Audit, Risk, and Compliance (OARC) has completed 31 percent of its audit plan, and 85 percent is underway, in accordance with the fiscal year 2022-23 annual audit plan.
  - d. **Internal Audit Reports:** The following internal audit reports were issued by OARC since the November 14, 2022 meeting. Where applicable, management developed action plans to effectively address the issues in the report with a reasonable implementation timeframe. As noted above,

OARC conducts follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations.

- i. **Civil & Environmental Engineering:** The audit received a rating of improvements are recommended. Observations were noted to improve management of laboratory safety training and access.
    - ii. **Licensing and Trademarks:** The audit received a rating of improvements are recommended. Observations were noted regarding enhanced monitoring over the university's licensing and trademark contract.
    - iii. **University Registrar:** The audit received an effective rating.
    - iv. **VCE Southwest District:** The audit received a rating of improvements are recommended. Observations were noted regarding background screenings, fixed asset management, and funds handling. A low-priority recommendation of a less significant nature was noted regarding state vehicle maintenance.
  - e. **Auditor of Public Accounts Financial Statement Audit:** The Committee received a report on the Auditor of Public Accounts (APA) audit of the university's financial statements for the fiscal year ended June 30, 2022. During the audit, the APA found the financial statements were presented fairly in all material respects, and there were no internal control findings requiring management's attention.
3. **Resolution on Information Technology Monitoring:** The Committee reviewed and approved a resolution regarding what measures should be taken to mitigate cyber threats and maintain the security, integrity, and availability of the university's information systems. Specifically, that to mitigate the elevated risk to the university and those individuals who potentially could be impacted by threats to its information technology infrastructure, data and other IT assets, the Board of Visitors directed leadership of the university to enhance monitoring of electronic communications and records whether stored on university technology resources, in the university's cloud storage, or in transit on the university network; that all relevant policies and standards be revised accordingly; and that authority be delegated to the Executive Vice President and Chief Operating Officer (or designee) to make further revisions or create new policies and standards as necessary. Leadership was asked to continue to focus on communication with all

constituent groups impacted by the IT transformation. The Committee approved the resolution and recommended it to the full board for approval.

4. **Capital Construction Audit Program:** The Committee received an overview on the university's capital construction program and an update on OARC's outsourced construction audit program in support of the institutional enterprise risk management framework. The university has an active capital portfolio that eclipses one billion dollars across 18 current projects. Internal Audit, in partnership with Capital Construction, oversees the outsourced program that assists the institution in managing this critical enterprise risk.
5. **Discussion of Future Topics:** The Committee discussed topics to be covered in future committee meetings, including new legislative changes that could impact the university.

## Closed Session Agenda

### COMPLIANCE, AUDIT, AND RISK COMMITTEE

The Inn at Virginia Tech – Cascades

March 19, 2023

9:00 a.m.

<u>Agenda Item</u>	<u>Reporting Responsibility</u>
1. Motion to Begin Closed Session	David Calhoun
2. Internal Audit Reports	Justin Noble
a. IT: Advanced Research Computing	
b. IT: Cybersecurity Incident Response	
c. College of Engineering Policy Compliance Review	
<b>+ #</b> 3. Partnership of IT Risk Assessment and Audit Assurance	Scott Midkiff Randy Marchany Ryan Orren Justin Noble
4. Update on Fraud, Waste, and Abuse Cases	Ryan Hamilton Sharon Kurek
5. Discussion on Legal Compliance Risk	Kay Heidbreder Suzanne Griffin
6. Discussion with the Director of Internal Audit	Justin Noble
7. Discussion with the Executive Director of Audit, Risk, and Compliance	Sharon Kurek
8. Motion to End Closed Session	David Calhoun

**+ Discusses Strategic Investment Priorities topic(s).**

**# Discusses Enterprise Risk Management topic(s).**

## Open Session Agenda

### COMPLIANCE, AUDIT, AND RISK COMMITTEE

The Inn at Virginia Tech – Cascades

March 19, 2023

11:00 a.m.

<u>Agenda Item</u>	<u>Reporting Responsibility</u>
1. Welcome and Introductory Remarks	Sharon Brickhouse Martin
2. Consent Agenda	Sharon Brickhouse Martin
a. Minutes from the November 14, 2022 Meeting	
b. Update of Responses to Open Internal Audit Comments	
c. Audit Plan Status Report	
d. Internal Audit Reports	
i. Civil & Environmental Engineering	
ii. Licensing and Trademarks	
iii. University Registrar	
iv. VCE Southwest District	
e. Auditor of Public Accounts Financial Statement Audit	
* + # 3. Resolution on Information Technology Monitoring	Amy Sebring
4. Capital Construction Audit Program	Justin Noble Dwyn Taylor
5. Discussion of Future Topics	Sharon Brickhouse Martin

\* Requires Full Board Approval.

+ Discusses Strategic Investment Priorities topic(s).

# Discusses Enterprise Risk Management topic(s).

**Consent Agenda**  
**COMPLIANCE, AUDIT, AND RISK COMMITTEE**  
**March 19, 2023**

The Committee will consider for approval and acceptance the items listed on the Consent Agenda.

- a. Minutes of the November 14, 2022 Meeting
- b. Update of Responses to Open Internal Audit Comments
- c. Audit Plan Status Report
- d. Internal Audit Reports
  - i. Civil & Environmental Engineering
  - ii. Licensing and Trademarks
  - iii. University Registrar
  - iv. VCE Southwest District
- e. Auditor of Public Accounts Financial Statement Audit

## Update of Responses to Open Audit Comments

### COMPLIANCE, AUDIT, AND RISK COMMITTEE

December 31, 2022

As part of the internal audit process, university management participates in the opening and closing conferences and receives copies of all final audit reports. The audited units are responsible for implementing action plans by the agreed upon implementation dates, and management is responsible for ongoing oversight and monitoring of progress to ensure solutions are implemented without unnecessary delays. Management supports units as necessary when assistance is needed to complete an action plan. As units progress toward completion of an action plan, the Office of Audit, Risk, and Compliance (OARC) performs a follow-up visit within two weeks after the target implementation date. OARC is responsible for conducting independent follow up testing to verify mitigation of the risks identified in the recommendation and formally close the recommendation. As part of management's oversight and monitoring responsibility, this report is provided to update the Compliance, Audit, and Risk Committee on the status of outstanding recommendations. Management reviews and assesses recommendations with university-wide implications and shares the recommendations with responsible administrative departments for process improvements, additions or clarification of university policy, and inclusion in training programs and campus communications. Management continues to emphasize the prompt completion of action plans.

The report includes outstanding recommendations from compliance reviews and audit reports. Consistent with the report presented at the November Board meeting, the report of open recommendations includes three attachments:

- Attachment A summarizes each audit in order of final report date with extended and on-schedule open recommendations.
- Attachment B details all open medium and high priority recommendations for each audit in order of the original target completion date, and with an explanation for those having revised target dates or revised priority levels.
- Attachment C charts performance in implementing recommendations on schedule over the last seven years. The 88 percent on-schedule rate for fiscal year 2023 reflects closing 14 of 16 recommendations by the original target date.

The report presented at the November 14, 2022 meeting covered audit reports reviewed and accepted through September 30, 2022 and included 18 open medium and high priority recommendations. Activity for the quarter ending December 31, 2022 resulted in the following:

Open recommendations as of September 30, 2022	18
Add: medium and high priority recommendations accepted November 14, 2022	4
Subtract: recommendations addressed since September 30, 2022	4
Remaining open recommendations as of December 31, 2022	<u>18</u>

While this report is prepared as of the end of the quarter, management continues to receive updates from OARC regarding auditee progress on action plans. Through March 3, 2023, OARC has closed eight of the 18 remaining open medium and high priority recommendations, including one that missed the original target date from the prior fiscal year, and two that missed their original target date during the second quarter of fiscal year 2023. Additionally, OARC granted an extension for two recommendations due to extenuating circumstances. All remaining open recommendations are progressing as expected and are on track to meet their respective target dates. Management continues to work jointly with all units and provides assistance as needed to help with timely completion of action plans.

**ATTACHMENT A**

**Open Recommendations by Priority Level**

**COMPLIANCE, AUDIT, AND RISK COMMITTEE**

**December 31, 2022**

Report Date	Audit Name	Audit Number	Total Recommendations						
			ISSUED	COMPLETED	OPEN				
					Extended		On-schedule		Total
					High	Medium	High	Medium	Open
May 11, 2020	College of Science	20-1491	3	2	-	1	-	-	1
Oct 22, 2021	University Libraries	22-1595	4	3	-	-	-	1	1
Mar 18, 2022	Mechanical Engineering	22-1586	3	-	-	-	-	3	3
May 20, 2022	Foreign Gifts and Contracts Reporting	22-1588	5	-	-	-	4	1	5
May 20, 2022	Vendor Contract Administration	22-1593	2	-	-	-	-	2	2
Jun 30, 2022	Biological Sciences	22-1573	2	-	-	2	-	-	2
Oct 28, 2022	Office of Research and Innovation	23-1652	1	-	-	-	-	1	1
Oct 31, 2022	Virginia Tech Police Department	22-1587	3	-	-	-	2	1	3
<b>Totals:</b>			<b>23</b>	<b>5</b>	<b>-</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>18</b>

## ATTACHMENT B

### Open Audit Recommendations

#### COMPLIANCE, AUDIT, AND RISK COMMITTEE

**December 31, 2022**

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised / Current		
May 11, 2020	1	20-1491	College of Science	Information Technology	Medium		Dec 01, 2021	Jan 31, 2023	1	Auditee implemented controls to substantially mitigate risks as of the revised target date.
Jun 30, 2022	2	22-1573	Biological Sciences	Cost Transfers	Medium		Dec 31, 2022	Jan 31, 2023	1	Auditee implemented controls to mitigate risks prior to the revised target date.
Jun 30, 2022	3	22-1573	Biological Sciences	Effort Reporting	Medium		Dec 31, 2022	Jan 31, 2023	1	Auditee implemented controls to mitigate risks prior to the revised target date.
May 20, 2022	4	22-1593	Vendor Contract Administration	Contract Administration	Medium		Jan 15, 2023		2	
May 20, 2022	5	22-1593	Vendor Contract Administration	Contract Monitoring	Medium		Jan 15, 2023		2	
Oct 22, 2021	6	22-1595	University Libraries	Information Technology	Medium		Jan 15, 2023		2	
Mar 18, 2022	7	22-1586	Mechanical Engineering	Laboratory Safety	Medium		Jan 31, 2023		2	
Oct 31, 2022	8	22-1587	Virginia Tech Police Department	Ammunition Inventory	Medium		Jan 31, 2023		2	
Mar 18, 2022	9	22-1586	Mechanical Engineering	Administrative Privileges	Medium		Feb 01, 2023		3	
Mar 18, 2022	10	22-1586	Mechanical Engineering	Patch Management	Medium		Feb 01, 2023		3	
Oct 31, 2022	11	22-1587	Virginia Tech Police Department	VTRS Training	High		May 01, 2023		4	
Oct 28, 2022	12	23-1652	Office of Research and Innovation	Information Technology	Medium		Jun 30, 2023		4	
May 20, 2022	13	22-1588	Foreign Gifts and Contracts Reporting	Completeness of Reporting	High		Jul 01, 2023		4	

## ATTACHMENT B

### Open Audit Recommendations

#### COMPLIANCE, AUDIT, AND RISK COMMITTEE

**December 31, 2022**

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised / Current		
May 20, 2022	14	22-1588	Foreign Gifts and Contracts Reporting	Determination of Source	High		Jul 01, 2023		4	
May 20, 2022	15	22-1588	Foreign Gifts and Contracts Reporting	Foreign Contract Reporting	High		Jul 01, 2023		4	
May 20, 2022	16	22-1588	Foreign Gifts and Contracts Reporting	Formal Policy and Procedures	High		Jul 01, 2023		4	
May 20, 2022	17	22-1588	Foreign Gifts and Contracts Reporting	System of Record	Medium		Jul 01, 2023		4	
Oct 31, 2022	18	22-1587	Virginia Tech Police Department	Automated External Defibrillators	High		Sep 01, 2023		4	

Follow Up Status

- 1 Management confirmed during follow up discussions with the Office of Audit, Risk, and Compliance (OARC) that the auditee missed their original target date. Subsequent conversations with OARC indicate that implementation has been completed since the close of the reported quarter.
- 2 Management confirmed during follow up discussions with OARC that actions are occurring and the target date has been or will be met. OARC will conduct testing after the due date to confirm that the Management Action Plan is implemented in accordance with the recommendations.
- 3 Management confirmed during follow up discussions with OARC that the original target date will not be met, and an extension has been granted. OARC will conduct testing after the revised due date to confirm that the Management Action Plan is implemented in accordance with the recommendations.
- 4 Target date is beyond current calendar quarter. Management has follow-up discussions with the auditor to monitor progress, to assist with actions that may be needed to meet target dates, and to assess the feasibility of the target date.

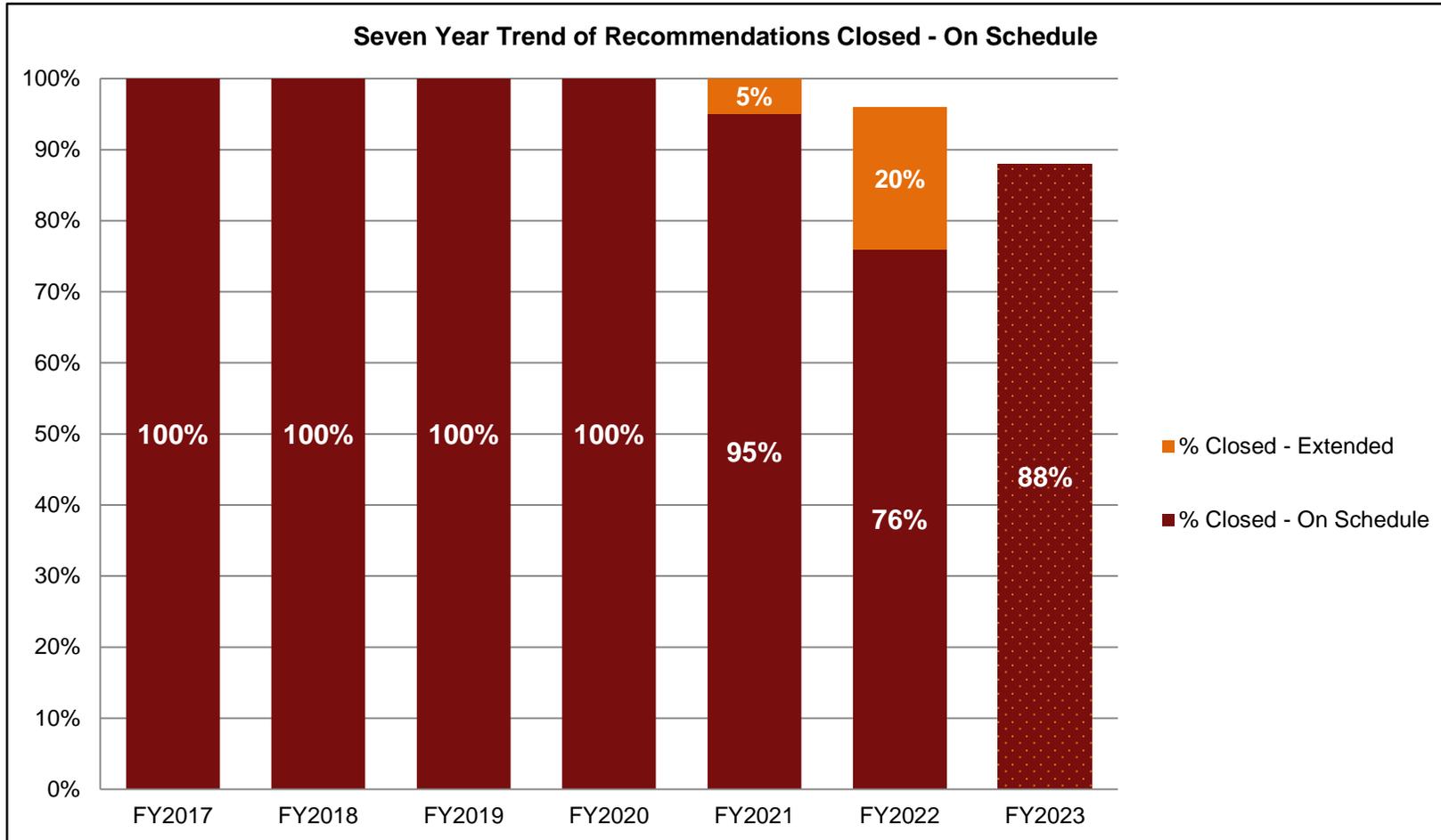
For Open Detail Report: "current calendar quarter" is used to refer to the current working quarter instead of the quarter being reported on.

# ATTACHMENT C

## Management Performance and Trends Regarding Office of Audit, Risk, and Compliance Recommendations

### COMPLIANCE, AUDIT, AND RISK COMMITTEE

December 31, 2022



## **Audit Plan Status Report**

### **COMPLIANCE, AUDIT, AND RISK COMMITTEE**

**March 19, 2023**

#### **Audit Plan Update**

Audits were performed in accordance with the fiscal year 2022-23 annual audit plan at a level consistent with the resources of the Office of Audit, Risk, and Compliance (OARC). Since the November board meeting nine planned projects have been completed, including six risk-based audits, one policy compliance review, and two advisory engagements. The two advisory engagements were related to graduate assistant workload and Graduate School information technology.

Twenty-one projects are currently underway, including:

- Eleven risk-based projects: College of Natural Resources and the Environment, Controller's Office General Accounting, Data Analytics: Administrative Operations, Data Analytics: Electronic Systems Approvals, Data Analytics: Possible Fraudulent Transactions, Data Analytics: Leave and Time Reporting, Endowed Chair Funds Utilization, Environmental Health and Safety, Housing and Residence Life, Human Resources: Employee Administration, and SBIR/STTR Grant Compliance.
- Seven advisory service projects: Athletics Media Rights, Effort Reporting System, Faculty Research Incentive Program, Remote Working Compliance, Research Accounting and Reporting Processes, and Steger Center Financial Controls. Additionally, an advisory service project regarding specific grant activities within the School of Public and International Affairs has been added to the audit plan and is underway.
- Three policy compliance reviews: Advancement, Athletics, and Innovation Campus.

Further, five planned audits have been canceled or deferred since the November board meeting. IT: ERP Systems is being canceled in consideration of the IT Transformation efforts underway. Aerospace and Ocean Engineering, Research: Cost Sharing, and the School of Plant and Environmental Sciences engagements are being canceled after conducting an analysis of available staff time remaining in the audit year following the inability to successfully hire our open auditor positions. Lastly, the planned Athletics Data Privacy advisory project will be canceled in anticipation of a request for an additional advisory project from the Division of Research and Innovation late in the audit plan year. All canceled engagements will be evaluated for consideration in next year's risk-based audit plan.

In fiscal year 2022-23, OARC has completed 36 percent of its audit plan as depicted below.

**FY 2022-23 Completion of Audit Plan**

<b>Audits</b>	
Total # of <b>Audits</b> Planned	38
Total # of Supplemental <b>Audits</b>	2
Total # of Carry Forwards	4
Total # of Planned <b>Audits</b> Canceled or Deferred	5
Total <b>Audits</b> in Plan as Amended	39
Total <b>Audits</b> Completed	12
<b>Audits</b> - Percentage Complete	31%
<b>Audits</b> - Percentage Complete or Underway	85%
Note: Includes Policy Compliance Reviews and Advisory Services	

**Internal Audit Reports**  
**COMPLIANCE, AUDIT, AND RISK COMMITTEE**

**March 19, 2023**

**Background**

This report provides a summary of audit ratings issued this period and the full rating system definitions. The following reviews have been completed during this reporting period. The Office of Audit, Risk, and Compliance has made a concerted effort to ensure progress on the annual audit plan.

<b>Consent Agenda Reports</b>	<b>Rating</b>
Civil & Environmental Engineering	Improvements are Recommended
Licensing and Trademarks	Improvements are Recommended
University Registrar	Effective
VCE Southwest District	Improvements are Recommended

**Summary of Audit Ratings**

The Office of Audit, Risk, and Compliance's rating system has four tiers from which to assess the controls designed by management to reduce exposures to risk in the area being audited. The auditor can use professional judgment in constructing the exact wording of the assessment in order to capture varying degrees of deficiency or significance.

Definitions of each assessment option

**Effective** – The audit identified opportunities for improvement in the internal control structure, but business risks are adequately controlled in most cases.

**Improvements are Recommended** – The audit identified occasional or isolated business risks that were not adequately or consistently controlled.

**Significant or Immediate Improvements are Needed** – The audit identified several control weaknesses that have caused, or are likely to cause, material errors, omissions, or irregularities to go undetected. The weaknesses are of such magnitude that senior management should undertake immediate corrective actions to mitigate the associated business risk and possible damages to the organization.

**Unreliable** – The audit identified numerous significant business risks for which management has not designed or consistently applied controls prior to the audit. Persistent and pervasive control weaknesses have caused or could cause significant errors, omissions, or irregularities to go undetected. The weaknesses are of such magnitude that senior management must undertake immediate corrective actions to bring the situation under control and avoid (additional) damages to the organization.

**RECOMMENDATION:**

That the internal audit reports listed above be accepted by the Compliance, Audit, and Risk Committee.

March 19, 2023

# VIRGINIA TECH



*CELEBRATING 150 YEARS*

**Financial Report 2021-2022**

## Contents

Message from Senior VP and Chief Business Officer	.....2
Statement of Management's Responsibility	.....4
Report from the Independent Auditor	.....5
Management's Discussion and Analysis	.....7
Financial Statements	....16
Notes to Financial Statements	....20
Required Supplementary Information	....60
Optional Supplementary Information	....66

### University Highlights

For the years ended June 30, 2014 - 2022

	2017-18 <sup>(1)</sup>	2018-19 <sup>(2)</sup>	2019-20	2020-21 <sup>(4)</sup>	2021-22
<b>Student admissions</b>					
Applications received, including transfers					
Undergraduate	30,299	35,002	34,769	33,538	44,936
Graduate	9,250	7,523	7,376	7,445	7,448
Offers, as a percentage of applications					
Undergraduate	68.1%	63.6%	69.2%	65.7%	55.8%
Graduate	32.5%	43.5%	48.4%	57.6%	59.5%
New enrollment, as a percentage of offers					
Undergraduate	37.8%	32.9%	36.4%	35.5%	30.5%
Graduate	58.8%	49.3%	48.2%	37.4%	45.0%
<b>Total student enrollment (head count)</b>					
Enrollment by classification					
Undergraduate	27,193	27,811	29,300	30,020	29,760
Graduate and first professional	7,247	7,039	7,083	7,004	7,519
Enrollment by campus					
Blacksburg campus	32,304	32,704	34,131	24,878	34,656
National Capital Region	799	768	980	752	871
Other off-campus locations	1,337	1,378	1,272	11,394	1,752
Enrollment by residence					
Virginia	22,715	22,925	23,762	24,479	23,619
Other states	7,875	8,079	8,589	8,998	9,966
Other countries	3,850	3,846	4,032	3,547	3,694
<b>Degrees conferred</b>					
Undergraduate (first majors)	6,111	6,835	6,832	7,393	7,290
Graduate and first professional	2,120	2,130	2,159	2,084	2,117
<b>Faculty and staff <sup>(3)</sup></b>					
Full-time instructional faculty	1,554	1,948	2,050	2,068	2,082
Other faculty and research associates	2,711	2,783	2,914	2,888	2,953
P14 faculty/part-time faculty	230	231	228	232	249
Support staff	3,390	3,433	3,471	3,380	3,257
Total faculty and support staff	<u>7,885</u>	<u>8,395</u>	<u>8,663</u>	<u>8,568</u>	<u>8,541</u>
Percent of instructional faculty tenured	55%	54%	51%	53%	51%

(1) 2017-18 Admissions data updated to reflect changes in methodology.

(2) 2018-2019 and subsequent years' data includes Virginia Tech Carilion School of Medicine.

(3) 2018-19 Faculty and staff definitions updated to align with Integrated Postsecondary Education Data System (IPEDS) guidelines.

(4) 2020-21 admissions, enrollments, and course delivery options were affected as a result of the COVID-19 pandemic.

On the front cover: The "1872 Forward: Celebrating Virginia Tech" graphic highlights an ongoing theme for celebration that brings to life how the past shapes the present and leads the university into the future. Image by April Goode for Virginia Tech.

## Financial Highlights

For the years ended June 30, 2018—2022 (all dollars are in millions; square feet in thousands)

	2017-18	2018-19	2019-20	2020-21 (restated)	2021-22
<b>Revenues, Expenses, and Changes in Net Position</b>					
Operating revenues	\$ 1,099.9	\$ 1,160.4	\$ 1,188.8	\$ 1,162.3	\$ 1,311.6
Operating expenses	1,423.4	1,467.9	1,549.8	1,509.5	1,638.7
Operating loss <sup>(1)</sup>	(323.5)	(307.5)	(361.0)	(347.2)	(327.1)
Non-operating revenues and expenses <sup>(1)</sup>	363.5	360.0	382.4	517.8	436.2
Other revenues, expenses, gains or losses	51.8	78.0	101.1	130.3	199.7
Net increase in net position	<u>\$ 91.8</u>	<u>\$ 130.5</u>	<u>\$ 122.5</u>	<u>\$ 300.9</u>	<u>\$ 308.8</u>
<b>University Net Position</b>					
Net investment in capital assets	\$ 1,273.2	\$ 1,326.1	\$ 1,437.6	\$ 1,521.3	\$ 1,704.4
Restricted	\$ 212.5	\$ 214.9	\$ 213.5	\$ 251.7	\$ 259.1
Unrestricted	\$ (226.4)	\$ (150.7)	\$ (135.6)	\$ 42.1	\$ 160.4
<b>Assets and Facilities</b>					
Total university assets	\$ 2,632.9	\$ 2,757.2	\$ 2,889.4	\$ 3,291.9	\$ 3,565.3
Capital assets, net of accumulated depreciation	\$ 1,731.9	\$ 1,786.0	\$ 1,936.1	\$ 2,112.5	\$ 2,279.7
Facilities—owned gross square feet	11,669	11,735	11,855	12,273	12,373
Facilities—leased square feet	2,067	2,204	2,273	2,134	2,146
<b>Sponsored Programs</b>					
Number of awards received	2,533	2,364	2,391	2,328	2,097
Value of awards received	\$ 336.8	\$ 323.7	\$ 367.7	\$ 349.3	\$ 390.3
Research expenditures reported to NSF <sup>(2)</sup>	\$ 531.6	\$ 542.0	\$ 556.3	\$ 542.0	N/A
<b>Virginia Tech Foundation</b>					
Gifts and bequests received	\$ 130.4	\$ 137.0	\$ 163.5	\$ 177.0	\$ 203.3
Expended in support of the university	\$ 179.6	\$ 170.0	\$ 180.7	\$ 155.8	\$ 242.2
Total assets and managed funds	\$ 1,891.0	\$ 2,107.1	\$ 2,266.0	\$ 2,687.6	\$ 2,667.8
<b>Endowments (at market value)</b>					
Owned by Virginia Tech Foundation (VTF)	\$ 849.9	\$ 970.1	\$ 932.4	\$ 1,184.7	\$ 1,167.3
Owned by Virginia Tech (held with VTF)	286.7	378.4	397.0	495.6	507.9
Managed by VTF under agency agreements	9.5	9.5	8.5	10.1	9.6
Total endowments supporting the university	<u>\$ 1,146.1</u>	<u>\$ 1,358.0</u>	<u>\$ 1,337.9</u>	<u>\$ 1,690.4</u>	<u>\$ 1,684.8</u>
<b>Student Financial Aid</b>					
Number of students receiving financial aid					
Loans	12,947	13,075	13,267	13,140	12,894
Grants, scholarships and waivers	19,493	19,484	20,548	20,606	20,179
Employment opportunities	11,193	12,717	12,430	9,747	11,693
Total amounts by major category					
Loans	\$ 181.3	\$ 191.9	\$ 200.2	\$ 202.4	\$ 206.5
Grants, scholarships and waivers	215.6	227.7	243.5	251.0	265.9
Employment opportunities	89.5	92.3	94.7	94.4	101.6
Total financial aid	<u>\$ 486.4</u>	<u>\$ 511.9</u>	<u>\$ 538.4</u>	<u>\$ 547.8</u>	<u>\$ 574.0</u>

(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) Total research expenditures reported to the National Science Foundation for the current year were not available at publication date.

# Message from the Senior Vice President and Chief Business Officer

The Virginia Tech community returned to campus for the fall 2021 semester with a prevailing sense of optimism, eager to participate in the many facets of university life and to collectively celebrate the 150th anniversary of the university's founding. Despite lingering uncertainty over the post-COVID economic environment, most notably a surge in inflation, the university concluded fiscal year 2022 (FY22) financially stronger and well-positioned to shape the future as a leading global research institution.

Growth across several revenue streams enabled the university to successfully navigate the unpredictable pandemic impacts on the higher education landscape. Demand for a Virginia Tech education remains robust and continues to grow, despite national declines in higher education enrollment. The university's comprehensive approach to engage prospective students yielded over 42,000 applications for fall 2021 – an increase of 36 percent over the prior year. Overall enrollment totaled 37,903 students during the 2021-22 academic year creating the largest enrollment in university history. In addition, the university continued to make progress towards its commitment to increase diversity as defined in its *Advancing Beyond Boundaries* strategic plan; 39.1 percent of incoming first-time-in-college and transfer students were from underrepresented minority (URM) or underserved student (USS) populations, putting the university on the brink of reaching its target of 40 percent URM/USS representation in the entering class of 2022.

Fueled by a resurgence in consumer demand and substantial federal support, Virginia's economy weathered the initial shock of the COVID-19 induced shutdown and quickly rebounded. With higher than anticipated revenue collections, the Virginia General Assembly made significant investments to sustain operations and affordability across the higher education sector in FY22. The university received \$337.2 million in general fund appropriations from the commonwealth for its academic division, cooperative extension and agricultural experiment station division, student financial aid assistance, research, and the Corps of Cadets program in FY22; an increase of \$25.9 million over the prior year's state appropriation.

The university benefited from federal and state pass-through pandemic relief funds. During the August 2021 special session, the General Assembly provided an additional \$7.4 million in one-time American Rescue Plan Act State and Local Recovery Funds to the university for need-based financial aid. These funds supplemented an earlier one-time allocation of \$841,600 from the Governor's Emergency Education Relief (GEER) Fund to be allocated to Virginia resident undergraduates with demonstrated financial need. Finally, the university allocated \$24.8 million of its American Rescue Plan (HEERF III) allocation to support emergency student financial aid,

and the remaining \$26.8 million of Coronavirus Response and Relief Supplemental Appropriations act Grant (HEERF II) and American Rescue Plan (HEERF III) funds to assist with lost revenues caused by the disruption of on-campus operations, outreach to financial aid applicants, and implementation of evidence-based practices to suppress spread of the coronavirus.

Momentum continued to accelerate in private philanthropy with the university's Advancement Division surpassing the \$1 billion threshold as part of the *Boundless Impact* fundraising campaign. Launched in 2019, the campaign set an original fundraising goal to raise \$1.5 billion by June 30, 2027. Due to an overwhelming response from donors, the *Boundless Impact* target was increased to \$1.872 billion, a figure which alludes to the year of Virginia Tech's founding. The university achieved another significant philanthropic milestone as alumni giving participation reached 22 percent, a goal originally set during the 2016 State of the University Address and an *Advancing Beyond Boundaries* strategic milestone. The combined total of new gifts and commitments for FY22 was \$268.5 million. Donations to support specific initiatives include \$12.5 million by Northrop Grumman to create



Christopher H. Kiwus  
Interim Senior Vice President and Chief Business Officer

a Center of Quantum Architecture and Software Development at the Innovation Campus and a \$35 million gift from an alumnus and his spouse (in addition to funds received from the commonwealth mentioned below) to advance the replacement of the College of Engineering's Randolph Hall with the new building to be known as Mitchell Hall.

The value of the Virginia Tech Foundation's endowed assets totaled \$1.68 billion as of June 30, 2022, down slightly from the fiscal year 2021 total of \$1.69 billion. The total sustained a long-standing university goal of doubling its endowment to \$1.6 billion by 2022. Although the endowment experienced negative earnings with a loss of 3.5 percent for the year, it significantly outperformed its benchmark return of -15.7 percent. Over the last twenty years, the endowment has outperformed its benchmark return over the trailing one, three, five, ten, and twenty-year periods. Continued strong philanthropy and solid endowment performance add flexible financial resources for university initiatives and expand financial aid resources to students.

While maintaining financial stability in an unpredictable environment remained an overriding priority, Virginia Tech, in partnership with the commonwealth, also continued to expand opportunities for learning, research, and discovery.

- Commonwealth Cyber Initiative (CCI) researchers continued groundbreaking transdisciplinary work advancing innovation and commercialization of cybersecurity technologies, including exploration of the implications of quantum networks on cybersecurity. CCI researchers also collaborated with Software Radio

Systems Ltd. in the development of a new 5G and NextG tested at the Virginia Tech Research Center in Arlington.

- Development of Virginia Tech's Innovation Campus in Alexandria accelerated as construction began in September on the Academic 1 Building. Slated for completion in 2024, the Academic 1 Building will provide instruction, research, office, and support spaces for the graduate programs in Computer Science and Computer Engineering. As a critical element of the state's Tech Talent Investment Program, the Innovation Campus will be a collaborative hub of project-based learning, bringing together public and private sector partners to develop frontier technologies and accelerate growth of the commonwealth's science and technology ecosystem. The university also implemented a multi-faceted strategy to bolster enrollment and degree production in Tech Talent programs, including an initiative with Boeing to establish a workforce development center to guide military veterans into careers in technology related fields.
- Expansion of the bio-sciences research ecosystem in the Roanoke-Blacksburg region continued with the October opening of the Fralin Biomedical Research Institute expansion at Virginia Tech Carilion. The expansion will enable the institute to double its workforce by 2027 and provide a catalyst for additional bio- and life-science spinoff company creation. In addition, the Virginia Tech Carilion School of Medicine increased the number of students for each class from 42 to 49 amidst growing demand for its collaborative, research-based learning, and clinical experiences. This emerging core of bioscience research and discovery will position the region to leverage the advantages of agglomeration and further attract human capital.

Each of these critical research initiatives contribute to the commonwealth's ongoing transition to an innovation-driven economy and boost its overall competitiveness. Virginia Tech is ranked in the top 50 U.S. research universities according to the most recent annual National Science Foundation research expenditures report. Virginia Tech reported more than \$542 million in research expenditures in fiscal year 2021 (the most recent data available). The university has also been deliberate in assisting Virginia Tech researchers identify opportunities for the commercialization of intellectual property. Working with Link+License+Launch, Virginia Tech Intellectual Properties initiated a third round of funding and support services for promising projects with the potential for broad societal and economic impact.

During FY22, the university updated its six-year *Capital Outlay Plan* for the 2022 – 2028 period, which was subsequently approved by the VT Board of Visitors for submission in the state's capital outlay budget program. The forward-looking plan includes 20 projects that total \$1.18 billion with a balanced approach to new construction and renovations to address the university's strategic plans. The 2022 General Assembly session resulted in Virginia Tech capturing \$223.4 million in general fund support to construct a state-of-the-art engineering building (Mitchell Hall) that is expected to open by fall 2027 as well as supplemental funding of \$7.3 million to ensure accessible pathway service in the North Academic District.

The university's portfolio of active capital projects has a combined total budget of \$1.2 billion for FY22 with over \$507 million of cumulative expenditures on 27 capital projects. Major capital projects underway during the fiscal year included i) a new residence hall to house approximately 300 students; ii) a new, donor funded home for the Corps of Cadets and Reserve Officers' Training Corp (ROTC) programs; iii) improvements to a campus dining facility and spirit plaza; iv) the design of a new business building; v) a new academic building that will house a cutting-edge data and decision sciences program; and vi) a new multi-program facility that will support doubling the enrollment of the building construction program, increasing dining capacity, and increasing modern instruction space. These projects are critical to support the transdisciplinary teaching and research programs to advance the strategic mission of the university.

The university reported a debt ratio of 3.46 percent for FY22 with a long long-term debt liability of \$549 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 complying with the university's performance measures of maintaining the debt program within six percent debt ratio and maintaining a credit rating of AA- or better. The university currently maintains credit ratings of Aa1 from Moody's Investors Service Inc., and AA from S&P Investment Services. The university continues to strive to deliberately manage resources and maintain an effective debt ratio and credit rating while supporting the continued growth of the university's capital program to achieve long-term goals and aspirations.

*"While maintaining financial stability in an unpredictable environment remained an overriding priority, Virginia Tech, in partnership with the commonwealth, also continued to expand opportunities for learning, research, and discovery."*

Guided by its culture of continuous improvement, the university officially launched an IT Transformation initiative in February 2022 to improve alignment of core IT organizations, processes, and services, mitigate cybersecurity related vulnerabilities, and further foster innovation and efficiency across the university. The multi-year IT Transformation initiative will leverage existing relationships with academic, administrative, and research units to meet the evolving and strategic needs of their diverse stakeholders. This collaborative approach will position the university not only to reduce complexity and inefficiency in critical IT services, but also to enhance data-driven decision-making and improve the user experience for students, faculty.

More generally, the university continues to make progress in meeting the metrics identified in its *Advancing Beyond Boundaries* strategic plan. Virginia Tech's resilient spirit and *Ut Prosim* (That I May Serve) motto, bolstered by its strong financial position, continue to propel the university towards achievement of its tripartite mission of discovery, learning, and engagement.

# Management's Responsibility for Financial Reporting & 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, 2022.

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 Virginia Tech Board of Visitors has created two committees which review and monitor the university's financial reporting and accounting practices. The Finance and Resource Management Committee meets with university financial officers and external independent auditors annually to review the Annual Financial Report, results of audit examinations, and quality of financial reporting. The Compliance, Audit, and Risk Committee periodically meets with internal auditors and university financial officers. These meetings include a review of the scope, quality, and results of the internal audit program, as well as a review of issues related to internal controls.

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, 2022.

Christopher H. Kiwus  
*Interim Senior Vice President and Chief Business Officer*

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY  
*An equal opportunity, affirmative action institution*



# Commonwealth of Virginia

## Auditor of Public Accounts

Staci A. Henshaw, CPA  
Auditor of Public Accounts

P.O. Box 1295  
Richmond, Virginia 23218

November 11, 2022

The Honorable Glenn Youngkin, Governor of Virginia  
Joint Legislative Audit and Review Commission  
Board of Visitors, Virginia Polytechnic Institute and State University

### INDEPENDENT AUDITOR'S REPORT

#### Report on the Audit of the Financial Statements

##### *Opinions*

We have audited the financial statements of the business-type activities and discretely presented component unit of **Virginia Polytechnic Institute and State University** (Virginia Tech), a component unit of the Commonwealth of Virginia, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the University's basic financial statements as listed in the table of contents.

In our opinion, based on our audit and the report of another auditor, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and discretely presented component unit of Virginia Tech as of June 30, 2022, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

We did not audit the financial statements of the discretely presented component unit of the University, which is discussed in Notes 1 and 26. Those financial statements were audited by another auditor whose report thereon have been furnished to us, and our opinions, insofar as it relates to the amounts included for the component unit of the University, is based solely on the report of the other auditor.

##### *Basis for Opinions*

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States (Government Auditing Standards). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the University and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions. The financial statements of the component unit of the University that were audited by another auditor upon whose report 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.

##### *Emphasis of Matter*

#### Change in Accounting Principle

As discussed in Notes 1 and 15 of the accompanying financial statements, in fiscal year 2022 Virginia Tech implemented Governmental Accounting Standards Board Statement (GASB) No. 87 Leases, related to accounting and financial reporting for lease liabilities and right-to-use lease assets. Our opinions are not modified with respect to this matter.

##### *Other Matters*

#### Report on Summarized Comparative Information

We have previously audited the University's 2021 financial statements, and we expressed an unmodified audit opinion on the respective financial statements in our report dated November 5, 2021. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2021, is consistent, in all material respects, with the audited financial statements from which it has been derived, except where revised due to the implementation of GASB Statement No. 87 Leases, as discussed in Note 1.

#### Responsibilities of Management for the Financial Statements

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

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

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

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and Government Auditing Standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may

involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

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

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the University's ability to continue as a going concern for a reasonable period of time.

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

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the following be presented to supplement the basic financial statements: Management's Discussion and Analysis on pages 7 through 15; the Schedule of Virginia Tech's Share of Net Pension Liability, the Schedule of Virginia Tech's Pension Contributions, and the Notes to the Required Supplementary Information on pages 60 through 61; the Schedule of Virginia Tech's Share of OPEB Liability (Asset), the Schedule of Virginia Tech's Share of OPEB Contributions, and the Notes to the Required Supplementary Information for the Pre-Medicare Retiree Healthcare (PMRH), Health Insurance Credit (HIC), Group Life Insurance (GLI), Disability Insurance (VSDP), and Line of Duty (LODA) programs, as applicable, on pages 62 through 65. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Supplementary Information*

Our audit was conducted for the purpose of forming an opinion 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, is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The 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 supplementary information, including the Virginia Tech Foundation, Inc. information, Affiliated Corporations Financial Highlights, and Consolidating Schedules, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

#### *Other Information*

Management is responsible for the other information included in the annual report. The other information comprises the Financial Highlights, University Highlights, and Message from the Senior Vice President and Chief Business Officer, but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

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

#### **Other Reporting Required by Government Auditing Standards**

In accordance with Government Auditing Standards, we have also issued our report dated November 11, 2022, 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, grant agreements, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the University's internal control over financial reporting and compliance.

Staci A. Henshaw  
AUDITOR OF PUBLIC ACCOUNTS

# Management's Discussion and Analysis

## (Unaudited)

Virginia Polytechnic Institute and State University, popularly known as Virginia Tech, is a comprehensive, land-grant university located in Blacksburg, Virginia. The university offers 280 graduate, undergraduate, and professional degree programs through its nine academic colleges: Agriculture and Life Sciences; Architecture, Arts, and Design; Engineering; Liberal Arts and Human Sciences; Natural Resources and Environment; Pamplin College of Business; Science; the Virginia-Maryland College of Veterinary Medicine; and the Virginia Tech Carilion School of 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 49th 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 *Annual Comprehensive 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 provide 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, 2022. Comparative numbers are included for the fiscal year ended June 30, 2021 and have been restated for the implementation of GASB Statement 87, *Leases*. 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*.

In accordance with Section 2100 of the GASB codification, the university's nine affiliated corporations were evaluated on the nature and significance of their relationship to the university. The Virginia Tech Foundation Inc. (VTF or 'the foundation') was determined to be a component unit and is 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. The foundation is not part of this MD&A, but detail regarding its financial activities can be found in Note 26 of the *Notes to Financial Statements*. Transactions between the university and this component unit have not been eliminated in this year's financial statements.

The following GASB statements of standards became effective and were implemented in fiscal year 2022: Statement 87, *Leases*; Statement 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*; Statement 92, *Omnibus 2020* (paragraphs 8-9); Statement 93, *Replacement of Interbank Offered Rates* (paragraphs 11b, 13, and 14); Statement 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*; and Statement 98, *The Annual Comprehensive Financial Report*. The university was not affected by the implementation of statements 92, 93, 97, or 98.

In June 2017, GASB issued Statement 87, *Leases*. The objective of this statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. The statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the agreement. The university adopted Statement 87 in fiscal year 2022 with an implementation date of July 1, 2020. This resulted in the recognition of right-of-use assets (net) of \$126.8 million, lease liabilities of \$121.6 million, lease receivables of \$0.9 million, and deferred inflows of \$0.9 million for fiscal year 2022. Prior year amounts have all been restated for comparative purposes.



Burruss Hall displays a banner celebrating Virginia Tech's 150th year.  
Photo by Luke Hayes for Virginia Tech.

## 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 this statement is to present a snapshot of the university's financial position to 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 see what the university owes to vendors, investors, and lending institutions. Finally, the SNP provides a picture of the university's net position and the restrictions for expenditure of the components of net position. Sustained increases 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 \$54.4 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 \$13.6 million are included in its column on the SNP.

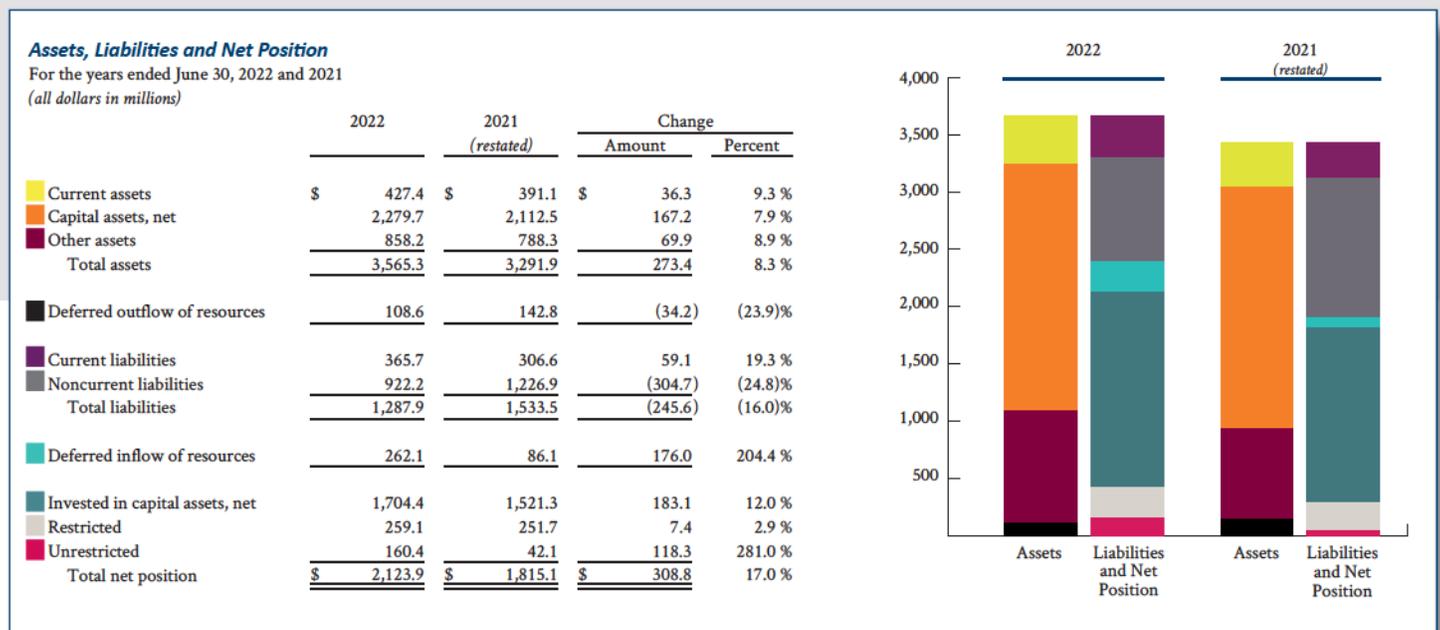
**Unrestricted component of net position** – The unrestricted component of net position represents resources used for transactions relating to academic departments and general operations of the university, and may be used at the discretion of the university's board of visitors to meet current

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 \$273.4 million or 8.3% during fiscal year 2022, bringing the total to \$3,565.3 million at year end. Current assets grew by \$36.3 million. The growth is largely the result of an increase in accounts and contributions receivable of \$19.5 million, predominantly in grants and contracts, and an increase of \$6.8 million in cash and cash equivalents. There were also smaller increases in prepaid expenses (\$4.1 million), due from the Commonwealth of Virginia (\$3.2 million), inventories (\$2.5 million) and a slight increase in notes receivable. Noncurrent assets grew by \$237.1 million. Capital assets, net, increased by \$167.2 million reflecting 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*. Long-term investments rose \$58.7 million mainly due to investments strategies that place more funds in the long-term endowment pool for investment purposes. Noncurrent cash and cash equivalents increased \$13.5 million due to an increase in commercial paper and cash funding to cover capital project payables at year end. There was also an increase of \$5.3 million in the due from the Commonwealth of Virginia line item attributable to additional capital activity being funded by VCBA 21st century bonds and maintenance reserve appropriation funding. Other noncurrent assets rose by \$4.8 million predominantly as a result of an increase in the restricted other postemployment benefit (OPEB) asset for the Virginia Sickness and Disability Program (VSDP). Accounts and contributions receivable fell by \$6.6 million due to a decrease in capital project being funded by private funding while noncurrent notes receivable fell by \$2.1 million.

Total university liabilities decreased by \$245.6 million or 16.0% during fiscal year 2022. The current liabilities category increased \$59.1 million and the noncurrent liabilities category decreased by \$304.7 million. The rise in current liabilities was due to an increase of \$25.1 million in commercial paper which was used to temporarily fund capital projects as well as a

## Summary of Assets, Liabilities, and Net Position



growth of \$17.9 million in accounts payable, largely due to payables related to capital construction and auxiliary enterprises. Unearned revenue grew by \$14.4 million predominantly in the grants and contracts area. Accrued compensated absences rose slightly (\$1.9 million) as did the current portion of long-term debt and leases payable (\$1.3 million), while funds held in custody for others decreased by \$1.1 million. Noncurrent liabilities declined by \$304.7 million. The largest decreases were in the actuarially determined pension liability (\$234.4 million), OPEB liability (\$31.2 million), and the liabilities related to debt and long-term leases (\$31.6 million). Additionally there were smaller decreases in accrued compensated absences

(\$3.8 million), federal student loan program contributions refundable (\$2.1 million) and other liabilities (\$1.6 million)

The increase in total assets along with the decrease in total liabilities is reflected in the year-over-year growth of the university's net position of \$308.8 million (17.0%). Net position in the category of net investment in capital assets increased by \$183.1 million, reflecting the university's continued investment in new facilities and equipment supporting the university's mission. Unrestricted net position rose by \$118.3 million (281.0%) due to the effect of the OPEB and VRS Pension net liability decreases as well as the prudent management of fiscal resources.

## Summary of Capital Project Funding

### Funding for Authorized Current and Future Capital Projects

As of June 30, 2022

(all dollars in millions)

	State Funds <sup>(1)</sup>	Other Funds <sup>(2)</sup>	University Debt Issued During Fiscal Year 2022	University Debt To Be Issued After June 30, 2022	Total Funding	Cash Basis Project-To-Date Expenses
Current education and general	\$ 417.9	\$ 51.9	\$ -	\$ 229.3	\$ 699.1	\$ 213.4
Current auxiliary enterprise	-	19.1	-	40.0	59.1	30.4
Total current	417.9	71.0	-	269.3	758.2	243.8
Future education and general	3.1	8.0	-	11.0	22.1	2.8
Future auxiliary enterprise	-	23.0	-	47.0	70.0	5.6
Total future	3.1	31.0	-	58.0	92.1	8.4
Total authorized	\$ 421.0	\$ 102.0	\$ -	\$ 327.3	\$ 850.3	\$ 252.2

(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.

## 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 7 of the *Notes to Financial Statements* describes the university's significant investment in depreciable capital assets, with gross additions of \$283.7 million during fiscal year 2022. Major projects included the completion of a new residence hall in the Creativity and Innovation District (\$99.4 million) and the renovation and expansion of Holden Hall (\$66.4 million). Ongoing investments in instructional, research, and computer equipment totaled \$56.2 million. Depreciation and amortization expense related to capital assets was \$135.8 million with net retirement of depreciable assets of \$3.4 million. The net increase in depreciable capital assets for this period was \$144.6 million. The net increase in nondepreciable capital assets (\$22.6 million) was primarily due to more construction in progress expenses during the current year for major building projects to be completed after fiscal year 2022. The major projects remaining in the construction-in-progress category include construction of the new Innovation Campus in Alexandria (\$65.7 million), construction of a new data and decision sciences building (\$53.3 million), upgrades to the university's chilled water infrastructure (\$39.8 million), construction of a new corps leadership and military science building (\$25.4 million), the first of two phases to renew existing livestock and poultry facilities (\$18.4 million), and other ongoing capital improvements and renovations throughout the university (\$97.3 million). In addition, \$9.2 million was withheld as retainage payable on 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 the issuance of long-term bonds and notes.

Total liabilities related to debt and long-term leases experienced a net decrease of \$30.3 million during fiscal year 2022. This decrease was due to the principle repayment of bonds and notes payable, and long-term leases. See Notes 12, 13 and 15 of the *Notes to Financial Statements* for more details.

The educational and general (E&G) portion of the university's capital outlay program includes nine projects currently under construction. These projects include construction of an academic building for the Innovation Campus in Alexandria (\$302.1 million), construction of a new undergraduate science lab building (\$90.4 million), construction of Hitt Hall (\$85.0 million), construction of a data and decision sciences building (\$79.0 million), construction of a corps leadership and military science building (\$52.0 million), and the first of two phases to renew existing livestock and poultry facilities (\$25.3 million). In addition to the capital projects underway, there were several new construction and renovation projects approved for instructional and research facilities. The new capital projects include the planning phases for the new Mitchell Hall to replace Randolph Hall (\$11.0 million) and construction of a new building for the Pamplin College of Business (\$8.0 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 auxiliary enterprises portion of the university's capital outlay program represents two projects currently under construction. These projects include the construction of a new residence hall in the upper quad area of campus (\$42.0 million) and refurbishment of the first floor of Dietrick Hall (\$9.1 million). Future capital projects include improvements to facilities

providing student wellness services (\$70.0 million). 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 \$850.3 million in capital building projects as of June 30, 2022, requiring approximately \$327.3 million in additional debt financing. Capital projects in progress carried commitments to construction contractors, architects, and engineers totaling \$398.5 million at June 30, 2022. 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 the construction of an academic building for the Innovation Campus in Alexandria (\$196.6 million), construction of a new undergraduate science laboratory building (\$67.1 million), construction

of Hitt Hall (\$58.0 million), construction of a new upper quad residence hall (\$19.3 million), construction of a corps leadership and military science building (\$17.4 million), construction of Mitchell Hall to replace Randolph Hall (\$14.9 million), and the construction of a data and decision sciences building (\$13.6 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 and commercial paper ratings shown in the table below reflect strong student demand, balanced operating performance, and adequate reserves to address unforeseen expenses.

	Bonds	Commercial Paper
Moody's Investors Service Inc.	Aa1	P-1
S&P Global Ratings	AA	A-1+



Eggleston Hall as seen from Squires Student Center. Photo by Luke Hayes for Virginia Tech.

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

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

For the years ending June 30, 2022 and 2021

(all dollars in millions)

	2022	2021 (restated)	Change	
			Amount	Percent
Operating revenues	\$ 1,311.6	\$ 1,162.3	\$ 149.3	12.8 %
Operating expenses	1,638.7	1,509.5	129.2	8.6 %
Operating loss	(327.1)	(347.2)	20.1	(5.8)%
Non-operating revenues and expenses	436.2	517.8	(81.6)	(15.8)%
Income before other revenues, expenses, gains, or losses	109.1	170.6	(61.5)	(36.0)%
Other revenues, expenses, gains or losses	199.7	130.3	69.4	53.3 %
Increase in net position	308.8	300.9	7.9	2.6 %
Net position - beginning of year	1,815.1	1,514.2	300.9	19.9 %
Net position - end of year	\$ 2,123.9	\$ 1,815.1	\$ 308.8	17.0 %

## 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 di-

rectly 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 \$149.3 million or 12.8% from the prior fiscal year. The growth in operating revenues came largely from auxiliary revenues (\$77.5 million) such as athletics and dorm and dining programs, as they recovered from the effects of the pandemic. Student tuition and fees rose by \$29.5 million reflecting small increases in tuition and fee rates as well as a continuing demand for a Virginia Tech education.

## Summary of Revenues

### Increase (Decrease) in Revenue

For the years ended June 30, 2022 and 2021  
(all dollars in millions)

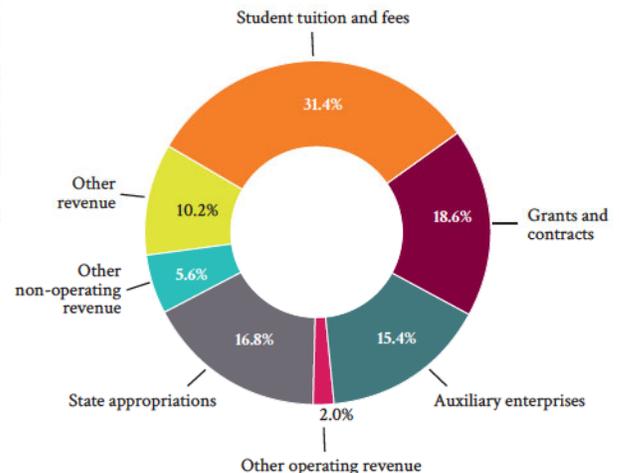
	2022	2021 (restated)	Change	
			Amount	Percent
<b>Operating revenue</b>				
Student tuition and fees, net	\$ 611.0	\$ 581.5	\$ 29.5	5.1 %
Grants and contracts <sup>1</sup>	362.5	326.8	35.7	10.9 %
Auxiliary enterprises	299.7	222.2	77.5	34.9 %
Other operating revenue	38.4	31.8	6.6	20.8 %
<b>Total operating revenue</b>	<b>1,311.6</b>	<b>1,162.3</b>	<b>149.3</b>	<b>12.8 %</b>
<b>Non-operating revenue</b>				
State appropriations	326.4	302.3	24.1	8.0 %
Other non-operating revenue <sup>2</sup>	109.8	215.5	(105.7)	(49.0)%
<b>Total non-operating revenue</b>	<b>436.2</b>	<b>517.8</b>	<b>(81.6)</b>	<b>(15.8)%</b>
<b>Other revenue</b>				
Capital appropriations	13.7	-	13.7	100.0 %
Capital grants and gifts	180.7	128.0	52.7	41.2 %
Gain on disposal of capital assets	5.3	2.3	3.0	130.4 %
<b>Total other revenue</b>	<b>199.7</b>	<b>130.3</b>	<b>69.4</b>	<b>53.3 %</b>
<b>Total revenue</b>	<b>\$ 1,947.5</b>	<b>\$ 1,810.4</b>	<b>\$ 137.1</b>	<b>7.6 %</b>

(1) Includes federal appropriations.

(2) Includes gifts, investment income, interest expense on debt related to capital assets, federal Pell grants, CARES Act stabilization revenue, and other non-operating revenue.

### Total Revenue by Source

For the year ended June 30, 2022



Total sponsored grants and contracts grew by \$35.7 million. Grants and contracts awarded by federal sponsors increased by \$27.3 million, non-governmental grants and contracts grew by \$3.4 million, state grants and contracts rose by \$3.0 million, and federal appropriations increased \$2.2 million while local grants and contracts fell slightly. Other operating revenue rose by \$6.6 million, largely due to an increase in sales and services of education activities. Overall, the university's operating revenues climbed from \$1,162.3 million in fiscal year 2021, to \$1,311.6 million in fiscal year 2022.

### Non-operating and Other Revenues and Expenses

Non-operating revenue and expenses totaled \$436.2 million, a decrease of \$81.6 million from the previous year's total. Revenue decreases in this category resulted primarily from the downturn of the investment markets at year-end, resulting in significant unrealized investment losses for the longer-term investments with total investment earnings having a decline of \$134.0 million. This decrease was offset by growth in state appropriations of \$24.2 million, an increase in COVID-19 relief funds of \$9.7 mil-

lion, a rise in gift revenue transferred from the Virginia Tech Foundation of \$9.7 million, and smaller increases in other non-operating revenue (\$6.6 million) and non-operating grants and contracts (\$1.0 million).

Total other revenue, expenses, gains, and losses grew by \$69.4 million compared to the prior year. Capital grants and gifts increased \$52.7 million due to an increase in Virginia College Building Authority (VCBA) 21st Century bonds and private funding for capital projects. For the first year in several years the university also received capital appropriation funding for its maintenance reserve program of \$13.7 million. Additionally, there was an increase of \$3.0 million in the gain on disposal of capital assets due to funds received for the sale of airport land to the FAA in previous years.

Revenues from all sources (operating, non-operating, and other) for fiscal year 2022 totaled \$1,947.5 million, increasing by \$137.1 million from the prior year. Operating expenses totaled \$1,638.7 million for fiscal year 2022, reflecting a year-over-year increase of \$129.2 million. Total revenues less total operating expenses resulted in an increase to net position of \$308.8 million.

## Summary of Expenses by Natural Classification

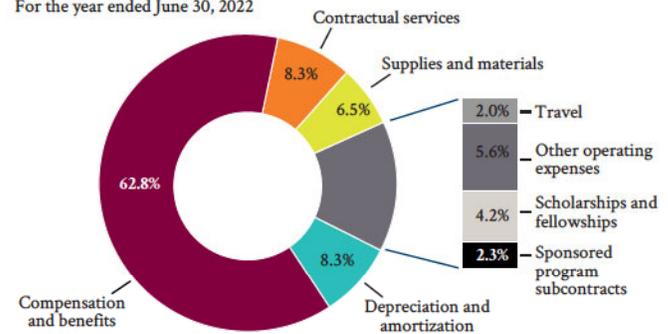
**Increase in Expenses by Natural Classification**For the years ended June 30, 2022 and 2021  
(all dollars in millions)

	2022	2021 (restated)	Change	
			Amount	Percent
Compensation and benefits	\$ 1,029.9	\$ 1,004.5	\$ 25.4	2.5 %
Contractual services	135.9	124.2	11.7	9.4 %
Supplies and materials	106.6	80.6	26.0	32.3 %
Travel	33.7	10.6	23.1	217.9 %
Other operating expenses	91.2	77.1	14.1	18.3 %
Scholarships and fellowships*	68.7	54.2	14.5	26.8 %
Sponsored program subcontracts	36.9	32.9	4.0	12.2 %
Depreciation and amortization	135.8	125.4	10.4	8.3 %
Total operating expenses	<u>\$ 1,638.7</u>	<u>\$ 1,509.5</u>	<u>\$ 129.2</u>	8.6 %

\*Includes loan administrative fees and collection costs.

**Total Expenses by Natural Classification**

For the year ended June 30, 2022

**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 \$1,029.9 million or 62.8% of the university's total operating expenses. This category increased by \$25.4 million (2.5%) over the previous year. 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. The benefits section is also affected by the changes in the actuarially calculated expenses for the OPEB and pension programs. All of the natural expense categories saw increases as the university recovered from the pandemic and travel and other spending returned to normal.

Operating expenses for fiscal year 2022 totaled \$1,638.7 million, an increase of \$129.2 million, or 8.6%, from fiscal year 2021. In the functional categories of expense, auxiliary enterprises experienced the largest increase (\$52.5 million) predominantly in the athletics and dorm and dining

programs, with the return of spectators to football games and dorms and dining returning to more normal capacity. Research expenses had the second largest increase with \$23.0 million of sponsored grants and research, signaling a return to pre-pandemic levels. While all other functional expense lines increased as the university returned to more normal operations post pandemic, the institutional support line did show a decrease of \$10.0 million. This decline was due to the larger partial reduction of the auxiliary indirect cost allocation charge in prior year. The partial year reduction was authorized by the state and done to provide pandemic relief to the auxiliaries. The current year totals are more in line with the normal total expenses for this function.

In summary, the university's operating revenues increased by \$149.3 million or 12.8% over the preceding year, while operating expenses grew by \$129.2 million or 8.6%. This resulted in an operating loss for the current fiscal year of \$327.0 million in comparison to the operating loss of \$347.2 million generated during the previous year. State appropriations, COVID-19 relief funding, and other net non-operating revenues were used to meet operating expenses not offset by operating revenues.

## Summary of Expenses by Function

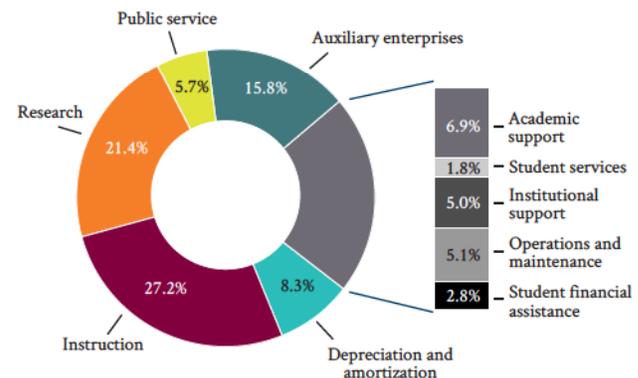
**Increase (Decrease) in Expenses by Function**For the years ended June 30, 2022 and 2021  
(all dollars in millions)

	2022	2021 (restated)	Change	
			Amount	Percent
Instruction	\$ 446.2	\$ 425.5	\$ 20.7	4.9 %
Research	351.4	328.4	23.0	7.0 %
Public service	93.2	88.7	4.5	5.1 %
Auxiliary enterprises	258.1	205.6	52.5	25.5 %
Depreciation and amortization	135.8	125.5	10.3	8.2 %
Subtotal	<u>1,284.7</u>	<u>1,173.7</u>	<u>111.0</u>	9.5 %
Support, maintenance, and other expenses				
Academic support	112.6	104.9	7.7	7.3 %
Student services	30.1	25.5	4.6	18.0 %
Institutional support	81.3	91.3	(10.0)	(10.8)%
Operations and maintenance of plant	84.6	82.0	2.6	3.2 %
Student financial assistance*	45.3	32.1	13.2	41.1 %
Total support, maintenance and other	<u>354.0</u>	<u>335.8</u>	<u>18.3</u>	5.4 %
Total operating expenses	<u>\$ 1,638.7</u>	<u>\$ 1,509.5</u>	<u>\$ 129.2</u>	8.6 %

\*Includes loan administrative fees and collection costs.

**Total Expenses by Function**

For the year ended June 30, 2022



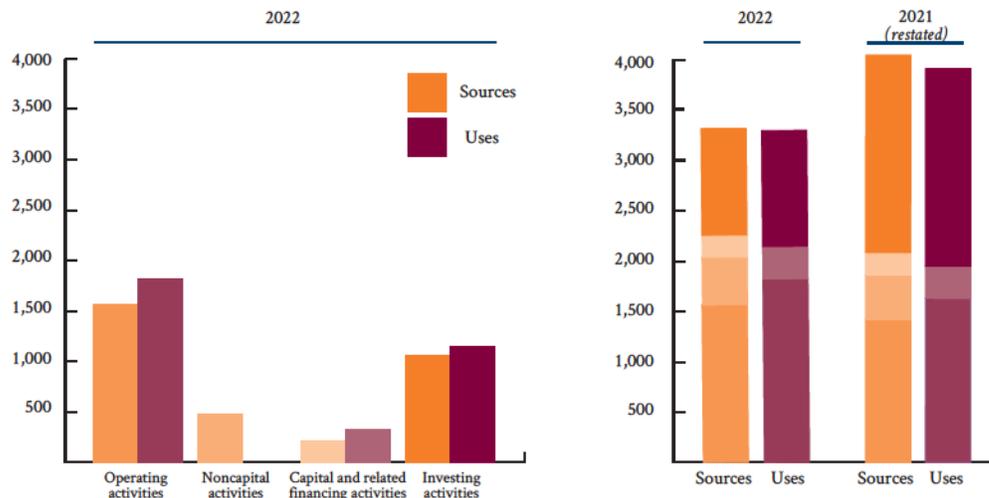
## Summary of Cash Flows

**Summary of Cash Flows**

For the years ended June 30, 2022 and 2021

(all dollars in millions)

	2022	2021 (restated)	Change	
			Amount	Percent
Net cash used by operating activities	\$ (256.8)	\$ (213.3)	\$ (43.5)	(20.4)%
Net cash provided by noncapital activities	483.2	446.1	37.1	8.3 %
Net cash used by capital and related financing activities	(113.8)	(95.3)	(18.5)	(19.4)%
Net cash used by investing activities	(92.3)	(37.2)	(55.1)	(148.1)%
Net increase (decrease) in cash and cash equivalents	20.3	100.3	(80.0)	79.8 %
Cash and cash equivalents - beginning of year	301.0	200.7	100.3	50.0 %
Cash and cash equivalents - end of year	\$ 321.3	\$ 301.0	\$ 20.3	6.7 %



The graphs above demonstrate the relationship between sources and uses of cash. The graph on the left shows activity for fiscal year 2022 only, grouped by related sources and uses of cash, while the graph on the right displays that same activity for fiscal years 2022 and 2021 in a stacked format.

**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 2022 to net cash used by operating activities.

Net cash used by operating activities was \$256.8 million, a \$43.5 million increase from the prior year. Total cash inflows for operating activities increased by \$151.2 million with the largest inflow increases in auxiliary enterprise charges (\$77.5 million) and inflows from tuition and fees (\$35.8 million). Total cash outflows grew by \$194.7 million with the major increases in uses of cash being payments to employees and fringe benefits (\$101.5 million) and operating expenses (\$79.4 million) as the university returned to normal operations after the COVID-19 pandemic. Operating activity uses of cash significantly exceeded operating activity sources of cash due to classification of state appropriations (\$326.4 million) and gifts (\$78.4 million) as noncapital financial activities.

Net cash flows from noncapital financing activities increased by \$37.1 million. This increase is due to a rise in state appropriations of \$14.6 million and COVID-19 relief funds of \$11.4 million to provide resources to the university to assist with the effects of the pandemic on the institution and to provide emergency hardship support to students due the disruption of on-campus operations. Also, gifts drawn from VTF grew by \$9.4 million.

Cash used by capital financing activities increased by \$18.5 million. Proceeds from the issuance of capital debt decreased by \$92.5 million due to no new debt being issued in the current year. Cash from proceeds of short-term financing increased by \$57.8 million due to the issuance of additional commercial paper to temporarily fund capital projects. Cash inflows from gifts for capital assets increased by \$38.7 million as a result of more projects being funded by VCBA 21st funding and funding from the VTF. Net cash used by investing activities increased \$55.1 million as activity for the investment areas slowed due to downturns in the markets compared to the previous year.

## Economic Outlook

As students, faculty, and staff returned to campus in the fall of 2021, resuming traditional in-person learning and activities, lingering apprehensions over COVID-19 gave way to the restored vibrancy of campus life and the familiar joys and anxieties of a typical semester. During fiscal year 2022, the university community collectively participated in Virginia Tech's sesquicentennial celebration with a host of events that honored the university's rich history and promising future. Virginia Tech's nimble response to the pandemic, its competitive market position, and state and federal funding support enabled the university to pursue its tripartite mission of discovery, learning, and engagement from a strong financial position.

With a rapidly changing economic landscape, budget development for fiscal year 2022 proved especially challenging. Many sectors of the economy, including those heavily dependent on tourism, travel, and hospitality, continued to experience distress. Mounting concerns over supply chain disruptions, the potential emergence of new COVID variants, and projections of a labor shortage made an imminent economic recovery appear unlikely. Despite these gathering headwinds, Virginia's economy emerged from the recessionary depths of the pandemic with rising consumer spending, real estate prices, and wages. With actual state revenue collections outpacing the revised revenue forecast, the commonwealth finished fiscal year 2021 with a \$2.6 billion surplus. This unexpected surge in revenues allowed the commonwealth to further build its financial reserves, reduce long-term pension obligations, invest in strategic initiatives, and fund a state employee compensation increase.

As part of its planning for fiscal year 2022, the university closely monitored the budget deliberations of the Virginia General Assembly. The commonwealth allocated \$337.2 million to Virginia Tech for fiscal year 2022 to support its academic division, research initiatives, student financial aid, cooperative extension and agricultural experiment station division, and its Corps of Cadets program. This represented an increase of \$25.9 million in state support over the fiscal year 2021 budget. In addition, the university received \$0.8 million in one-time Governor's Emergency Education Relief pass through funds for need-based student financial aid. The General Assembly returned in August 2021 to consider allocation of more than \$4.3 billion in federal pandemic relief funding, of which an additional \$7.4 million of one-time American Rescue Plan (ARP) State and Local Recovery Funds was provided to Virginia Tech for need-based financial aid. These funds supplemented a \$48.7 million one-time allocation to the university in the third installment of the Higher Education Emergency Relief Fund (HEERF) as part of the federal ARP program, with half dedicated to student financial aid.

During the transition to a post-pandemic environment, progress continued on a number of long-term initiatives designed to enhance the commonwealth's innovation and production capacity. In September 2021, construction began on the Academic 1 Building at Virginia Tech's Innovation Campus in Alexandria, the first of three planned buildings on the campus. With aspirations to become the most diverse graduate engineering school in the country, the Innovation Campus will play an integral role in the development of the region's envisioned innovation ecosystem. In order to fulfill its multi-year commitment for degree production, the university implemented the Virginia Tech Talent Graduate Scholarship for students pursuing a graduate degree in eligible Computer Science and Computer Engineering fields. This talent pipeline will accelerate growth in the region's tech-savvy workforce and attract additional prominent, dynamic companies to the commonwealth.

In addition to the Innovation Campus, the university contributed to the commonwealth's economic diversification efforts with its focus on research, development, and commercialization. In fiscal year 2022, Virginia

Tech's sponsored research expenditures and awards increased 12 percent. Momentum continued on several major initiatives within the university's four defined research frontiers: artificial intelligence, health systems, security, and quantum technologies.

Active collaborations with other universities, industry, foundations, and the federal government facilitated the sharing of expertise across disciplinary boundaries. In further collaboration with Amazon, Virginia Tech established the Amazon-Virginia Tech Initiative for Efficient and Robust Machine Learning to support development and implementation of innovative approaches to machine learning through research projects and doctoral student fellowships.

In a partnership to advance transdisciplinary research and teaching in quantum information science and engineering, Northrup Grumman made a \$12.5 million commitment to the Innovation Campus. The partnership will help establish the Center of Quantum Architecture and Software Development at the Innovation Campus with the goal of harnessing revolutionary quantum technologies for both commercial and national security applications.

Along the health frontier, the opening of the Fralin Biomedical Research Institute's 139,000 square foot expansion in Roanoke will further accelerate growth in the region's life sciences ecosystem, creating additional productive synergy between the Research Institute, Carilion Clinic, and industry. The Virginia Tech Carilion School of Medicine received a record number of applicants for the class of 2026, while the class of 2022 achieved a 100% match rate with residency programs across the country. The incoming class was both more diverse demographically and highly experienced in both clinical and research environments. The university's medical school is positioned for growth to continue to address the shortfall of physicians in the commonwealth, especially in rural Virginia.

Finally, groundbreaking work continued through the Virginia Tech-led Commonwealth Cyber Initiative (CCI), with significant investment in experiential learning projects across nine universities throughout Virginia. With implications for intellectual property and national security, an inter-disciplinary team of researchers at Virginia Tech, in collaboration with the CCI's Southwest node, continues to explore how to build and extend quantum networks, and in the process, enhance cybersecurity and enable broader access to quantum computation.

While the pandemic's lasting impact on higher education continues to be widely debated, enrollment pressures which began prior to the pandemic accelerated nationally. Fueled by unfavorable demographic trends and a labor shortage which has reduced educational requirements, many institutions are projected to remain below pre-pandemic enrollment levels over the next several years. However, demand for a Virginia Tech education remains robust. A record number of 42,000 applications were received for fall 2021, only to be eclipsed in the fall 2022 enrollment cycle with a 7 percent increase or more than 45,000 applicants for the class of 2026. Continuous improvements to the university's application process have contributed to more meaningful and lasting engagement with prospective students. The university's efforts to remove barriers to access have also diversified the applicant pool with notable increases in interest from first generation and under-served populations.

Virginia Tech's strong and diverse academic programs continue to enhance the university's reputation in an era of intensifying global competition for students. For fall 2021, Virginia Tech enrolled a class of 7,743 undergraduate students, including 941 transfer students; Total undergraduate enrollment was 29,760 students as of fall 2021 census. The university also made progress on several critical diversity benchmarks. Among the first-time in college and transfer student fall 2021 cohort, 39.1 percent were from

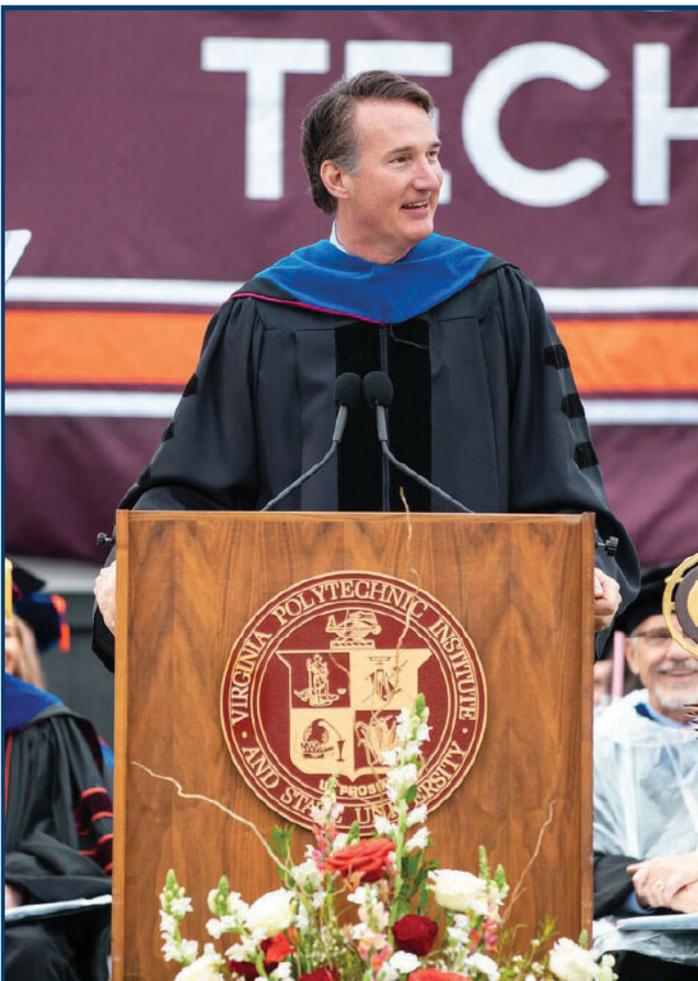
underrepresented minority or underserved populations; a 22.6 percent increase from fall 2017. The university also enrolled 1,539 first generation college students. At the graduate level, Virginia Tech saw growth of over 500 students compared to the prior year, resulting in total graduate enrollment of 6,846. Achievement of the university's enrollment goals provides a stable and growing source of revenue, allowing the university to realize goals outlined in its Advancing Beyond Boundaries strategic plan.

In order to enhance its competitiveness with both in-state and out-of-state peer institutions, Virginia Tech continues to allocate critical resources to the university's strategic objectives through a rigorous budget process. New initiatives are thoroughly evaluated to ensure their alignment with the university's mission and fiscal officers are required to annually identify cost-savings strategies. Moreover, internal benchmarking continues to demonstrate that the university remains an administratively lean organization. The cultivation of cost-conscious culture which values streamlined business processes and the effective and scalable delivery of services has enabled the university to outperform peer institutions across a variety of administrative cost and efficiency metrics. Systematic measures to control the total cost of education provide a solid fiscal foundation for achieving the university's historical commitment to value, access, and affordability.

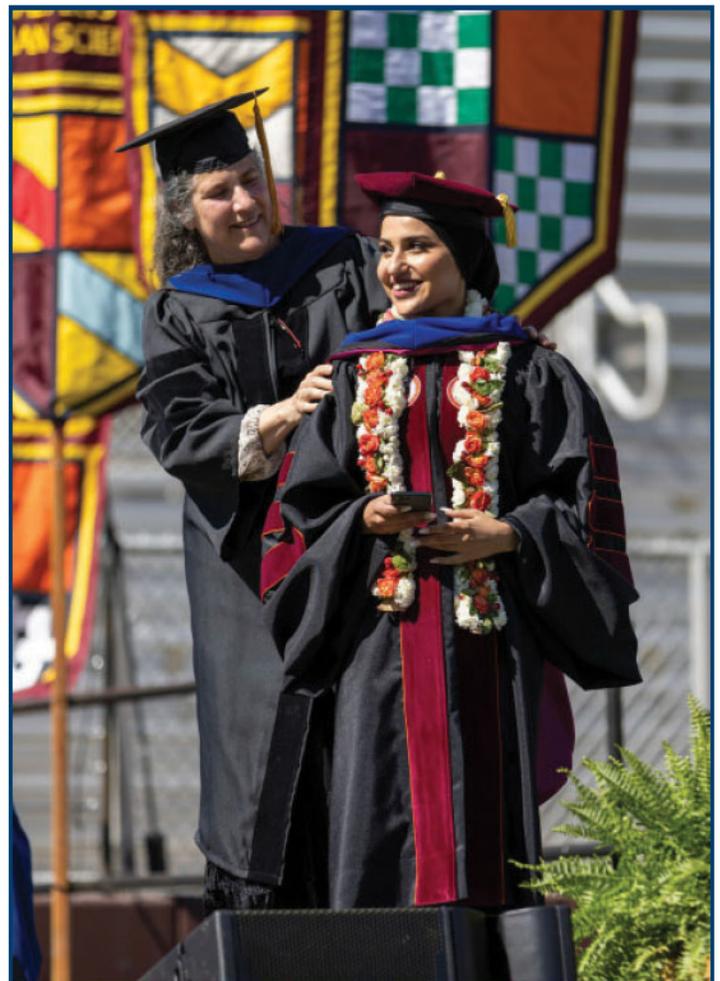
To manage its exposure to risk, the university's investment policy—established by the board of visitors and monitored by the board's Finance and Resource Management Committee — requires that its public funds

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 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 \$513.6 million, an increase of \$12.8 million over the preceding year.

As the COVID-19 pandemic and its negative spillovers recede, emerging risks, including upward pressures on prices, accompanying interest rate hikes, and geo-political uncertainty are projected to subdue economic growth in the near term. With robust student demand, record-breaking philanthropy, growing endowments, a diversified portfolio of research funding, and increased assets underpinning the university's strong financial position, Virginia Tech remains resilient and well-positioned to effectively respond to a changing environment. Moreover, the university's quality debt ratings from Moody's Investors Service Inc. (Aa1) and S&P Global Ratings (AA) enable the university to obtain funding for capital projects with advantageous terms. With its thriving and engaged community of students, faculty, and staff, Virginia Tech's future remains bright.



Virginia Governor Glenn Youngkin delivers the May 2022 commencement address.  
Photo by Christina Franusich for Virginia Tech.



Doctoral degree recipients receive their hoods during the May 2022 commencement ceremony.  
Photo by Luke Hayes for Virginia Tech.

## Statement of Net Position

As of June 30, 2022, with comparative financial information as of June 30, 2021

(all dollars in thousands)

	2022		2021	
	Virginia Tech	Virginia Tech Foundation	Virginia Tech (restated)	Virginia Tech Foundation
<b>Assets</b>				
<b>Current assets</b>				
Cash and cash equivalents <sup>(Note 4)</sup>	\$ 280,210	\$ 63,814	\$ 273,362	\$ 50,593
Short-term investments <sup>(Note 4, 26)</sup>	-	22,126	-	90,835
Accounts and contributions receivable, net <sup>(Notes 1, 5, 26)</sup>	87,067	93,505	67,555	80,938
Notes receivable, net <sup>(Note 1, 6)</sup>	1,113	422	1,020	535
Due from Commonwealth of Virginia <sup>(Note 10)</sup>	18,069	-	14,827	-
Inventories	17,626	341	15,153	297
Prepaid expenses	23,318	1,148	19,169	1,422
Other assets	-	7,406	-	8,351
Total current assets	<u>427,403</u>	<u>188,762</u>	<u>391,086</u>	<u>232,971</u>
<b>Noncurrent assets</b>				
Cash and cash equivalents <sup>(Note 4)</sup>	41,108	47,784	27,584	111,624
Short-term investments	-	-	3,670	-
Due from Commonwealth of Virginia <sup>(Note 10)</sup>	13,120	-	7,798	-
Accounts and contributions receivable, net <sup>(Notes 1, 5, 26)</sup>	3,268	116,587	9,831	118,216
Notes receivable, net <sup>(Note 1, 6)</sup>	9,770	22,010	11,863	22,556
Net investments in direct financing leases	-	67,423	-	69,432
Irrevocable trusts held by others, net	-	5,450	-	5,839
Long-term investments <sup>(Notes 4, 26)</sup>	777,862	1,761,317	719,148	1,740,491
Long-term right-to-use lease assets, net <sup>(Note 7)</sup>	126,812	-	129,727	-
Depreciable capital assets, net <sup>(Notes 7, 26)</sup>	1,787,647	205,490	1,640,182	199,856
Nondepreciable capital assets <sup>(Notes 7, 26)</sup>	365,221	243,339	342,667	175,954
Intangible assets, net	-	3,575	-	3,622
Other assets	13,095	6,065	8,319	7,042
Total noncurrent assets	<u>3,137,903</u>	<u>2,479,040</u>	<u>2,900,789</u>	<u>2,454,632</u>
Total assets	<u>3,565,306</u>	<u>2,667,802</u>	<u>3,291,875</u>	<u>2,687,603</u>
Deferred outflows of resources <sup>(Note 24)</sup>	108,600	-	142,762	-
<b>Liabilities</b>				
<b>Current liabilities</b>				
Accounts payable and accrued liabilities <sup>(Note 8)</sup>	175,170	18,599	157,272	8,140
Accrued compensated absences <sup>(Notes 1, 16)</sup>	29,503	353	27,556	427
Unearned revenue <sup>(Notes 1, 9)</sup>	62,219	17,933	47,848	7,326
Funds held in custody for others	10,757	-	11,871	-
Commercial paper <sup>(Note 11)</sup>	46,449	-	21,370	-
Long-term debt payable <sup>(Notes 12, 13, 26)</sup>	21,483	20,686	20,514	26,202
Long-term leases payable <sup>(Note 15)</sup>	17,099	-	16,806	-
Other postemployment benefits liabilities <sup>(Notes 16, 20)</sup>	2,975	-	3,328	-
Other liabilities	-	4,897	-	6,591
Total current liabilities	<u>365,655</u>	<u>62,468</u>	<u>306,565</u>	<u>48,686</u>
<b>Noncurrent liabilities</b>				
Accrued compensated absences <sup>(Notes 1, 16)</sup>	24,282	330	28,082	341
Federal student loan program contributions refundable <sup>(Note 16)</sup>	6,240	-	8,377	-
Unearned revenue	-	3,522	-	3,524
Long-term debt payable <sup>(Notes 12, 13, 26)</sup>	406,073	281,554	430,006	301,782
Long-term leases payable <sup>(Note 15)</sup>	104,471	-	112,115	-
Liabilities under trust agreements	-	21,124	-	25,595
Custodial deposits held in trust <sup>(Note 26)</sup>	-	576,822	-	570,833
Pension liability <sup>(Note 16, 18)</sup>	231,055	-	465,425	-
Other postemployment benefits liabilities <sup>(Note 16, 20)</sup>	146,986	-	178,156	-
Other liabilities	3,124	6,701	4,755	6,997
Total noncurrent liabilities	<u>922,231</u>	<u>890,053</u>	<u>1,226,916</u>	<u>909,072</u>
Total liabilities	<u>1,287,886</u>	<u>952,521</u>	<u>1,533,481</u>	<u>957,758</u>
Deferred inflows of resources <sup>(Note 24)</sup>	262,078	-	86,087	-
<b>Net position</b>				
Investment in capital assets	1,704,367	235,265	1,521,268	198,849
Restricted, nonexpendable	13,588	782,379	14,864	736,643
Restricted, expendable				
Scholarships, research, instruction, and other	150,005	525,124	150,386	634,690
Capital projects	10,194	-	7,224	-
Debt service and auxiliary operations	85,361	-	79,199	-
Unrestricted	160,427	172,513	42,128	159,663
Total net position	<u>\$ 2,123,942</u>	<u>\$ 1,715,281</u>	<u>\$ 1,815,069</u>	<u>\$ 1,729,845</u>

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, 2022 with comparative financial information for the year ended June 30, 2021

(all dollars in thousands)

	2022		2021	
	Virginia Tech	Virginia Tech Foundation	Virginia Tech (restated)	Virginia Tech Foundation
<b>Operating revenues</b>				
Student tuition and fees, net <sup>(Note 1)</sup>	\$ 611,022	\$ -	\$ 581,540	\$ -
Gifts and contributions	-	131,257	-	105,772
Federal appropriations	15,612	-	13,412	-
Federal grants and contracts	251,890	-	224,596	-
State grants and contracts	19,605	-	16,550	-
Local grants and contracts <sup>(Note 3)</sup>	15,946	-	16,111	-
Nongovernmental grants and contracts	59,476	-	56,062	-
Sales and services of educational activities	29,161	-	22,988	-
Auxiliary enterprise revenue, net <sup>(Note 1)</sup>	299,676	24,589	222,187	12,812
Other operating revenues	9,257	70,771	8,817	63,425
Total operating revenues	<u>1,311,645</u>	<u>226,617</u>	<u>1,162,263</u>	<u>182,009</u>
<b>Operating expenses</b>				
Instruction	446,171	5,114	425,464	5,004
Research	351,448	7,012	328,427	8,049
Public service	93,219	5,238	88,722	5,563
Academic support	112,578	64,704	104,919	14,505
Student services	30,117	-	25,547	-
Institutional support	81,346	50,477	91,247	31,291
Operation and maintenance of plant	84,638	15,787	82,017	15,956
Student financial assistance	45,279	36,369	32,087	32,763
Auxiliary enterprises	258,107	16,148	205,596	9,395
Depreciation and amortization <sup>(Note 7)</sup>	135,774	11,149	125,469	10,842
Other operating expenses	-	20,817	-	13,167
Total operating expenses	<u>1,638,677</u>	<u>232,815</u>	<u>1,509,495</u>	<u>146,535</u>
<b>Operating income (loss)</b>	<u>(327,032)</u>	<u>(6,198)</u>	<u>(347,232)</u>	<u>35,474</u>
<b>Non-operating revenues (expenses)</b>				
State appropriations <sup>(Note 23)</sup>	326,419	-	302,268	-
Gifts	78,702	-	69,050	-
CARES Act stabilization revenue <sup>(Note 30)</sup>	53,139	-	43,435	-
Non-operating grants and contracts	2,421	-	1,335	-
Federal student financial aid (Pell)	22,722	-	22,078	-
Investment income, net	(37,504)	20,842	96,625	12,823
Net gain (loss) on investments	-	(81,802)	-	199,200
Interest expense on debt related to capital assets	(10,922)	(9,417)	(10,995)	(9,243)
Interest expense on long-term leases	(5,757)	-	(6,195)	-
Other non-operating revenue	6,945	-	270	-
Net non-operating revenues (expenses)	<u>436,165</u>	<u>(70,377)</u>	<u>517,871</u>	<u>202,780</u>
<b>Income (loss) before other revenues, expenses, gains, or losses</b>	<u>109,133</u>	<u>(76,575)</u>	<u>170,639</u>	<u>238,254</u>
Change in valuation of split interest agreements	-	(10,947)	-	8,143
Capital appropriations <sup>(Note 23)</sup>	13,726	-	-	-
Capital grants and gifts <sup>(Note 10)</sup>	180,756	18,736	127,958	18,439
Gain (loss) on disposal of capital assets	5,258	1,706	2,309	48
Additions to permanent endowments	-	53,293	-	52,740
Loss on extinguishment of debt	-	-	-	(1,646)
Other revenues (expenses)	-	(777)	-	5,431
Total other revenues, expenses, gains, and losses	<u>199,740</u>	<u>62,011</u>	<u>130,267</u>	<u>83,155</u>
<b>Increase (decrease) in net position</b>	<u>308,873</u>	<u>(14,564)</u>	<u>300,906</u>	<u>321,409</u>
<b>Net position—beginning of year</b> <sup>(Note 1)</sup>	<u>1,815,069</u>	<u>1,729,845</u>	<u>1,514,163</u>	<u>1,408,436</u>
<b>Net position—end of year</b>	<u>\$ 2,123,942</u>	<u>\$ 1,715,281</u>	<u>\$ 1,815,069</u>	<u>\$ 1,729,845</u>

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

## Statement of Cash Flows

For the year ended June 30, 2022, with comparative financial information as of June 30, 2021  
(all dollars in thousands)

	2022	2021 (restated)
<i>Cash flows from operating activities</i>		
Tuition and fees	\$ 610,867	\$ 575,082
Federal appropriations	15,612	13,783
Grants and contracts	341,809	312,336
Sales and services of education departments	29,161	22,988
Auxiliary enterprise charges	299,839	222,385
Other operating receipts	9,257	8,817
Payments for operating expenses	(423,941)	(344,527)
Payments to employees and fringe benefits	(1,092,881)	(991,699)
Payments for scholarships and fellowships	(45,279)	(31,849)
Loans issued to students	(3,232)	(4,566)
Collection of loans to students	3,095	3,426
Direct lending receipts	148,432	149,337
Direct lending disbursements	(148,432)	(149,337)
Scholarship and other miscellaneous custodial receipts	125,852	124,615
Scholarship and other miscellaneous custodial disbursements	(126,966)	(124,051)
Net cash used by operating activities	<u>(256,807)</u>	<u>(213,260)</u>
<i>Cash flows from noncapital financing activities</i>		
State appropriations	326,419	311,833
Non operating grants and contracts	2,421	1,335
Federal student financial aid (Pell)	22,722	22,078
Gifts for other than capital purposes	78,405	68,983
Other non-operating receipts	53,209	41,815
Net cash provided by noncapital financing activities	<u>483,176</u>	<u>446,044</u>
<i>Cash flows from capital financing activities</i>		
Capital appropriations	11,302	-
Gifts and grants for capital assets	168,325	129,641
Proceeds from issuance capital debt	-	92,501
Proceeds from the sale of capital assets	6,228	4,441
Acquisition and construction of capital assets	(267,791)	(223,917)
Proceeds from short-term financing	25,079	(32,694)
Principal paid on capital-related debt	(37,632)	(44,552)
Interest paid on capital-related debt and long-term leases	(19,258)	(20,752)
Net cash used by capital financing activities	<u>(113,747)</u>	<u>(95,332)</u>
<i>Cash flows from investing activities</i>		
Proceeds from sales and maturities of investments	1,061,668	1,935,203
Interest on investments	4,818	3,349
Purchases of investments	(1,158,736)	(1,975,745)
Net cash used by investing activities	<u>(92,250)</u>	<u>(37,193)</u>
Net increase in cash and cash equivalents	20,372	100,259
Cash and cash equivalents - beginning of year	<u>300,946</u>	<u>200,687</u>
Cash and cash equivalents - end of year	<u>\$ 321,318</u>	<u>\$ 300,946</u>

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

**Statement of Cash Flows (continued)**

For the year ended June 30, 2022, with comparative financial information as of June 30, 2021  
(all dollars in thousands)

	2022	2021 (restated)
<i>Reconciliation of net operating expenses to net cash used by operating activities</i>		
Operating loss	\$ (327,032)	\$ (347,232)
Adjustments to reconcile net loss to net cash used by operating activities		
Depreciation and amortization expense	135,774	125,469
Changes in assets, deferred outflows, liabilities, and deferred inflows		
Receivables, net	(19,392)	(2,667)
Inventories	(2,473)	(1,707)
Prepaid and other asset items	(4,429)	(2,764)
Other postemployment benefits asset	(4,496)	(775)
Notes receivable, net	2,000	1,195
Deferred outflow for VRS pension	30,292	(21,480)
Deferred outflow for other postemployment benefits	3,313	(3,482)
Accounts payable and other liabilities	10,994	7,665
Accrued payroll	(4,307)	4,750
Compensated absences	(1,853)	5,386
Unearned revenue	14,371	(4,203)
Pension liability	(231,023)	54,974
Other postemployment benefits liability	(31,523)	(6,560)
Federal loan contributions refundable	(2,137)	(2,335)
Deferred inflow for VRS pension	167,244	(15,968)
Deferred inflow for other postemployment benefits	9,062	(4,090)
Deferred inflow for long-term leases	(78)	
Scholarship and other miscellaneous custodial accounts, net	(1,114)	564
Total adjustments	<u>70,225</u>	<u>133,972</u>
Net cash used by operating activities	<u>\$ (256,807)</u>	<u>\$ (213,260)</u>

*Noncash investing, capital, and financing activities*

Change in accounts receivable related to non-operating income	\$ 6,486	\$ (3,117)
Capital assets acquired through in-kind donations as a component of capital gifts and grants income	\$ 12,741	\$ 4,620
Change in fair value of investments recognized as a component of investment income	\$ (65,987)	\$ 51,160
Change in value of interest payable affecting interest paid	\$ (448)	\$ (496)
Capital assets acquired through the assumption of a liability	\$ -	\$ 1,515
Long term leases used to finance capital assets	\$ 12,040	\$ 22,335
Change in interest receivable affecting interest income	\$ (299)	\$ 416
Gain (loss) on disposal of capital assets	\$ 5,258	\$ 2,309
Capitalization of interest revenue and expense, net	\$ -	\$ (1,842)
Amortization of bond premium (discount) and gain (loss) on debt refunding	\$ (2,130)	\$ 1,197
Retainage payable	\$ 9,158	\$ 8,615
Change in pension liability recognized as a component of non-operating revenue	\$ 3,347	\$ -

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

# Notes to Financial Statements

## Contents

1. Summary of Significant Accounting Policies	20
2. Related Parties	23
3. Local Government Support	24
4. Cash, Cash Equivalents, and Investments	24
5. Accounts Receivable	26
6. Notes Receivable	26
7. Capital Assets	27
8. Accounts Payable and Accrued Liabilities	27
9. Unearned Revenue	27
10. Commonwealth Capital Reimbursement Programs and Capital Gifts	28
11. Short-term Debt	28
12. Summary of Long-term Indebtedness	28
13. Detail of Long-term Indebtedness	30
14. Long-term Debt Defeasance	32
15. Long-term Leases Payable	33
16. Change in Other Liabilities	34
17. Capital Improvement Commitments	34
18. Pension Plans	35
19. Defined Contribution Plans	40
20. Other Postemployment Benefits	41
21. Grants, Contracts, and Other Contingencies	50
22. Federal Direct Lending Program	50
23. Appropriations	51
24. Deferred Outflows and Inflows of Resources	51
25. Expenses by Natural Classification within Functional Classification	51
26. Component Unit	52
27. Joint Ventures	59
28. Jointly Governed Organizations	59
29. Risk Management and Employee Health Care Plans	59
30. COVID-19 Relief Funding	59
31. Pending Litigation	59
32. Subsequent Event	59

## 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, and 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 can exercise oversight authority for financial reporting purposes.

Under Section 2100 of the GASB code, Virginia Tech Foundation Inc. (VTF, or the foundation) is included as a component unit 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 can 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. A twenty (20) to thirty-five (35) member board of directors and four ex-officio positions govern the foundation. The foundation's bylaws provide that the rector of the board of visitors, the president of the university, the president of the alumni association, and the president of the athletic fund shall serve as ex-officio members of the board. The remainder of the board consists 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 that supplements state appropriations. It provides additional operating support to colleges and departments, helps fund 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. It 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 \$115,589,000 to the university for both restricted and unrestricted purposes.

### 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.

#### **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 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 with 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 consist 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, as well as nongovernmental sources, in connection with reimbursement of allowable expenses made according to the university's grants and contracts. Accounts receivable are recorded net of allowance for doubtful accounts. Accounts receivable include amounts owed from lessees for the present service capacity of university assets. Lease receivables are recognized when the net present value of future minimum lease payments is \$50,000 or greater. 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 6 for a list of notes receivable amounts by major categories.

#### **Inventories**

Inventories are stated at the lower of cost or market value (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, 2022. Payments of expenses that extend beyond fiscal year 2023 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. These cash and investments include those restricted for the acquisition or construction of capital assets, those kept legally separate 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.

Intangible right-to-use assets consisting of the right-to-use land, buildings, infrastructure, and equipment are stated at the net present value of future minimum lease payments at the commencement of the lease term. Intangible right-to-use assets are recognized when the net present value of future minimum lease payments is \$50,000 or greater. Up-fits, tenant improvements, construction, and other renovations are capitalized at actual cost as expenses are incurred.

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 sum of the acquisition and 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. Right-to-use lease assets are amortized on a straight-line basis over the shorter of the lease term or the useful life of the underlying asset. Amortization expense is combined with depreciation expense in the *Statement of Revenues, Expenses, and Changes in Net Position*. 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 the proceeds from the sales of collection items to be used to acquire other items for collections.

#### **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 purpose 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 VRS plan and the VaLORS plan, and the additions to/deductions from the VRS plan's and the VaLORS plan's net fiduciary position have been determined on the same basis as VRS reported them. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable according to the benefit terms. Investments are reported at fair value.

#### **Other Postemployment Benefits**

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

*Group Life Insurance* – The Virginia Retirement System (VRS) Group Life Insurance (GLI) program is a multiple-employer, cost-sharing plan. It provides coverage to state employees, teachers and employees of participating

political subdivisions. The GLI program was established under §51.1-500 et seq., *Code of Virginia*, as amended, which provides the authority under which benefit terms are established or may be amended. The GLI program is a defined benefit plan that provides a group life insurance benefit for employees of participating employers.

**State Employee Health Insurance Credit Program** – The Virginia Retirement System (VRS) State Employee Health Insurance Credit (HIC) program is a single-employer plan that is presented as a multiple-employer, cost-sharing plan. The HIC program was established under §51.1-1400 et seq., *Code of Virginia*, as amended, which provides the authority under which benefit terms are established or may be amended. The HIC program is a defined benefit plan that provides credit toward the cost of health insurance coverage for retired state employees.

**Line of Duty Act Program** – The Virginia Retirement System (VRS) Line of Duty Act (LODA) program is a multiple-employer, cost-sharing plan. The LODA program was established under §9.1-400 et seq., *Code of Virginia*, as amended, which provides the authority under which benefit terms are established or may be amended. The LODA program provides death and health insurance benefits to eligible state employees and local government employees, including volunteers, who die or become disabled as a result of the performance of their duties as public safety officers. In addition, health insurance benefits are provided to eligible survivors and family members.

**VRS Disability Insurance Program** – The Virginia Retirement System (VRS) Disability Insurance Program (Virginia Sickness and Disability Program, VSDP) is a single-employer plan that is presented as a multiple-employer, cost-sharing plan. The VSDP program was established under §51.1-1100 et seq., *Code of Virginia*, as amended, which provides the authority under which benefit terms are established or may be amended. The VSDP program is a managed care program that provides sick, family and personal leave and short-term and long-term disability benefits for state police officers, state employees and VaLORS employees.

For measuring the net liability of these OPEB programs, the expenses, deferred outflows and inflows of resources, information about and additions to or deductions from their net fiduciary positions have been determined on the same basis as reported by VRS. In addition, benefit payments for these programs 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 and sabbatical leave, as well as the amount payable upon termination under the Commonwealth of Virginia's sick leave payout 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, 2022, 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, 2022, 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 before year end for Summer Session II are unearned and recognized as revenue in the next fiscal year. Summer Session III is twelve weeks long and spans across fiscal years 2022 and 2023. The tuition and fees received for Summer Session III are considered half earned by June 30th, and half unearned and recognized as revenue in the next fiscal year. See *Note 9* 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 finance purchase obligations with maturities greater than one year; (2) long-term lease obligations; (3) pension plan liabilities; (4) OPEB liabilities; and (5) estimated amounts for accrued compensated absences and other liabilities that will not be paid within the next fiscal year.

#### **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 to produce 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 is considered an agency of the Commonwealth of Virginia and, as such, is exempt from federal income tax under Section 115(a) of the *Internal Revenue Code*.

#### **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 third parties making payments on the students' behalf. For the fiscal year ended June 30, 2022, the scholarship allowance for student tuition and fee revenue and auxiliary enterprise revenue totaled \$147,361,000 and \$30,954,000, 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.

### Implementation of GASB Statement 87 and Statement 89

In June 2017, GASB issued Statement 87, *Leases*. The objective of this statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. The statement requires the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the agreement. Under this statement a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources.

The university adopted Statement 87 in fiscal year 2022 with an implementation of July 1, 2020 and fiscal year ending June 30, 2021 has been restated. The restatement is as follows (*all dollars in thousands*):

Net Position July 1, 2020	\$	1,814,124
Accounts Receivable		1,018
Long Term Lease right to use asset, net		129,727
Depreciable Capital Assets, net		(57,722)
Non Depreciable Capital Assets		(2,609)
Accrued Interest Payable		(570)
Long Term Lease Payable		(128,921)
Long Term Debt Payable		61,027
Deferred Inflow		(1,005)
Adjusted Net Position June 30, 2021	\$	<u>1,815,069</u>

In June 2018, GASB issued Statement 89, *Accounting for Interest Cost Before the End of a Construction Period*. This statement requires that the interest

cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund.

### 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, 2021, from which the summarized information was derived. Prior reports can be found at [www.controller.vt.edu/resources/financialreporting.html](http://www.controller.vt.edu/resources/financialreporting.html).

## 2. Related Parties

In addition to the component unit 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 Services Inc., 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 Corporation, Virginia Tech Innovations Corporation, Virginia Tech India Research and Education Forum, 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 Services Inc., Virginia Tech Intellectual Properties Inc., Virginia Tech Applied Research Corporation, Virginia Tech Innovations Corporation, and Virginia Tech India Research and Education Forum are required to have an annual audit. Auditors have examined the financial records of these organizations and a copy of their audit reports have been or will be provided to the university.



The 2022 Virginia Tech Corps of Cadets Graduation and Joint Commissioning Ceremony in Burruss Auditorium.  
Photo by Christina Franusch for Virginia Tech.

### 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 \$13,232,000 in 2022, and has been included in revenues and expenses of the accompanying financial statements. The university received other local government support of \$2,714,000 in 2022.

### 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, 2022. 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 2022.

**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 which more than five percent of total investments are held. More than five percent of the university's investments are in the Federal Home Loan Banks (FHLB). These comprise 13.2% of the university's total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded from this requirement.

Additionally, the university's investment policy requires that each individual portfolio within the primary liquidity or extended duration allocations be diversified so that not more than three percent of the value of the respective portfolios will be invested in the securities or individual trusts of any single issuer. The limitation shall not apply to securities of the U.S. Government, an agency thereof, U.S. Government sponsored enterprises, securities fully insured or fully guaranteed by the U.S. Government, or money market funds.

**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 45% of total investments with a target duration of approximately 55 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 2022.

### 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®). SNAP® offers a professionally-managed money market mutual fund, which provides a temporary pooled investment vehicle for proceeds pending expenditure, as well as record keeping, depository, and arbitrage rebate calculations. SNAP® complies with all standards of GASB Statement 79, *Certain External Investment Pools and Pool Participants*. SNAP® investments are reported using the net asset value per share, which is calculated on an amortized cost basis that provides a net asset value (NAV) per share 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, 2022

(all dollars in thousands)

	Current Assets	Noncurrent Assets	Total
Cash and cash equivalents	\$ 280,210	\$ 41,108	\$ 321,318
Long-term investments	-	777,862	777,862
Cash and investments	<u>\$ 280,210</u>	<u>\$ 818,970</u>	1,099,180
Less cash			40,566
Total investments			<u>\$ 1,058,614</u>

The investment policy of the university is established by the board of visitors and monitored by the board's Finance and Resource Management 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, banker's acceptances and bank notes, negotiable certificates of deposit, repurchase agreements, commercial paper, and money market funds.

All gifts, local funds, and nongeneral fund reserves and balances that 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*.

**Investments Measured at Fair Value including categorization of credit quality and interest rate risk**

Investments held on June 30, 2022

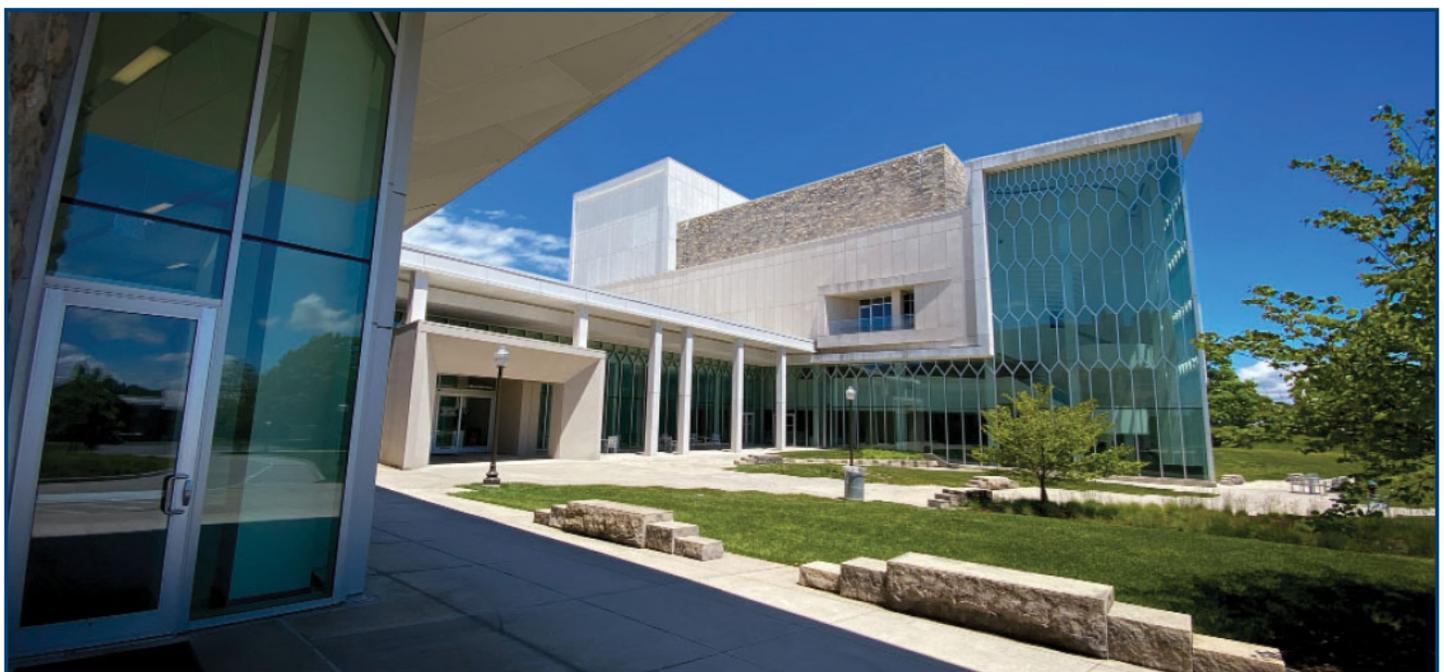
*(all dollars in thousands)*

	Credit Rating	6/30/2022			Fair Value Measurement*	
		Less than 1 Year	1-5 Years		Level 1	Level 2
<b>Investments by fair value level</b>						
U.S. Treasury and Agency securities (1)	N/A	\$ 71,613	\$ 48,137	\$ 119,750	\$ 119,750	\$ -
<b>Debt securities</b>						
Corporate bonds & notes	A1	5,378	15,145	20,523	-	20,523
Corporate bonds & notes	A2	12,264	21,156	33,420	-	33,420
Corporate bonds & notes	A3	12,054	11,933	23,987	-	23,987
Corporate bonds & notes	Aa2	1,484	4,584	6,068	-	6,068
Corporate bonds & notes	Aa3	-	1,428	1,428	-	1,428
Corporate bonds & notes	Aaa	-	1,845	1,845	-	1,845
Repurchase agreements	N/A	3,809	-	3,809	-	3,809
Asset backed securities	A2	-	269	269	-	269
Asset backed securities	Aaa	16,492	35,569	52,061	-	52,061
Asset backed securities (2)	AAA	17,024	16,581	33,605	-	33,605
Asset backed securities	NR	-	1,112	1,112	-	1,112
<b>Federal agency securities</b>						
Unsecured bonds and notes	Aaa	147,669	25,332	173,001	-	173,001
Mortgage backed securities	Aaa	982	4,983	5,965	-	5,965
<b>Money market &amp; mutual funds</b>						
Money market funds	N/A	169	-	169	169	-
Mutual funds	N/A	3,124	-	3,124	3,124	-
Total investments by fair value level		<u>292,062</u>	<u>188,074</u>	<u>480,136</u>	<u>\$ 123,043</u>	<u>\$ 357,093</u>
<b>Investments measured at net asset value (NAV)</b>						
Deposits with VTF		5,659	-	5,659		
Dairymen's Equity w/o specific maturity		-	-	63		
Investments w/o specific maturities, held with VTF		-	-	507,932		
Total investments measured at NAV		<u>5,659</u>	<u>-</u>	<u>513,654</u>		
<b>Investments not measured at fair value</b>						
Money market funds	AAA-mf	47,936	-	47,936		
Virginia SNAP® funds (2)	AAAam	16,888	-	16,888		
Total investments not measured at fair value		<u>64,824</u>	<u>-</u>	<u>64,824</u>		
Total investments		<u>\$ 362,545</u>	<u>\$ 188,074</u>	<u>\$ 1,058,614</u>		

\*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 S&P Global Ratings. All other ratings provided by Moody's Investors Service Inc.



Moss Arts Center  
Photo by Ray Meese for Virginia Tech.

## 5. Accounts Receivable

Accounts receivable as of June 30, 2022  
(all dollars in thousands)

Current receivables	
Grants and contracts	\$ 65,941
Student tuition and fees	4,711
Accrued investment interest	968
Long-term leases receivable	75
Auxiliary enterprises and other operating activities	<u>17,676</u>
Total current receivables before allowance	89,371
Less allowance for doubtful accounts	<u>2,304</u>
Net current accounts receivable	<u>87,067</u>
Noncurrent receivables	
Capital gifts, grants, and other receivables	2,151
Long-term leases receivable	870
Accrued investment interest	125
Build America Bond interest receivable	<u>122</u>
Total noncurrent receivables	<u>3,268</u>
Total receivables	<u>\$ 90,335</u>

### Long-term leases receivable

Leases receivable represent the university's contractual receipts for the right to use the present service capacity of its assets. These receivables are for cell tower leases on the Blacksburg main campus. The university's lease agreements for cell towers typically have an initial term of 10 years with five-year renewal options. The lending rates on the university's receivable leases are 3.25%.

The university leases indirectly to cell carriers through a ground lease with a subsidiary of the foundation and directly with cell carriers. The university's present receivable portfolio does not contain provisions for variable payments based on the university's future performance or usage of the underlying assets. Additionally, the university's present receivable portfolio does not contain provisions for residual value guarantees. The university had no impairment losses on its lease receivable portfolio in fiscal year 2022.

### Future Lease Payments Receivable

For fiscal years subsequent to 2022  
(all dollars in thousands)

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2023	\$ 75	\$ 30	\$ 105
2024	61	27	88
2025	61	25	86
2026	65	23	88
2027	69	21	90
2028-2032	342	72	414
2033-2037	<u>272</u>	<u>17</u>	<u>289</u>
Total future payments receivable	<u>\$ 945</u>	<u>\$ 215</u>	<u>\$ 1,160</u>



Newman Library  
Photo by Luke Hayes for Virginia Tech.

## 6. Notes Receivable

Notes receivable as of June 30, 2022  
(all dollars in thousands)

Current notes receivable	
Federal Perkins students loan program	\$ 752
VTT LLC operating & equipment loan	194
Brookings student loan programs	149
Other short-term loans	<u>63</u>
Total current notes receivable	1,158
Less allowance for doubtful accounts	<u>45</u>
Net current notes receivable	<u>1,113</u>
Noncurrent notes receivable	
VTT LLC operating & equipment loan	4,209
Federal Perkins students loan program	3,974
Brookings student loan programs	1,024
Health Professional student loan program	599
Other short-term loans	<u>231</u>
Total noncurrent notes receivable	10,037
Less allowance for doubtful accounts	<u>267</u>
Net noncurrent notes receivable	<u>9,770</u>
Total notes receivable	<u>\$ 10,883</u>

## 7. Capital Assets

A summary of changes to capital assets for the year ended June 30, 2022  
(all dollars in thousands)

	Beginning Balance (Restated)	Additions	Retirements	Ending Balance
<b>Depreciable capital assets</b>				
Buildings	\$ 2,103,789	\$ 183,544	\$ 1,089	\$ 2,286,244
Buildings - financed purchase	13,952	-	-	13,952
Moveable equipment	655,237	56,244	24,435	687,046
Capitalized software and other intangible assets	28,956	11,018	375	39,599
Fixed equipment	160,155	8,155	555	167,755
Fixed equipment - financed purchase	659	-	-	659
Infrastructure	133,160	5,053	30	138,183
Library books	78,423	736	353	78,806
Right-to-use leases				
Land	3,805	465	-	4,270
Buildings	141,569	18,510	4,123	155,956
Equipment	2,145	-	-	2,145
Infrastructure	181	-	-	181
Total depreciable capital assets, at cost	<u>3,322,031</u>	<u>283,725</u>	<u>30,960</u>	<u>3,574,796</u>
<b>Less accumulated depreciation and amortization</b>				
Buildings	738,328	55,632	1,087	792,873
Buildings - financed purchase	4,070	581	-	4,651
Moveable equipment	491,126	45,503	23,395	513,234
Capitalized software and other intangible assets	27,090	3,509	321	30,278
Fixed equipment	92,805	7,098	489	99,414
Fixed equipment - financed purchase	192	28	-	220
Infrastructure	107,294	2,694	18	109,970
Library books	73,244	1,066	353	73,957
Right-to-use lease assets				
Land	182	195	-	377
Buildings	17,225	18,900	1,896	34,229
Equipment	536	537	-	1,073
Infrastructure	30	31	-	61
Total accumulated depreciation and amortization	<u>1,552,122</u>	<u>135,774</u>	<u>27,559</u>	<u>1,660,337</u>
Total depreciable capital assets, net of accumulated depreciation and amortization	<u>1,769,909</u>	<u>147,951</u>	<u>3,401</u>	<u>1,914,459</u>
<b>Non-depreciable capital assets</b>				
Land	49,652	-	-	49,652
Livestock	230	97	-	327
Construction in progress	286,600	212,838	193,113	306,325
Equipment in process	6,087	7,775	5,386	8,476
Software in development	98	422	79	441
Total non-depreciable capital assets	<u>342,667</u>	<u>221,132</u>	<u>198,578</u>	<u>365,221</u>
Total capital assets, net of accumulated depreciation and amortization	<u>\$ 2,112,576</u>	<u>\$ 369,083</u>	<u>\$ 201,979</u>	<u>\$ 2,279,680</u>

## 8. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities at June 30, 2022, consist of the following (all dollars in thousands):

Accounts payable	\$ 51,744
Accounts payable, capital projects	27,780
Accrued salaries and wages payable	86,488
Retainage payable	9,158
Total current accounts payable and accrued liabilities	<u>\$ 175,170</u>

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.

## 9. Unearned Revenue

Unearned revenue consists of the following at June 30, 2022 (all dollars in thousands):

Grants and contracts	\$ 33,788
Prepaid athletic tickets	11,902
Prepaid tuition and fees	10,490
Dining Services Meal Plans	1,360
Other auxiliary enterprises	4,679
Total unearned revenue	<u>\$ 62,219</u>

## 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 2022, 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, 2022, 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, 2022 as shown in the subsequent paragraph (*all dollars in thousands*):

VCBA 21st Century program	\$	128,054
Private Gifts		26,611
VCBA Central Maintenance Reserve program		4,715
VCBA Equipment Trust Fund program		18,814
Grants and contracts		2,562
Total	\$	<u>180,756</u>

The line items, "Due from the Commonwealth of Virginia", on the *Statement of Net Position* for the year ended June 30, 2022, include pending reimbursements from the following programs (*all dollars in thousands*):

	Current	Noncurrent
VCBA Equipment Trust Fund program	\$ 18,069	\$ -
VCBA 21st Century program		10,696
Capital appropriations receivable	-	2,424
Total	\$ 18,069	\$ 13,120

## 11. Short-term Debt

In August of 2021, the Board of Visitors authorized the university to issue its own commercial paper on a tax-exempt or taxable basis in an aggregate principal amount of up to \$175,000,000. At June 30, 2022, the amount outstanding was \$46,449,000. The average days-to-maturity was 44 days with a weighted average effective interest rate of 0.70%.

JP Morgan is the university's dealer and BNY Mellon is the issuing and paying agent. This short-term debt finances capital projects on an interim basis pending long-term bond financing.

## 12. Summary of Long-term Indebtedness

### Bonds Payable

The university has issued two categories of bonds pursuant to Article X, Section 9, 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, VCBA 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 Virginia Tech Foundation Inc. and investment firms BNY Mellon Investment Management and Merganser Capital Management hold these funds 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 Athletic Facilities System, the University Services System (includes Career and Professional Development, Center for the Arts, Health Services, Recreational Sports, Student Engagement and Campus Life, Cultural and Community Centers, Student Organizations, and Rescue Squad), and the Utility System (includes Virginia Tech Electric Service) 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 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.

### Finance Purchase Obligation

The university has a finance purchase obligation with the Virginia Tech Foundation Inc. for the Kentland Farm dairy complex. Under the terms of the lease agreement, ownership of the property will be transferred to the university at the end of the lease. The university has accounted for the financed purchases as additions to capital assets in the year of the agreement and recorded a corresponding financed purchase obligation in long-term debt, both of which are on the *Statement of Net Position* as of June 30, 2022.

### Revolving Lines of Credit

The university has revolving lines of credit with First Bank and Trust Company, Truist Financial Corporation, and Wells Fargo Bank, N.A. with maximum principal amounts totaling \$368,000,000. The \$308,000,000 with Truist Bank includes a standby liquidity support agreement to provide a revolving line of credit as liquidity to support the university's commercial paper program with a maximum principal amount of \$175,000,000. As of June 30, 2022, there were no amounts outstanding on these revolving lines of credit as shown in the table below (*all dollars in thousands*):

	Maximum Principal Amount
Truist Financial Corporation	\$ 308,000
The First Bank and Trust Company	30,000
Wells Fargo Bank, N.A.	30,000
Total	\$ <u>368,000</u>

**Long-term Debt Payable Activity**

As of June 30, 2022

(all dollars in thousands)

	Beginning Balance (restated)	Additions	Retirements	Ending Balance	Current Portion
Bonds payable					
Section 9(c) general obligation revenue bonds	\$ 188,792	\$ -	\$ 12,399	\$ 176,393	\$ 12,818
Section 9(d) revenue bonds	84,576	-	2,743	81,833	2,650
Notes payable	165,632	-	7,352	158,280	5,525
Finance purchase obligations	11,520	-	470	11,050	490
Total long-term debt payable	<u>\$ 450,520</u>	<u>\$ -</u>	<u>\$ 22,964</u>	<u>\$ 427,556</u>	<u>\$ 21,483</u>

**Future Principal Commitments**

For fiscal years subsequent to 2022

(all dollars in thousands)

	Section 9(c) Bonds	Section 9(d) Bonds	Notes Payable	Finance Purchase Obligations	Total Long-term Debt Payable
2023	\$ 12,818	\$ 2,650	\$ 5,525	\$ 490	\$ 21,483
2024	13,304	4,475	12,890	515	31,184
2025	13,445	4,870	13,100	530	31,945
2026	13,985	4,745	13,105	560	32,395
2027	14,507	4,910	12,665	585	32,667
2028-2032	49,821	26,605	56,210	3,335	135,971
2033-2037	28,280	22,345	28,940	4,105	83,670
2038-2041	16,170	8,860	8,545	930	34,505
Unamortized premiums (discounts)	14,063	2,373	7,300	-	23,736
Total future principal requirements	<u>\$ 176,393</u>	<u>\$ 81,833</u>	<u>\$ 158,280</u>	<u>\$ 11,050</u>	<u>\$ 427,556</u>

**Future Interest Commitments**

For fiscal years subsequent to 2022

(all dollars in thousands)

	Section 9(c) Bonds	Section 9(d) Bonds	Notes Payable	Finance Purchase Obligations	Total Long-term Debt Payable
2023	\$ 5,258	\$ 2,288	\$ 4,631	\$ 482	\$ 12,659
2024	4,747	2,181	4,308	457	11,693
2025	4,210	2,038	3,940	441	10,629
2026	3,673	1,899	3,583	414	9,569
2027	3,108	1,742	3,218	386	8,454
2028-2032	8,464	6,651	10,287	1,529	26,931
2033-2037	2,974	2,557	3,565	766	9,862
2038-2041	610	449	295	42	1,396
Total future interest requirements	<u>\$ 33,044</u>	<u>\$ 19,805</u>	<u>\$ 33,827</u>	<u>\$ 4,517</u>	<u>\$ 91,193</u>

**Future Principal Commitments by System**

For fiscal years subsequent to 2022

(all dollars in thousands)

	Section 9(c) Bonds	Section 9(d) Bonds	Notes Payable	Finance Purchase Obligations	Total Long-term Debt Payable
Athletic system					
Principal	\$ -	\$ 35,505	\$ -	\$ -	\$ 35,505
Unamortized premiums (discounts)	-	(3)	-	-	(3)
Total for athletic system	-	<u>35,502</u>	-	-	<u>35,502</u>
Dormitory and dining hall system					
Principal	145,163	38,355	17,675	-	201,193
Unamortized premiums (discounts)	12,335	2,246	1,193	-	15,774
Total for dormitory and dining hall system	<u>157,498</u>	<u>40,601</u>	<u>18,868</u>	-	<u>216,967</u>
Electric service utility system					
Principal	-	3,230	225	-	3,455
Unamortized premiums (discounts)	-	99	7	-	106
Total for utility system	-	<u>3,329</u>	<u>232</u>	-	<u>3,561</u>
University services system					
Principal	-	2,370	41,035	-	43,405
Unamortized premiums (discounts)	-	31	1,605	-	1,636
Total for university services system	-	<u>2,401</u>	<u>42,640</u>	-	<u>45,041</u>
All systems					
Principal	145,163	79,460	58,935	-	283,558
Unamortized premiums (discounts)	12,335	2,373	2,805	-	17,513
Total for all systems	<u>157,498</u>	<u>81,833</u>	<u>61,740</u>	-	<u>301,071</u>
Other nonsystem debt					
Principal	17,167	-	92,045	11,050	120,262
Unamortized premiums (discounts)	1,728	-	4,495	-	6,223
Total for other nonsystem debt	<u>18,895</u>	-	<u>96,540</u>	<u>11,050</u>	<u>126,485</u>
Total future principal requirements	<u>\$ 176,393</u>	<u>\$ 81,833</u>	<u>\$ 158,280</u>	<u>\$ 11,050</u>	<u>\$ 427,556</u>

**13. Detail of Long-term Indebtedness**As of June 30, 2022  
(all dollars in thousands)

	Interest rates	Maturity	Principal Payable	Unamortized Premium (Discount)	Ending Balance
<b>Bonds Payable</b>					
Revenue bonds - Section 9(d)					
Athletic system					
Series 2015B, issued \$510	2.50% - 3.50%	2035	\$ 510	\$ (3)	\$ 507
Series 2021, issued \$40	2.15%	2036	40	-	40
Series 2021, issued \$21,825 - refunding 2012B note payable	0.40% - 2.55%	2041	21,825	-	21,825
Series 2021, issued \$7,055 - refunding 2010B note payable	0.40% - 2.55%	2041	7,055	-	7,055
Series 2021, issued \$6,075 - refunding 2016A note payable	0.40% - 2.55%	2041	6,075	-	6,075
Total athletic system			<u>35,505</u>	<u>(3)</u>	<u>35,502</u>
Dormitory and dining hall system					
Series 2015A, issued \$51,425	2.00% - 5.00%	2035	38,355	2,246	40,601
Electric service utility system					
Series 2015D, issued \$4,390	2.75% - 4.00%	2035	3,230	99	3,329
University services system					
Recreational Sports auxiliary					
Series 2015C, issued \$3,280	2.00% - 4.00%	2035	2,370	31	2,401
Total revenue bonds			<u>79,460</u>	<u>2,373</u>	<u>81,833</u>
General obligation revenue bonds - Section 9(c)					
Dormitory and dining hall system					
Series 2012A, issued \$942 - partial refunding series 2004A	5.00%	2024	705	39	744
Series 2013B, issued \$7,842 - partial refunding series 2007A	4.00% - 5.00%	2027	4,723	518	5,241
Series 2013B, issued \$3,576 - partial refunding series 2007A	4.00% - 5.00%	2027	2,152	236	2,388
Series 2015B, issued \$10,671 - partial refunding series 2008B	4.00% - 5.00%	2028	7,043	1,059	8,102
Series 2016B, issued \$24,200 - partial refunding series 2009B	2.00% - 5.00%	2029	18,110	2,591	20,701
Series 2016B, issued \$2,310 - partial refunding series 2009B	2.00% - 5.00%	2029	1,725	247	1,972
Series 2010A, issued \$34,650	3.00% - 5.00%	2030	16,520	263	16,783
Series 2020B, issued \$13,070 - refunding series 2011A	0.55% - 1.41%	2031	13,070	41	13,111
Series 2020A, issued \$84,305	1.63% - 4.00%	2040	81,115	7,341	88,456
Total dormitory and dining hall system			<u>145,163</u>	<u>12,335</u>	<u>157,498</u>
Other nonsystem general obligation revenue bonds					
Parking facilities					
Series 2013B, issued \$218 - partial refunding series 2006B	4.00% - 5.00%	2026	184	11	195
Series 2015B, issued \$921 - partial refunding series 2008B	4.00% - 5.00%	2028	603	91	694
Series 2010A, issued \$745	2.00% - 5.00%	2030	345	5	350
Series 2016B, issued \$18,890 - partial refunding series 2009B	2.00% - 5.00%	2034	16,035	1,621	17,656
Total other nonsystem general obligation revenue bonds			<u>17,167</u>	<u>1,728</u>	<u>18,895</u>
Total general obligation revenue bonds			<u>162,330</u>	<u>14,063</u>	<u>176,393</u>
Total bonds payable			<u>\$ 241,790</u>	<u>\$ 16,436</u>	<u>\$ 258,226</u>
<b>Notes Payable</b>					
Dormitory and dining hall system					
Series 2014B, issued \$340 - partial refunding series 2005	3.00% - 5.00%	2026	\$ 205	\$ 13	\$ 218
Series 2021B, issued \$795 - partial refunding series 2012A	0.48% - 0.94%	2028	795	1	796
Series 2010A, issued \$9,650	3.75% - 5.50%	2031	4,835	175	5,010
Series 2021A, issued \$980 - partial refunding series 2010A	2.00% - 3.00%	2033	980	103	1,083
Series 2018A, issued \$11,505	4.00% - 5.00%	2039	10,015	901	10,916
Series 2021B, issued \$845 - partial refunding series 2018A	2.50% - 2.60%	2041	845	-	845
Total dormitory and dining hall system			<u>17,675</u>	<u>1,193</u>	<u>18,868</u>
Electric service utility system					
Series 2021A, issued \$425 - refunding series 2010B	5.00%	2023	225	7	232
University services system					
Career Services auxiliary					
Series 2021A, issued \$600 - refunding series 2010B	5.00%	2025	600	53	653
Center for the Arts auxiliary					
Series 2010A, issued \$19,445	3.75% - 5.60%	2036	12,490	328	12,818
Series 2021A, issued \$1,530 - partial refunding series 2010A	2.00%	2038	1,530	53	1,583
Series 2021B, issued \$15,655 - refunding series 2011A	0.48% - 2.40%	2039	15,655	3	15,658
Health Services auxiliary					
Series 2015B, issued \$800 - partial refunding series 2009A	3.00% - 5.00%	2029	575	62	637
Series 2016A, issued \$7,945 - partial refunding series 2009B	3.00% - 5.00%	2030	5,905	819	6,724
Series 2016A, issued \$2,780 - partial refunding series 2009B	3.00% - 5.00%	2030	2,065	287	2,352
Series 2021B, issued \$175 - partial refunding series 2015B	1.33% - 1.53%	2031	175	-	175
Series 2021B, issued \$1,510 - partial refunding series 20016A	1.53% - 1.71%	2032	1,510	-	1,510
Series 2021B, issued \$530 - partial refunding series 2016A	1.53% - 1.71%	2032	530	-	530
Total university services system			<u>41,035</u>	<u>1,605</u>	<u>42,640</u>
Other nonsystem notes payable					
Boiler pollution controls					
Series 2014B, issued \$720 - partial refunding series 2006A	3.00% - 5.00%	2024	120	13	133
Series 2016A, issued \$375 - partial refunding series 2006A	3.00%	2027	375	19	394
Series 2021B, issued \$235 - partial refunding series 2014B	0.94% - 1.13%	2029	235	-	235
Campus heating plant					
Series 2014B, issued \$1,790 - partial refunding series 2007A	3.00% - 5.00%	2026	755	85	840
Series 2016A, issued \$575 - partial refunding series 2007A	3.00% - 5.00%	2028	575	59	634
Series 2016A, issued \$3,625 - partial refunding series 2009B	3.00% - 5.00%	2030	2,695	373	3,068

Series 2021B, issued \$485 - partial refunding series 2014B	1.13% - 1.33%	2030	485	-	485
Series 2021B, issued \$690 - partial refunding series 2016A	1.53% - 1.71%	2032	690	-	690
Chiller plant					
Series 2021B, issued \$5,315 - refunding series 2011A	0.48% - 1.91%	2034	5,315	2	5,317
Goodwin Hall					
Series 2021B, issued \$8,320 - partial refunding series 2011A	0.48% - 1.71%	2032	8,320	3	8,323
Holden Hall					
Series 2019A, issued \$7,920	2.25% - 5.00%	2040	7,410	735	8,145
Holtzman Alumni Center and Skelton Conference Center					
Series 2021B, issued \$10,840 - refunding series 2012A	0.48% - 1.81%	2033	10,840	4	10,844
ICTAS II					
Series 2016A, issued \$8,345 - partial refunding series 2009B	3.00% - 5.00%	2030	6,950	983	7,933
Kelly Hall					
Series 2014B, issued \$6,040 - partial refunding series 2006A	3.00% - 5.00%	2024	1,935	222	2,157
Series 2016A, issued \$3,180 - partial refunding series 2006A	3.00%	2027	3,180	157	3,337
Life Sciences I Facility					
Series 2012A, issued \$3,985 - partial refunding series 2005	5.00%	2023	535	64	599
Series 2021B, issued \$1,235 - partial refunding series 2012A	0.48% - 1.00%	2025	1,205	2	1,207
Series 2014B, issued \$1,005 - partial refunding series 2005	3.00% - 5.00%	2026	615	39	654
Steger Hall					
Series 2021A, issued \$6,785 - refunding series 2010B	5.00%	2030	6,785	1,381	8,166
Unified Communications					
Series 2015A, issued \$6,160	5.00%	2023	1,015	103	1,118
Veterinary medicine instruction addition					
Series 2012B, issued \$9,820	3.00% - 5.00%	2033	480	57	537
Series 2021B, issued \$6,355 - partial refunding series 2012B	0.48% - 1.81%	2033	6,355	2	6,357
Virginia Tech Carilion biosciences addition					
Series 2017A and 2017B, issued \$24,630	2.75% - 3.30%	2038	21,610	150	21,760
Series 2018B, issued \$3,965	3.12% - 5.00%	2039	3,565	42	3,607
Total other nonsystem notes payable			92,045	4,495	96,540
Total notes payable			<u>\$ 150,980</u>	<u>\$ 7,300</u>	<u>\$ 158,280</u>

Finance purchase obligation - Kentland Farm dairy complex

\$ 11,050 \$ - \$ 11,050



Groundbreaking event for the new Hitt Hall building on Virginia Tech's campus.  
Photo by Christina Franusich for Virginia Tech.



Burruss Hall reflects blue and yellow lights, the colors of the Ukrainian flag, in support of students and faculty affected by the conflict in Ukraine.  
Photo by Christina Fransich for Virginia Tech.

## 14. Long-term Debt Defeasance

### Prior Years

In previous fiscal years, in accordance with GASB Statement 7, *Advance Refundings Resulting in the Defeasance of Debt*, the university excluded from its financial statements the assets in escrow and the debt payable that were defeased in-substance. For the year ending June 30, 2022, bonds and notes payable considered defeased in previous years totaled \$68,805,000.

### Debt Defeasance – Gains (Losses)

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 prior years.

#### Deferred Outflows for Debt Defeasance

As of June 30, 2022

(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Ending Balance
Bonds payable				
Section 9(c) general obligation revenue bonds	\$ (1,813)	\$ -	\$ 277	\$ (1,536)
Section 9(d) revenue bonds	(718)	-	82	(636)
Notes payable	(1,996)	-	198	(1,798)
Total deferred outflows for debt defeasance	<u>\$ (4,527)</u>	<u>\$ -</u>	<u>\$ 557</u>	<u>\$ (3,970)</u>

#### Deferred Inflows for Debt Defeasance

As of June 30, 2022

(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Ending Balance
Bonds payable				
Section 9(c) general obligation revenue bonds	\$ 525	\$ -	\$ (92)	\$ 433
Section 9(d) revenue bonds	206	-	(34)	172
Notes payable	1,057	-	(111)	946
Total deferred inflows for debt defeasance	<u>\$ 1,788</u>	<u>\$ -</u>	<u>\$ (237)</u>	<u>\$ 1,551</u>

## 15. Long-term Leases Payable

Long-term leases represent the university's obligation to pay owners for the right to use the present service capacity of their assets. These obligations are primarily for leases of facilities, such as office space in the North End Center office building, the North End Center parking garage, space in the Children's National Hospital, and various office and laboratory spaces in the Virginia Tech Corporate Research Center. The university's lease agreements for facilities typically range from 3-20 years, with renewal options equal to the base term appearing more frequently in the university's 3-5-year lease agreements. The difference between the effective borrowing rates on the university's determinable-rate contracts and prime-rate contracts is immaterial. The tax-exempt borrowing rates on the university's leases range from 2.19% to 25.4%, with a tax-exempt effective portfolio rate of 3.26% at June 30, 2022. A portion of the North End Center parking garage liability is a taxable obligation, and carries a 4.31% borrowing rate.

The university's lease portfolio is primarily with the Virginia Tech Foundation and its subsidiaries. Several of the university's leases with the foundation operate on a non-profit basis, in which the rent owed is trueed-up at regular intervals to reflect cost-only payments. These agreements make up the majority of the university's 20-year leases. The university's present lease portfolio does not contain provisions for variable payments based on the university's future performance or usage of the underlying assets. Additionally, the university's present lease portfolio does not contain provisions for residual value guarantees. The university had no impairment losses on its lease portfolio in fiscal year 2022. The university committed \$10.3 million to the university's future Gilbert Street lease with the foundation. The lease is for 182,578 square feet of office space commencing on or around November 1, 2022. The amount is for construction and renovation costs documented in the lease agreement dated May 1, 2022.

### Long-term Leases Payable Activity

As of June 30, 2022

(all dollars in thousands)

	Beginning Balance	Additions	Retirements	Terminations	Ending Balance	Current Portion
<b>Long-term leases payable</b>						
Land	\$ 3,397	\$ -	\$ 383	\$ -	\$ 3,014	\$ 351
Building	123,719	12,040	16,191	2,273	117,295	16,168
Equipment	1,653	-	515	-	1,138	550
Infrastructure	152	-	29	-	123	30
Total long-term leases payable	<u>\$ 128,921</u>	<u>\$ 12,040</u>	<u>\$ 17,118</u>	<u>\$ 2,273</u>	<u>\$ 121,570</u>	<u>\$ 17,099</u>

### Future Principal Commitments

For fiscal years subsequent to 2022

(all dollars in thousands)

	Land	Building	Equipment	Infrastructure	Total
2023	\$ 351	\$ 16,138	\$ 550	\$ 30	\$ 17,099
2024	264	14,437	588	31	15,320
2025	191	10,263	-	32	10,486
2026	197	9,427	-	30	9,654
2027	173	9,259	-	-	9,432
2028-2032	924	25,721	-	-	26,645
2033-2037	578	22,210	-	-	22,788
2038-2042	44	4,870	-	-	4,914
2043-2047	62	2,650	-	-	2,712
2048-2052	85	2,290	-	-	2,375
2053-2057	112	-	-	-	112
2058-2059	33	-	-	-	33
Total future principal requirements	<u>\$ 3,014</u>	<u>\$ 117,295</u>	<u>\$ 1,138</u>	<u>\$ 123</u>	<u>\$ 121,570</u>

### Future Interest Commitments

For fiscal years subsequent to 2022

(all dollars in thousands)

	Land	Building	Equipment	Infrastructure	Total
2023	\$ 98	\$ 4,845	\$ 60	\$ 3	\$ 5,006
2024	88	3,635	22	2	3,747
2025	80	2,763	-	1	2,844
2026	74	2,382	-	-	2,456
2027	68	2,011	-	-	2,079
2028-2032	256	6,848	-	-	7,104
2033-2037	112	3,158	-	-	3,270
2038-2042	52	1,117	-	-	1,169
2043-2047	44	597	-	-	641
2048-2052	32	145	-	-	177
2053-2057	17	-	-	-	17
2058-2059	1	-	-	-	1
Total future interest requirements	<u>\$ 922</u>	<u>\$ 27,501</u>	<u>\$ 82</u>	<u>\$ 6</u>	<u>\$ 28,511</u>

## 16. Change in Other Liabilities

A summary of the changes in other liabilities for the year ended June 30, 2022  
(all dollars in thousands)

	Beginning Balance	Additions	Reductions	Ending Balance	Current Portion
Accrued compensated absences	\$ 55,638	\$ 40,842	\$ 42,695	\$ 53,785	\$ 29,503
Federal student loan program contribution refundable	8,377	156	2,293	6,240	-
Net pension liability	465,425	-	234,370	231,055	-
Other Post employment benefits	181,484	146	31,669	149,961	2,975
Total other liabilities	<u>\$ 710,924</u>	<u>\$ 41,144</u>	<u>\$ 311,027</u>	<u>\$ 441,041</u>	<u>\$ 32,478</u>

## 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, 2022 are listed below.

### Capital commitments by project

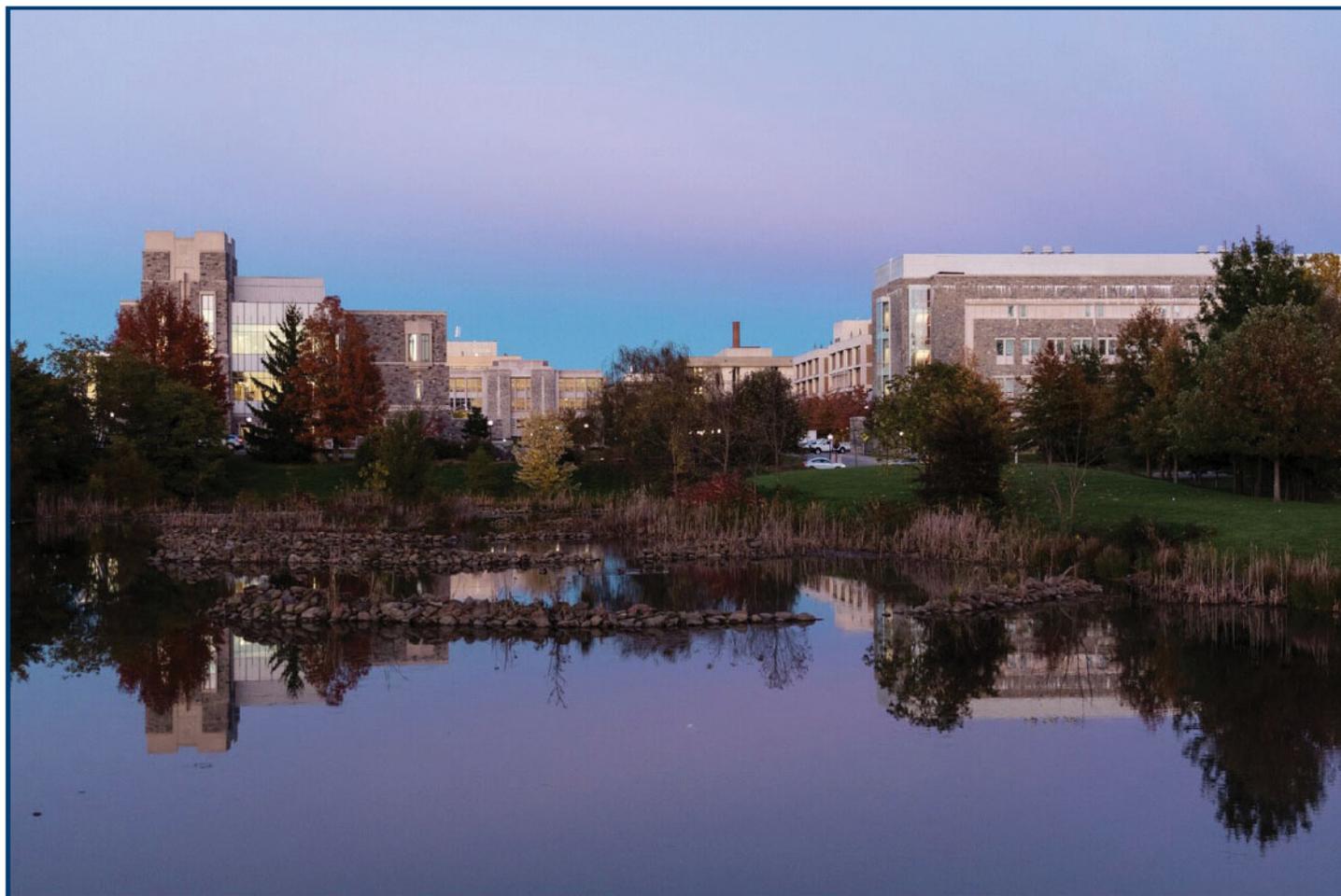
(all dollars in thousands)

Innovation Campus	\$ 196,560
Undergraduate science laboratory building	67,114
Hitt Hall and new dining facility	58,027
New upper quad residence hall	19,270
Corps leadership & military science building	17,439
Mitchell Hall to replace Randolph Hall	14,888
Data & decision sciences building	13,641
Other projects	11,573
Total	<u>\$ 398,512</u>

### Capital commitments by funding source

(all dollars in thousands)

VCBA 21st Century bonds to be paid by the commonwealth	\$ 280,422
Private gifts	57,442
Bonds and notes payable to be paid by the university	51,006
Auxiliary enterprise funds	9,145
Other funding sources	497
Total	<u>\$ 398,512</u>



A view of west campus reflected by the Duck Pond. Photo by Christina Franusich for Virginia Tech.

## 18. Pension Plans

### Plan Descriptions

All full-time, salaried, permanent employees of state agencies are automatically covered by the VRS State Employee Retirement Plan (SERP) or the Virginia Law Officers' Retirement System (VaLORS) retirement plans 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. These plans 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 pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the *Code of Virginia*, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave, and previously refunded service.

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

### Retirement Plan Provisions by Plan Structure

#### Plan 1

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

#### Plan 2

Same as Plan 1.

#### Hybrid Retirement Plan

The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan.

- The defined benefit component is based on a member's age, service credit, and average final compensation at retirement using a formula.
- The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions.
- In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.

### Eligible Members

#### Eligible Members – Plan 1

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

#### Eligible Members – Plan 2

Employees are in Plan 2 if their membership date is on or after July 1, 2010, to December 31, 2013, and they have not taken a refund, 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.

#### Eligible Members – Hybrid Plan

Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:

- Full-time permanent, salaried state employees\*
- Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.

\*Some state 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 pretax salary reduction. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payments.

#### Retirement Contributions - Plan 2

Same as Plan 1.

#### 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.

### Service Credit

#### Service Credit - Plan 1

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

#### Service Credit - Plan 2

Same as Plan 1.

#### Service Credit - Hybrid Plan

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

**Defined Contributions Component:** Under the defined contribution component, service credit is used to determine vesting for the employer contribution portion of the plan.

## Vesting

### Vesting - 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 service credit. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund. Members are always 100% vested in the contributions that they make.

### 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 service credit. Plan 1 or Plan 2 members with at least five years (60 months) of service credit who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.

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

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

Distribution is not required, except as governed by law.

## Calculating the Benefit

### Calculating the Benefit - Plan 1

The basic benefit is determined using the average final compensation, service credit and plan multiplier. An early retirement reduction factor is applied to this amount if the member is retiring with a reduced benefit. In cases where the member has elected an optional form of retirement payment, an option factor specific to the option chosen is then applied.

### 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 on those contributions.

## 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%. 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 service credit earned, purchased, or granted on or after January 1, 2013. The retirement multiplier for VaLORS employees is 2.00%.

### Service Retirement Multiplier - Hybrid Plan

**Defined Benefit Component:** 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. VaLORS - Not applicable.

**Defined Contribution Component:** Not applicable.

## Normal Retirement Age

### Normal Retirement Age - Plan 1

For SERP, age 65. For VaLORS, age 60.

### Normal Retirement Age - Plan 2

For SERP, normal Social Security retirement age. For VaLORS, same as Plan 1.

### Normal Retirement Age - Hybrid Plan

**Defined Benefit Component:** SERP - Same as Plan 2; VaLORS - 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 service credit or at age 50 with at least 30 years of service credit. For VaLORS, age 60 with at least five years of service credit or age 50 with at least 25 years of service credit.

### Earliest Unreduced Retirement Eligibility - Plan 2

For SERP, normal Social Security retirement age with at least five years (60 months) of service credit or when their age and service equal 90. For VaLORS, same as Plan 1.

### Earliest Unreduced Retirement Eligibility - Hybrid Plan

**Defined Benefit Component:** SERP - Same as Plan 2; 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 service credit or age 50 with at least 10 years of service credit. For VaLORS, age 50 with at least five years of service credit.

### Earliest Reduced Retirement Eligibility - Plan 2

For SERP, age 60 with at least five years (60 months) of service credit. For VaLORS, same as Plan 1.

### Earliest Reduced Retirement Eligibility - Hybrid Plan

**Defined Benefit Component:** SERP - Same as Plan 2. 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%) up to a maximum COLA of 5%.

#### **Eligibility:**

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

For members who retire with a reduced benefit and who have less than 20 years of service credit, the COLA will 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.
- 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 and Plan 2.

Defined Contribution Component: Not applicable.

### *Disability Coverage*

#### **Disability Coverage - Plan 1**

For members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.70% on all service, regardless of when it was earned, purchased or granted. 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**

For 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 service credit counts toward vesting, eligibility for retirement, and the health insurance credit. Only active members are eligible to purchase prior service. Members also may be eligible to purchase periods of leave without pay.

#### **Purchase of Prior Service - Plan 2**

Same as Plan 1.

#### **Purchase of Prior Service - Hybrid Plan**

Defined Benefit Component: Same as Plan 1, with the exception that Hybrid Retirement Plan members are ineligible for ported service.

Defined Contribution Component: Not applicable.

### *Contributions*

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Each state agency's contractually required contribution rate for the year ended June 30, 2022 was 14.46% of covered employee compensation for employees in the VRS State Employee Retirement Plan. For employees in the VaLORS Retirement Plan, the contribution rate was 21.90% of covered employee compensation. These rates were based on an actuarially determined rates from an actuarial valuation as of June 30, 2019. The actuarially determined rates, when combined with employee contributions, were 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 State Employee Retirement Plan were \$41,085,000 and \$39,309,000 for the years ended June 30, 2022 and June 30, 2021, respectively. Contributions from Virginia Tech to the VaLORS Retirement Plan were \$557,000 and \$512,000 for the years ended June 30, 2022 and June 30, 2021, respectively.

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

At June 30, 2022, Virginia Tech reported a liability of \$277,619,000 for its proportionate share of the VRS State Employee Retirement Plan Net Pension Liability and a liability of \$3,436,000 for its proportionate share of the VaLORS Retirement Plan Net Pension Liability. The Net Pension Liability was measured as of June 30, 2021, and the total pension liability used to calculate the Net Pension Liability was determined by an actuarial valuation performed as of June 30, 2020, and rolled forward to the measurement date of June 30, 2021. 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, 2021, relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2021, Virginia Tech's proportion of the VRS State Employee Retirement Plan was 6.275% as compared to 6.355% at June 30, 2020. At June 30, 2021, the Virginia Tech's proportion of the VaLORS Retirement Plan was 0.659% as compared to 0.643% at June 30, 2020.

For the year ended June 30, 2022, Virginia Tech recognized pension expense of \$3,314,000 for the VRS State Employee Retirement Plan and \$443,000 for the VaLORS Retirement Plan. Since there was a change in proportionate share between June 30, 2020 and June 30, 2021, 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, 2022, 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	\$ 2,051	\$ 13,070	\$ 36	\$ 95
Net difference between projected and actual earnings on pension plan investments	-	156,701	-	1,318
Change in assumptions	26,167	-	246	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	-	5,865	63	22
Employer contributions subsequent to the measurement date	41,085		557	
Total	<u>\$ 69,303</u>	<u>\$ 175,636</u>	<u>\$ 902</u>	<u>\$ 1,435</u>

A total of \$41,642,000 (\$41,085,000 for SERP and \$557,000 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 ending June 30, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows (all dollars in thousands):

Year ended June 30,	SERP	VaLORS
2023	\$ (27,981)	\$ (128)
2024	\$ (35,611)	\$ (251)
2025	\$ (35,981)	\$ (308)
2026	\$ (47,846)	\$ (402)
2027	\$ -	\$ -

### Actuarial Assumptions

#### VRS State Employee Retirement Plan (SERP)

The total pension liability for the VRS State Employee Retirement Plan was based on an actuarial valuation as of June 30, 2020, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2021.

Inflation	2.50%
Salary increases, including inflation	3.50% – 5.35%
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation

#### Mortality rates (SERP)

- Pre-Retirement: Pub-2010 Amount Weighted General Employee Rates projected generationally; females set forward 2 years
- Post-Retirement: Pub-2010 Amount Weighted General Healthy Retiree Rates projected generationally; 110% of rates for females
- Post-Disability: Pub-2010 Amount Weighted General Disabled Rates projected generationally; males and females set forward 3 years
- Beneficiaries and Survivors: Pub-2010 Amount Weighted General Contingent Annuitant Rates projected generationally; 110% of rates for males and females
- Mortality Improvement: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

#### VaLORS Retirement Plan

The total pension liability for the VaLORS Retirement Plan was based on an actuarial valuation as of June 30, 2020, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2021.

Inflation	2.50%
Salary increases, including inflation	3.50% – 4.75%
Investment rate of return	6.75%, net of pension plan investment expenses, including inflation

#### Mortality rates (VaLORS)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years

- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years
- Mortality Improvement: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Increased rates at some younger ages, decreased at age 62, and changed final retirement age from 65 to 70
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

### Net Pension Liability

The net pension liability (NPL) is calculated separately for each plan and represents that particular plan's total pension liability determined in accordance with GASB Statement No. 67, less that plan's fiduciary net position. As of June 30, 2021, NPL amounts for the VRS State Employee Retirement Plan and the VaLORS Retirement Plan are as follows (all dollars in thousands):

	SERP	VaLORS
Total Pension Liability	\$ 26,739,647	\$ 2,390,609
Plan Fiduciary Net Position	23,112,417	1,868,924
Employers' Net Pension Liability (Asset)	<u>\$ 3,627,230</u>	<u>\$ 521,685</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	86.44%	78.18%

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

### Long-term Expected Rate of Return

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

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

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

\*On October 10, 2019, the VRS Board elected a long-term rate of 6.75%, which was roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation at that time, providing a median return of 7.11% including expected inflation of 2.50%.

### Discount Rate

The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through

the fiscal year ending June 30, 2021, 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 which was 100% of the actuarially determined contribution rate. From July 1, 2021, on, all agencies are assumed to continue 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 (SERP) and the VaLORS Retirement Plan net pension liability using the discount rate of 6.75%, 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 (5.75%) or one percentage point higher (7.75%) than the current rate (*all dollars in thousands*):

	1.00% Decrease (5.75%)	Current Discount Rate (6.75%)	1.00% Increase (7.75%)
Virginia Tech's proportionate share of the VRS SERP net pension liability	\$ 426,360	\$ 227,619	\$ 61,084
Virginia Tech's proportionate share of the VaLORS net pension liability	\$ 5,531	\$ 3,436	\$ 1,718

### *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 2021 Annual Report*. A copy of the *VRS 2021 Annual Report* may be downloaded from the VRS website at <https://www.varetire.org/pdf/publications/2021-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, 2022, was approximately \$2.4 million for legally required contributions into the plans.

## **19. Defined Contribution Plans**

### *Optional Retirement Plans*

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 \$34,835,000 for year ended June 30, 2022. Contributions to the optional retirement plan were calculated using the base salary amount of approximately \$379,393,000 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, which is an amount assessed by the commonwealth, was approximately \$2,444,000 for the fiscal year 2022.

### *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 \$79,000 for the year ended June 30, 2022. Contributions to the FERS and CSRS were calculated using the base salary amount of approximately \$373,000 for the fiscal year 2022.

In addition, the university contributed \$19,000 in employer contributions to the Thrift Savings Plan for the year ended June 30, 2022. The Thrift Savings Plan is a defined contribution plan in which the university matches employee contributions within certain limitations.

## 20. Other Postemployment Benefits

The university participates in postemployment benefit programs that are sponsored by the commonwealth and administered by the Virginia Retirement System (VRS, or the System) or the Department of Human Resource Management. These programs include the Pre-Medicare Retiree Healthcare program, Virginia Sickness and Disability program, Group Life Insurance program, Retiree Health Insurance Credit program, and Line of Duty Act program. The specific information for each of these Other Postemployment Benefit (OPEB) programs is described below:

### Plan Descriptions

#### **Pre-Medicare Retiree Healthcare (PMRH) program**

All full-time and part-time permanent salaried Virginia Tech employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) are eligible to participate in the commonwealth's healthcare program upon employment. Retirees who are not yet eligible for Medicare health benefits may continue to participate in this program by meeting certain eligibility requirements.

#### **Virginia Sickness and Disability (VSDP) program**

All full-time and part-time permanent salaried Virginia Tech employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) hired on or after January 1, 1999 are automatically covered by VSDP upon employment. The VSDP program also covers Virginia Tech employees hired before January 1, 1999 who elected to transfer to VSDP rather than retain their eligibility to be considered for disability retirement.

#### **Group Life Insurance (GLI) program**

All full-time, salaried, permanent employees of Virginia Tech are automatically covered by the GLI program upon employment. (Note: In addition to the Basic Group Life Insurance benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance program. For members who elect the optional group life insurance coverage, the insurer bills Virginia Tech directly for the premiums. Virginia Tech deducts these premiums from members' paychecks and pays the premiums to the insurer. Since this is a separate and fully insured program, it is not included as part of the GLI program postemployment benefit.)

#### **Retiree Health Insurance Credit (HIC) program**

All full-time, salaried, permanent employees of Virginia Tech are automatically covered by the HIC program. Members earn one month of service credit toward the benefit for each month they are employed and for which Virginia Tech pays contributions to VRS. The health insurance credit is a tax-free reimbursement in an amount set by the General Assembly for each year of service credit against qualified health insurance premiums retirees pay for single coverage, excluding any portion covering the spouse or dependents. The credit cannot exceed the amount of the premiums and ends upon the retiree's death.

#### **Line of Duty Act (LODA) program**

All paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) are automatically covered by the LODA program. As required by statute, the VRS is responsible for managing the assets of the program. The Virginia Tech contributions are determined by the VRS actuary using anticipated program costs and the number of covered individuals associated with all participating employers.

### Plan Provisions

#### **PMRH program**

##### Eligible employees

For a VRS retiree to participate in the Pre-Medicare Retiree Healthcare (PMRH) program, the participant must:

- be a retiring state employee who is eligible for a monthly retirement benefit from the VRS, and
  - be receiving (not deferring) the benefit immediately upon retirement\*, and
  - have his or her last employer before retirement be the Commonwealth of Virginia, and
  - be eligible for coverage (even if not enrolled) as an active employee in the State Health Benefits Program until his or her retirement date (not including extended coverage), and
  - have submitted within 31 days of his or her retirement date an enrollment form to his or her benefits administrator to enroll.
- (\* A retirement contribution or leave without pay status for retirement was reported in the month immediately prior to retirement date. Some faculty members may also be eligible if they are paid on an alternate pay cycle but maintain eligibility for active coverage until their retirement date.)

For an Optional Retirement Plan (ORP) retiree to participate in the PMRH program, the participant must:

- be a terminating state employee who is eligible for a benefit from one of the qualified ORP vendors, and
- have his or her last employer before termination be the Commonwealth of Virginia, and
- be eligible for coverage (even if not enrolled) in the State Employee Health Benefits Program at the time of termination, and
- meet the age and service requirements for an immediate retirement benefit under the VRS plan that would have been applicable had ORP coverage not been selected, and
- enroll in the State Retiree Health Benefits Program no later than 31 days from the date that coverage (or eligibility for coverage) was lost due to termination of employment.

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

There are no assets accumulated in a trust to pay benefits for this program.

#### **VSDP program**

##### Eligible employees

The Virginia Sickness and Disability Program (VSDP), also known as the Disability Insurance Trust Fund was established January 1, 1999 to provide short-term and long-term disability benefits for non-work-related and work-related disabilities.

Eligible employees are enrolled automatically upon employment. They include:

- Full-time and part-time permanent salaried Virginia Tech employees covered under VRS, SPORS and VaLORS (members new to VaLORS following its creation on October 1, 1999, have been enrolled since the inception of VSDP).
- State employees hired before January 1, 1999, who elected to transfer to VSDP rather than retain their eligibility to be considered for VRS disability retirement.
- Virginia Tech faculty members who elect the VRS defined benefit plan.

Benefit Amounts

The Virginia Sickness and Disability Program (VSDP) provides the following benefits for eligible retirees:

- Long-term Disability – If an employee becomes disabled within five years of his or her normal retirement age, the employee will receive up to five years of VSDP benefits, provided he or she remains medically eligible.
- Long-term Care Plan – The program also includes a self-funded long-term care plan that assists with the cost of covered long-term care services.

Cost-of-Living Adjustment (COLA)

During periods an employee receives long-term disability benefits, the LTD benefit may be increased annually by an amount recommended by the actuary and approved by the board.

- Plan 1 employees vested as of 1/1/2013 – 100% of the VRS Plan 1 COLA (The first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%).
- Plan 1 employee non-vested as of 1/1/2013, Plan 2 and Hybrid Plan employees – 100% of the VRS Plan 2 and Hybrid COLA (The first 2% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 2%) up to a maximum COLA of 3%).

For participating full-time employees taking service retirement, the creditable compensation may be increased annually by an amount recommended by the actuary and approved by the board, from the date of the commencement of the disability to the date of retirement.

100% of the increase in the pay over the previous plan year for continuing VSDP members in the State, SPORS and VaLORS Plans, with a maximum COLA of 4.00%

For participating full-time employees receiving supplemental (work-related) disability benefits, the creditable compensation may be increased annually by an amount recommended by the actuary and approved by the board, from the date of the commencement of the disability to the date of retirement

**GLI program**Eligible employees

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

Benefit amounts

The benefits payable under the GLI program have several components:

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

Reduction in benefit amounts

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

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

For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the GLI program. The minimum benefit was set at \$8,000 by statute. The amount increases annually based on the VRS Plan 2 cost-of-living adjustment and was increased to \$8,722 effective June 30, 2022.

**Retiree HIC program**Eligible Employees

The HIC program was established January 1, 1990 for retired state employees covered under VRS, SPORS, VaLORS and the Judicial Retirement System (JRS) who retire with at least 15 years of service credit. Eligible employees are enrolled automatically upon employment. They include full-time and part-time permanent salaried state employees covered under VRS, SPORS, VaLORS and JRS.

Benefit amounts

The HIC program provides the following benefits for eligible employees:

- At Retirement – For employees who retire, the monthly benefit is \$4.00 per year of service per month with no cap on the benefit amount.
- Disability Retirement – For employees other than state police officers who retire on disability or go on long-term disability under the Virginia Sickness and Disability Program (VSDP), the monthly benefit is \$120.00 or \$4.00 per year of service, whichever is higher. For state police officers with a non-work-related disability who retire on disability or go on long-term disability under VSDP, the monthly benefit is \$120.00 or \$4.00 per year of service, whichever is higher. For state police officers with a work-related disability, there is no benefit provided under the HIC program if the premiums are being paid under the Virginia Line of Duty Act (LODA). However, they may receive the credit for premiums paid for other qualified health plans.

HIC program notes

The monthly HIC benefit cannot exceed the individual premium amount. Employees who retire after being on long-term disability under VSDP must have at least 15 years of service credit to qualify for HIC as a retiree.

**LODA program**Eligible Employees

The eligible employees of the LODA program are paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the Virginia Retirement System (VRS), the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS).

Benefit Amounts

The Line of Duty Act Program (LODA) provides death and health insurance benefits for eligible individuals.

Death benefits – The Line of Duty Act program death benefit is a one-time payment made to the beneficiary or beneficiaries of a covered individual. Amounts vary as follows:

- \$100,000 when a death occurs as the direct or proximate result of performing duty as of January 1, 2006, or after.
- \$25,000 when the cause of death is attributed to one of the applicable presumptions and occurred earlier than five years after the retirement date.

- An additional \$20,000 benefit is payable when certain members of the National Guard and U.S. military reserves are killed in action in any armed conflict on or after October 7, 2001.

Health insurance benefits – The Line of Duty Act program provides health insurance benefits. Prior to July 1, 2017, these benefits were managed through the various employee plans and maintained the benefits that existed prior to the employee's death or disability. These premiums were reimbursed to the employer by the LODA program. The health insurance benefits are managed through the Virginia Department of Human Resource Management (DHRM). The health benefits are modeled after the State Employee Health Benefits Program plans and provide consistent, premium-free continued health plan coverage for LODA-eligible disabled individuals, survivors and family members.

## Contributions

### PMRH program

Virginia Tech 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, Virginia Tech effectively subsidizes the costs of the participating retirees' healthcare through payment of Virginia Tech's portion of the premiums for active employees. Benefit payments are recognized when due and payable in accordance with the benefit terms. PMRH is a single-employer defined benefit OPEB plan that is treated like a cost-sharing plan for financial reporting purposes and is administered by the Virginia Department of Human Resource Management.

### VSDP program

The contribution requirements for the VSDP are governed by §51.1-1140 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for VSDP for the year ended June 30, 2022 was 0.61% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2019. The actuarially determined rate was expected to finance the costs of benefits payable during the year, with an adjustment to amortize the accrued OPEB assets. Contributions to the VSDP from Virginia Tech were \$998,000 and \$971,000 for the years ended June 30, 2022 and June 30, 2021, respectively.

### GLI program

The contribution requirements for the GLI program are governed by §51.1-506 and §51.1-508 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI program was 1.34% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.80% (1.34% X 60%) and the employer component was 0.54% (1.34% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2022 was 0.54% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2019. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the GLI program from Virginia Tech were \$3,584,000 and \$3,397,000 for the years ended June 30, 2022 and June 30, 2021, respectively.

### Retiree HIC program

The contribution requirement for active employees is governed by §51.1-1400(D) of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each state agency's contractually required employer contribution rate for the year ended June 30, 2022 was 1.12% of covered employee compensation for employees in the Retiree HIC program. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2019. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions from Virginia Tech to the Retiree HIC program were \$7,429,000 and \$7,050,000 for the years ended June 30, 2022 and June 30, 2021, respectively.

### LODA program

The contribution requirements for the LODA program are governed by §9.1-400.1 of the *Code of Virginia*, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the LODA program for the year ended June 30, 2022 was \$722.55 per covered full-time-equivalent employee. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2019 and represents the pay-as-you-go funding rate and not the full actuarial cost of the benefits under the program. The actuarially determined pay-as-you-go rate was expected to finance the costs and related expenses of benefits payable during the year. Contributions to the LODA program from Virginia Tech were \$32,000 and \$34,000 for the years ended June 30, 2022 and June 30, 2021, respectively.

## Liabilities (Assets), Expenses, and Deferred Inflows/Outflows of Resources

At June 30, 2022, Virginia Tech reported the following net liabilities (assets) for its proportionate share of these programs:

PMRH	\$	40,472,000
VSDP	\$	(12,709,000)
GLI	\$	35,260,000
HIC	\$	73,126,000
LODA	\$	1,103,000

These liabilities (assets) were measured as of June 30, 2021 and the total OPEB liability (asset) used to calculate each net liability (asset) was determined by an actuarial valuation as of that date. Virginia Tech's proportion of the PMRH OPEB liability was based on its healthcare premium contributions as a percentage of the total employer's healthcare premium contributions for all participating employers. For VSDP, GLI, HIC and LODA programs, Virginia Tech's proportionate share of each liability (asset) was based on Virginia Tech's actuarially determined employer contributions to each plan for the year ended June 30, 2021 relative to the total of the actuarially determined employer contributions for all participating employers.

At June 30, 2021, Virginia Tech's proportionate share was:

PMRH	9.02% as compared to 8.93% at June 30, 2020
VSDP	3.69% as compared to 3.72% at June 30, 2020
GLI	3.03% as compared to 3.03% at June 30, 2020
HIC	8.66% as compared to 8.63% at June 30, 2020
LODA	0.25% as compared to 0.23% at June 30, 2020

For the year ended June 30, 2022, Virginia Tech recognized the following expenses for these programs:

PMRH	\$	(14,158,000)
VSDP	\$	(102,000)
GLI	\$	1,860,000
HIC	\$	7,008,000
LODA	\$	103,000

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

At June 30, 2022, Virginia Tech reported deferred outflows/inflows of resources related to these programs from the following sources (all dollars in thousands):

Program	Source	Deferred Outflows	Deferred Inflows
PMRH	Difference between expected and actual experience	\$ -	\$ 20,578
	Change in assumptions	-	38,925
	Changes in proportion	6,634	466
	Amounts associated with transactions subsequent to measurement date	2,959	-
	Total	<u>\$ 9,593</u>	<u>\$ 59,969</u>
VSDP	Difference between expected and actual experience	\$ 604	\$ 2,061
	Net difference between projected and actual earnings on investments	-	2,380
	Change in assumptions	86	299
	Changes in proportion	194	13
	VT contributions subsequent to measurement date	998	-
Total	<u>\$ 1,882</u>	<u>\$ 4,753</u>	
GLI	Difference between expected and actual experience	\$ 4,022	\$ 268
	Net difference between projected and actual earnings on investments	-	8,416
	Change in assumptions	1,944	4,824
	Changes in proportion	1,292	13
	VT contributions subsequent to measurement date	3,584	-
Total	<u>\$ 10,842</u>	<u>\$ 13,521</u>	
HIC	Difference between expected and actual experience	\$ 23	\$ 2,381
	Net difference between projected and actual earnings on investments	-	1,388
	Change in assumptions	1,894	206
	Changes in proportion	2,233	23
	VT contributions subsequent to measurement date	7,429	-
Total	<u>\$ 11,579</u>	<u>\$ 3,998</u>	
LODA	Difference between expected and actual experience	\$ 92	\$ 167
	Net difference between projected and actual earnings on investments	-	6
	Change in assumptions	305	53
	Changes in proportion	100	62
	VT contributions subsequent to measurement date	32	-
Total	<u>\$ 529</u>	<u>\$ 288</u>	

The following amounts reported as deferred outflows of resources related to each program, resulting from Virginia Tech's contributions subsequent to the measurement date, will be recognized as a reduction of each program's net liability (asset) in the fiscal year ending June 30, 2023 (all dollars in thousands):

PMRH	\$	2,959
VSDP	\$	998
GLI	\$	3,584
HIC	\$	7,429
LODA	\$	32

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

Year ended June 30:	PMRH	VSDP	GLI	HIC	LODA
2023	\$ (19,322)	\$ (859)	\$ (1,321)	\$ 217	\$ 27
2024	\$ (16,360)	\$ (848)	\$ (951)	\$ 310	\$ 27
2025	\$ (9,780)	\$ (843)	\$ (1,072)	\$ 154	\$ 27
2026	\$ (4,821)	\$ (963)	\$ (2,460)	\$ (453)	\$ 27
2027	\$ (2,384)	\$ (293)	\$ (460)	\$ (73)	\$ 30
Thereafter	\$ (668)	\$ (63)	\$ -	\$ (2)	\$ 71

## Actuarial Assumptions

### PMRH program actuarial assumptions

The total Pre-Medicare Retiree Healthcare OPEB liability was based on an actuarial valuation with a valuation date of June 30, 2021. The Department of Human Resource Management selected the economic, demographic, and healthcare claim cost assumptions. The actuary provided guidance with respect to these assumptions. Initial healthcare costs trend rates used were 6.75 percent for medical and pharmacy and 4.00 percent for dental. The ultimate trend rates used were 4.50 percent for medical and pharmacy and 4.00 percent for dental.

Valuation Date	Actuarially determined contribution rates are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Measurement Date	June 30, 2021 (one year prior to the end of the fiscal year)
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level dollar, Closed
Effective Amortization Period	6.37 years
Discount Rate	2.16%
Projected Salary Increases	5.35% to 3.50% based on years of service from 1 year to 20 years or more
Medical Trend Under 65	Medical and Rx: 6.75% to 4.50%, Dental: 4.00%
Year of Ultimate Trend	2033

### Mortality Rates

- Pre-Retirement: Pub-2010 Benefits Weighted General Employee Rates projected generationally with a Modified MP-2021 Improvement Scale; females set forward 2 years

- Post-Retirement: Pub-2010 Benefits Weighted General Healthy Retiree Rates projected generationally with a Modified MP-2021 Improvement Scale; 110% of rates for females
- Post-Disablement: Pub-2010 Benefits Weighted General Disabled Rates projected generationally with a Modified MP-2021 Improvement Scale; males and females set forward 3 years
- Beneficiaries and Survivors: Pub-2010 Benefits Weighted General Contingent Annuitant Rates projected generationally with a Modified MP-2021 Improvement Scale; 110% of rates for males and females

The discount rate was based on the Bond Buyers GO 20 Municipal Bond Index as of the measurement date which is June 30, 2021.

#### Changes of Assumptions

The following actuarial assumptions were updated since the June 30, 2020 valuation based on the recent experience study are as follows:

- Retiree participation – reduced rate from 45% to 40%
- Spousal coverage and retiree participation were based on a blend of recent experience and the prior year assumptions. The mortality table has been updated from adjusted RP-2014 mortality tables using Scale BB to adjusted Pub-2010 Headcount-Weighted mortality tables projected generationally with modified MP-2021 Improvement Scales. No excise tax has been reflected due to the SECURE Act. Among the provisions was a repeal of three taxes and fees that were originally intended to help fund the Affordable Care Act (ACA): i) the excise tax on high-cost health plans (Cadillac tax); ii) the annual fee on health insurance providers; and iii) the medical device excise tax. The trend rates were updated based on economic conditions as of June 30, 2021. Additionally, the discount rate was decreased from 2.21% to 2.16% based on the Bond Buyers GO 20 Municipal Bond Index. There were no plan changes in the valuation since the prior year.

#### VSDP, GLI, HIC, and LODA program actuarial assumptions

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

Inflation	2.50 percent
Salary increases, including inflation	
General state employees	3.50 percent – 5.35 percent
Teachers (GLI only)	3.50 percent – 5.95 percent
SPORS employees	3.50 percent – 4.75 percent
VaLORS employees	3.50 percent – 4.75 percent
JRS employees (GLI and HIC only)	4.50 percent
Locality – General employees (GLI only)	3.50 percent – 5.35 percent
Locality – Hazardous Duty employees (GLI only)	3.50 percent – 4.75 percent
Investment rate of return	6.75 percent, net of OPEB plan investment expenses, including inflation

LODA – The total liability for these programs was based on an actuarial valuation as of June 30, 2020, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2021.

Inflation	2.50 percent
Salary increases, including inflation	
General state employees	N/A
SPORS employees	N/A
VaLORS employees	N/A
Locality employees	N/A
Medical cost trend rates assumption	
Under age 65	7.00 percent – 4.75 percent
Ages 65 and older	5.375 percent – 4.75 percent
Year of ultimate trend rate	
Under age 65	Fiscal year ended 2029
Ages 65 and older	Fiscal year ended 2024
Investment rate of return	2.16 percent, including inflation*

\* Since LODA is funded on a current-disbursement basis, the assumed annual rate of return of 2.16% was used since it approximates the risk-free rate of return.

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

- Pre-Retirement: Pub-2010 Amount Weighted General Employee Rates projected generationally; females set forward 2 years.
- Post-Retirement: Pub-2010 Amount Weighted General Healthy Retiree Rates projected generationally; 110% of rates for females.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; males and females set forward 3 years
- Beneficiaries and Survivors: Pub-2010 Amount Weighted General Contingent Annuitant Rates projected generationally; 110% of rates for males and females.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change (Discount rate does not apply to LODA)

#### Mortality rates – Teachers (GLI)

- Pre-Retirement: Pub-2010 Amount Weighted Teachers Employee Rates projected generationally; 110% of rates for males.
- Post-Retirement: Pub-2010 Amount Weighted Teachers Healthy Retiree Rates projected generationally; males set forward 1 year; 105% of rates for females.
- Post-Disablement: Pub-2010 Amount Weighted Teachers Disabled Rates projected generationally; 110% of rates for males and females.

- Beneficiaries and Survivors: Pub-2010 Amount Weighted Teachers Contingent Annuitant Rates projected generationally.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each age and service decrement through age 9 years of service
Disability Rates	No change
Salary Scale	No change
Discount Rate	No change

#### Mortality rates – SPORS Employees (VSDP, GLI, HIC, LODA)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020. VSDP and LODA only: Increased disability life expectancy.
Retirement Rates	Increased rates for ages 55 to 61, 63, and 64 with 26 or more years of service and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rate for 0 years of service and increased rates for 1 to 6 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change (Discount rate does not apply to LODA)

#### Mortality rates – VaLORS Employees (VSDP, GLI, HIC, LODA)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

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

Mortality Rates	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020. VSDP and LODA only: Increased disability life expectancy.
Retirement Rates	Increased rates at some younger ages, decreased at age 62, and changed final retirement age from 65 to 70
Withdrawal Rates	Adjusted rates to better fit experience at each age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change (Discount rate does not apply to LODA)

#### Mortality rates – JRS Employees (GLI, HIC)

- Pre-Retirement: Pub-2010 Amount Weighted General Employee Rates projected generationally; males set forward 2 years
- Post-Retirement: Pub-2010 Amount Weighted General Healthy Retiree Rates projected generationally; 95% of rates for males and females set back 2 years
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates

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

Mortality Rates	Review separately from State employees because exhibit fewer deaths. Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Decreased rates at for ages 60-66 and 70-72.
Withdrawal Rates	No change
Disability Rates	No change
Salary Scale	Reduce increases across all ages by 0.50%.
Discount Rate	No change

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

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; males set forward 2 years; 105% of rates for females set forward 3 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 95% of rates for males set forward 2 years; 95% of rates for females set forward 1 year.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 110% of rates for males set forward 3 years; 110% of rates for females set forward 2 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally.

- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all.
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service decrement through 9 years of service.
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

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

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; males set forward 2 years; 105% of rates for females set forward 3 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 95% of rates for males set forward 2 years; 95% of rates for females set forward 1 year.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 110% of rates for males set forward 3 years; 110% of rates for females set forward 2 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

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

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all.
Withdrawal Rates	Adjusted termination rates to better fit experience at each age and service decrement through 9 years of service.
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

#### Mortality rates – Largest Ten Locality Employers with Hazardous Duty Employees (GLI)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

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

Mortality Rates	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70.
Withdrawal Rates	Decreased rates
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

#### Mortality rates – Non-Largest Ten Locality Employers with Hazardous Duty Employees (GLI)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

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

Mortality Rates	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020.
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70.
Withdrawal Rates	Decreased rates and changed rates based on age and service to rates based on service only to better fit experience and to be more consistent with Locals Top 10 Hazardous Duty
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

Mortality rates – Largest Ten Locality Employers with Public Safety Employees (LODA)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016 through June 30, 2020. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rates
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change

Mortality rates – Non-Largest Ten Locality Employers with Public Safety Employees (LODA)

- Pre-Retirement: Pub-2010 Amount Weighted Safety Employee Rates projected generationally; 95% of rates for males; 105% of rates for females set forward 2 years.
- Post-Retirement: Pub-2010 Amount Weighted Safety Healthy Retiree Rates projected generationally; 110% of rates for males; 105% of rates for females set forward 3 years.
- Post-Disablement: Pub-2010 Amount Weighted General Disabled Rates projected generationally; 95% of rates for males set back 3 years; 90% of rates for females set back 3 years.
- Beneficiaries and Survivors: Pub-2010 Amount Weighted Safety Contingent Annuitant Rates projected generationally; 110% of rates for males and females set forward 2 years.
- Mortality Improvement Scale: Rates projected generationally with Modified MP-2020 Improvement Scale that is 75% of the MP-2020 rates.

The actuarial assumptions used in the June 30, 2020 valuation were based on the results of an actuarial experience study for the period from July 1, 2016 through June 30, 2020. Changes to the actuarial assumptions as a result of the experience study are as follows:

Mortality Rates	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rates and changed from rates based on age and service to rates based on service only to better fit experience and to be more consistent with Locals Top 10 Hazardous Duty
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change

Net OPEB Asset/Liability

The net OPEB asset/liability (NOA or NOL) for VSDP, GLI, HIC and LODA represents each program's total OPEB asset/liability determined in accordance with GASB Statement 74, less the associated fiduciary net position. As of June 30, 2021, NOA/NOL amounts for each program are as follows (*all dollars in thousands*):

	VSDP	GLI	HIC	LODA
Total OPEB Liability	\$ 267,198	\$ 3,577,346	\$ 1,052,400	\$ 448,542
Plan Fiduciary Net Position	611,919	2,413,074	207,860	7,553
Employers' Net OPEB Liability (Asset)	<u>\$ (344,721)</u>	<u>\$ 1,164,272</u>	<u>\$ 844,540</u>	<u>\$ 440,989</u>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	229.01%	67.45%	19.75%	1.68%

The total OPEB liability is calculated by VRS's actuary, and each plan's fiduciary net position is reported in VRS's financial statements. The net OPEB asset/liability is disclosed in accordance with the requirements of GASB Statement 74 in VRS's notes to the financial statements and required supplementary information.

Long-term Expected Rate of ReturnVSDP, GLI, HIC programs

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

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

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

**LODA program**

The long-term expected rate of return on LODA OPEB Program's investments was set at 2.16% for this valuation. Since LODA is funded on a current-disbursement basis, it is not able to use the VRS Pooled Investments 6.75% assumptions. Instead, the assumed annual rate of return of 2.16% was used since it approximates the risk-free rate of return. This Single Equivalent Interest Rate (SEIR) is the applicable municipal bond index rate based on the Bond Buyer General Obligation 20-year Municipal Bond Index as of the measurement date of June 30, 2021.

**Discount Rate****PMRH program**

The discount rate was decreased from 2.21% to 2.16% based on the Bond Buyers GO 20 Municipal Bond Index as of the measurement date of June 30, 2021. Retiree participation was reduced from 45% to 40% based on a blend of recent experience and the prior year assumptions. The mortality table has been updated from adjusted RP-2014 mortality tables using Scale BB to adjusted Pub-2010 Headcount-Weighted mortality tables projected generationally with modified MP-2021 Improvement Scales.

**VSDP, GLI, HIC programs**

The discount rate used to measure the total OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2021, the rate contributed by Virginia Tech for each of these programs will be subject to the portion of the VRS board-certified rates that are funded by the Virginia General Assembly, which was 100% of the actuarially determined contribution rate. From July 1, 2021 on, employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the OPEB fiduciary net position for these programs was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total OPEB liability for each of these programs.

**LODA program**

The discount rate used to measure the total OPEB liability was 2.16%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made per the VRS Statutes and they will be made in accordance with the VRS funding policy at rates equal to the actuarially determined contribution rates adopted by the VRS Board of Trustees. Through the fiscal year ending June 30, 2021, the rate contributed by Virginia Tech to the LODA OPEB program will be subject to the portion of the VRS board-certified rates that are funded by the Virginia General Assembly.

**Sensitivity of Virginia Tech's Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate**

The following presents Virginia Tech's proportionate share of the net OPEB liability for PMRH using the discount rate of 2.16%; VSDP, GLI, and HIC using the discount rate of 6.75%; and LODA using the discount rate of 2.16%. As well, Virginia Tech's proportionate share of the net OPEB liability (asset) is presented as it would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate (*all dollars in thousands*):

**Virginia Tech's Proportionate Share of Net OPEB Liability (Asset)**

	1.00% Decrease	Current Discount Rate	1.00% Increase
	1.21%	2.21%	3.21%
PMRH	\$ 42,548	\$ 40,472	\$ 38,370
	5.75%	6.75%	7.75%
VSDP	\$ (12,008)	\$ (12,709)	\$ (13,327)
GLI	\$ 51,517	\$ 35,260	\$ 22,133
HIC	\$ 82,033	\$ 73,126	\$ 65,495
	1.16%	2.16%	3.16%
LODA	\$ 1,269	\$ 1,103	\$ 971

**Sensitivity of Virginia Tech's Proportionate Share of the Net PMRH OPEB and LODA OPEB Liabilities to Changes in the Health Care Trend Rate**

Because the Pre-Medicare Retiree Healthcare and Line of Duty Act programs contain provisions for the payment of health insurance premiums, the liabilities are also impacted by the health care trend rates. The following presents Virginia Tech's proportionate share of the net OPEB liability for these programs using health care trend rate of 6.75% decreasing to 4.50% for PMRH and 7.00% decreasing to 4.75% for LODA. As well, Virginia Tech's proportionate share of the net OPEB liability is presented as it would be if it were calculated using a health care trend rate that is one percentage point lower or one percentage point higher than the current rate (*all dollars in thousands*):

**Virginia Tech's Proportionate Share of Net OPEB Liability**

	1.00% Decrease	Current Health Care Trend Rate	1.00% Increase
	5.75% decreasing to 3.50%	6.75% decreasing to 4.50%	7.75% decreasing to 5.50%
PMRH	\$ 36,509	\$ 40,472	\$ 45,073
	6.00% decreasing to 3.75%	7.00% decreasing to 4.75%	8.00% decreasing to 5.75%
LODA	\$ 905	\$ 1,103	\$ 1,357

**Fiduciary Net Position**

Detailed information about Fiduciary Net Position for each of these programs is available in the separately issued VRS 2021 *Annual Comprehensive Financial Report* (Annual Report). A copy of the 2021 VRS Annual Report may be downloaded from the VRS website at <https://www.varetire.org/pdf/publications/2021-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 VSDP, GLI, and HIC OPEB programs**

The amount payable outstanding at June 30, 2022 to each of these OPEB programs was as follows:

VSDP	\$ 6,000
GLI	\$ 209,000
HIC	\$ 436,000



*A Sustainable Land Development class tours the campus near the Human and Agricultural Biosciences Building I.  
Photo by Ray Meese for Virginia Tech.*

## 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, 2022, the university estimates that no material liabilities will result from such audits or questions.

## 22. 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, 2022, cash provided by the program totaled \$148,432,000 and cash used by the program totaled \$148,432,000.

## 23. Appropriations

The Appropriation Act specifies that unexpended general fund appropriations remaining on the last day of the current year, ending on June 30, 2022, shall be reappropriated for expenditure in the first month of the next year, beginning on July 1, 2022, 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 1 of the 2022 Special Session)

Education and general programs	\$ 256,117
Student financial assistance	24,609
Commonwealth Research Initiative and Federal Action Contingency Trust	5,389
Unique military activities	2,907
Total appropriation	<u>289,022</u>

### Adjustments

Education and general programs	14,634
Tech talent investment program	12,957
Affordable access	8,918
Virginia management fellows program	312
Virginia military survivors and dependents	255
Other adjustments	321
Total adjustments	<u>37,397</u>
Total adjusted appropriation	<u>\$ 326,419</u>

### Capital Appropriations

Capital project general fund appropriations were recognized by the university from the commonwealth for the year ended June 30, 2022. During the year, \$13,726,000 in capital appropriations have been allocated to E&G maintenance reserve projects.

## 24. Deferred Outflows and Inflows of Resources

### 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.

The composition of deferred outflows of resources on June 30, 2022, is summarized as follows (all dollars in thousands):

Deferred loss on long-term debt defeasance <sup>(Note 14)</sup>	\$ 3,970
Deferred outflow for VRS pension <sup>(Note 18)</sup>	70,205
Deferred outflow for other postemployment benefits <sup>(Note 20)</sup>	34,425
	<u>\$ 108,600</u>

### 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.

The composition of deferred inflows of resources on June 30, 2022, is summarized as follows (all dollars in thousands):

Deferred gain on long-term debt defeasance <sup>(Note 14)</sup>	\$ 1,551
Deferred inflow for long-term leases	927
Deferred inflow for VRS pension <sup>(Note 18)</sup>	177,071
Deferred inflow for other postemployment benefits <sup>(Note 20)</sup>	82,529
	<u>\$ 262,078</u>

## 25. Expenses by Natural Classification within Functional Classification

The university's operating expenses by functional classification for the year ended June 30, 2022

(all dollars in thousands)

	Compensation and Benefits	Contractual Services	Travel	Supplies and Materials	Other Operating Expenses	Sponsored Program Subcontracts	Scholarships and Fellowships	Total
Instruction	\$ 398,856	\$ 21,968	\$ 8,341	\$ 10,104	\$ 5,036	\$ 217	\$ 1,649	\$ 446,171
Research	237,951	26,589	6,834	24,326	4,305	31,652	19,791	351,448
Public service	59,791	23,334	2,927	4,051	1,618	969	529	93,219
Academic support	80,176	12,877	1,088	11,125	3,713	3,199	400	112,578
Student services	21,394	3,878	1,174	1,668	1,118	727	158	30,117
Institutional support	69,579	6,829	984	1,264	2,140	33	517	81,346
Operations and maintenance	35,651	5,381	449	13,373	29,726	-	58	84,638
Student financial assistance*	327	24	5	7	60	-	44,856	45,279
Auxiliary enterprises	126,193	35,007	11,888	40,665	43,532	100	722	258,107
Subtotal before other costs	<u>\$ 1,029,918</u>	<u>\$ 135,887</u>	<u>\$ 33,690</u>	<u>\$ 106,583</u>	<u>\$ 91,248</u>	<u>\$ 36,897</u>	<u>\$ 68,680</u>	1,502,903
Depreciation and amortization								135,774
Total operating expenses								<u>\$ 1,638,667</u>

\*Includes loan administrative fees and collection costs.

## 26. Component Unit

The component unit statements and subsequent notes comply with the Governmental Accounting Standards Board (GASB) presentation format. Virginia Tech Foundation Inc. follows 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.

### Virginia Tech Foundation Statement of Net Position

As of June 30, 2022

(all dollars in thousands)

#### Assets

##### Current assets

Cash and cash equivalents	\$	63,814
Short-term investments		22,126
Accounts and contributions receivable, net		93,505
Notes receivable, net		422
Inventories		341
Prepaid expenses		1,148
Other assets		7,406
Total current assets		<u>188,762</u>

##### Noncurrent assets

Cash and cash equivalents		47,784
Accounts and contributions receivable, net		116,587
Notes and deeds of trust receivable, net		22,010
Net investments in direct financing leases		67,423
Irrevocable trusts held by others, net		5,450
Long-term investments		1,761,317
Depreciable capital assets, net		205,490
Nondepreciable capital assets		243,339
Intangible assets, net		3,575
Other assets		6,065
Total noncurrent assets		<u>2,479,040</u>
Total assets		<u>2,667,802</u>

#### Liabilities

##### Current liabilities

Accounts payable and accrued liabilities		18,599
Accrued compensated absences		353
Unearned revenue		17,933
Long-term debt payable		20,686
Other liabilities		4,897
Total current liabilities		<u>62,468</u>

##### Noncurrent liabilities

Accrued compensated absences		330
Unearned revenue		3,522
Long-term debt payable		281,554
Liabilities under trust agreements		21,124
Custodial deposits held in trust		576,822
Other liabilities		6,701
Total noncurrent liabilities		<u>890,053</u>
Total liabilities		<u>952,521</u>

#### Net position

Invested in capital assets, net of related debt		235,265
Restricted, nonexpendable		782,379
Restricted, expendable		
Scholarships, research, instruction, and other		525,124
Unrestricted		172,513
Total net position	\$	<u>1,715,281</u>

*Virginia Tech Foundation Statement of Revenues, Expenses, and Changes in Net Assets*

For year ended June 30, 2022

(all dollars in thousands)

**Operating revenues**

Gifts and contributions	\$ 131,257
Auxiliary enterprise revenue	
Hotel Roanoke	23,034
River Course	1,555
Other revenues	
Rental income	43,952
Other	26,819
Total operating revenues	<u>226,617</u>

**Operating expenses**

Instruction	5,114
Research	7,012
Public service	5,238
Academic support	64,704
Institutional support	
Other university programs	26,527
Fund-raising	16,766
Management and general	7,184
Operation and maintenance of plant	
Operation and maintenance of plant	7,104
Research cost centers	8,683
Student financial assistance	36,369
Auxiliary enterprises	
Hotel Roanoke	14,244
River Course	1,904
Depreciation expense	11,149
Other expenses	20,817
Total operating expenses	<u>232,815</u>

**Operating income (loss)**

(6,198)

**Non-operating revenues (expenses)**

Investment income, net	20,842
Net losses on investments	(81,802)
Interest expense on debt related to capital assets	(9,417)
Net non-operating revenues	<u>(70,377)</u>

**Income before other revenues, expenses, gains, or losses**

(76,575)

Change in valuation of split interest agreements	(10,947)
Capital grants and gifts	18,736
Gain on disposal of capital assets	1,706
Additions to permanent endowments	53,293
Loss on extinguishment of debt	
Other revenues (expenses)	(777)
Total other revenues, expenses, gains, or losses	<u>62,011</u>

**Net Position**

Increase (decrease) in net position	(14,564)
Net position - beginning of year	1,729,845
Net position - end of year	<u>\$ 1,715,281</u>

## Notes to Component Unit Statements

**Contributions Receivable - Virginia Tech Foundation Inc.**

The following summarizes unconditional promises to give at June 30, 2022 (all dollars in thousands):

Receivable in less than one year	\$ 85,870
Receivable in one to five years	78,460
Receivable in more than five years	65,043
Total contributions receivable, gross	229,373
Allowance for uncollectible contributions	(5,207)
Discount to reduce estimated future cash flows to fair value and allowance for uncollectible contributions receivable	(25,046)
Total contributions receivable, measured at fair value	<u>\$ 199,120</u>

The discount rates ranged from 2.10% to 4.70% at June 30, 2022. As of June 30, 2022 the foundation is unaware of any significant 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. Major investment decisions, such as asset allocation and spending, are overseen by the board's Investment Committee and authorized by the board's Executive Committee. The Investment Committee oversees the foundation's investment program in accordance with established guidelines.

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 interests 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 sale prices, and other pertinent information, and may reflect discounts for the illiquid nature of certain investments held. Moreover, the fair values of the 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.

As of June 30, 2022, long-term investments included investment assets held in internally managed trust funds with a carrying values totaling \$55,151. At June 30, 2022, unspent bond proceeds of \$15,043, invested in U.S. government treasuries, was included in short-term investments. These proceeds are restricted for investment in land and building development.

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, 2022, the foundation had recorded annuity obligations of \$6,478. As of June 30, 2022, the foundation had separately invested cash reserves of \$11,653, and had met its minimum reserve requirement under Maryland state law.

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

	Fair value	Cost	Net gains (losses)
June 30, 2022	\$ 1,783,443	\$ 1,738,014	\$ 45,429
June 30, 2021	1,831,326	1,588,925	242,401
Unrealized net loss for the year, including net loss on custodial deposits held in trust of \$(63,806)			(196,972)
Realized net gain for the year, including net gain on custodial deposits held in trust of \$29,218			91,640
Total net loss for the year, including net loss on custodial deposits held in trust of \$(34,588)			<u>\$ (105,332)</u>

**Fair Value Hierarchy - Virginia Tech Foundation, Inc.**

Accounting Standards Codification (ASC) Topic 820 establishes 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) and lowest priority to unobservable inputs (Level 3).

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

**Level 1** – Inputs that use 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 within 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 that were measured at fair value on a recurring basis at June 30, 2022 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 of June 30, 2022, as well as liquidity and funding commitments.

**Assets measured at fair value - Virginia Tech Foundation Inc.**

At June 30, 2022

(all dollars in thousands)

	Total	Fair value measurements at reporting date using			
		Level 1	Level 2	Level 3	NAV*
Contributions receivable	\$ 199,120	\$ -	\$ -	\$ 199,120	\$ -
<b>Short-term investments</b>					
Corporate debt securities	4,613	4,613	-	-	-
U.S. government treasuries	15,765	15,765	-	-	-
U.S. government agencies	1,748	1,748	-	-	-
Total short-term investments	22,126	22,126	-	-	-
<b>Long-term investments</b>					
Cash and cash equivalents	16,813	15,462	1,351	-	-
U.S. government treasuries	149,239	149,239	-	-	-
U.S. government agencies	5,420	5,420	-	-	-
State, county, and municipal securities	91	-	91	-	-
Equity securities	167,443	167,443	-	-	-
Hedge funds	205,261	-	-	-	205,261
Private real estate	136,890	-	-	-	136,890
Private credit	164,067	-	-	-	164,067
Private equity	273,933	-	-	-	273,933
Private equity alternative investments	292,874	-	-	-	292,874
Corporate bonds	16,790	16,790	-	-	-
Corporate debt securities	169,205	116,807	51,053	1,345	-
Mortgage receivable	34,730	19,612	15,118	-	-
Foreign securities	121,637	107,172	-	-	14,465
Real estate	6,924	-	-	6,924	-
Total long-term investments	1,761,317	597,945	67,613	8,269	1,087,490
Irrevocable trusts held by others	5,450	-	-	5,450	-
<b>Total</b>	<b>\$ 1,988,013</b>	<b>\$ 620,071</b>	<b>\$ 67,613</b>	<b>\$ 212,839</b>	<b>\$ 1,087,490</b>

\* 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, 2022

(all dollars in thousands)

	Fair Value	Uncalled Commitments	Remaining Life	Redemption Frequency	Trade to Settlement Terms	Redemption Notice Period
Public equity funds <sup>1</sup>	\$ 113,665	\$ -	N/A	≤ Quarterly	5-15 days	30-90 days
Public equity funds <sup>2</sup>	192,069	5,623	N/A	> Quarterly	5-15 days	30-180 days
Hedge funds <sup>3</sup>	32,459	-	N/A	≤ Quarterly	5-15 days	30-90 days
Hedge funds <sup>3</sup>	171,465	-	N/A	> Quarterly	5-15 days	30-90 days
Private credit funds <sup>4</sup>	130,104	26,393	1-10 years	N/A	N/A	N/A
Private equity funds <sup>5</sup>	274,984	136,062	1-10 years	N/A	N/A	N/A
Private real assets funds <sup>6</sup>	172,744	67,062	1-10 years	N/A	N/A	N/A
	<u>\$ 1,087,490</u>	<u>\$ 235,140</u>				

(1) The amount represents funds that invest in publicly traded equity securities and can be liquidated at the end of each quarter or more frequently. There are currently no restrictions on redemption of these investments. The managers directly invest primarily in long equity securities and, at times, opportunistically invest in short equity securities. Management seeks to achieve a return in excess of an 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 the end of a quarter. The longest time to liquidation is 60 months. There are currently no restrictions on redemption of these investments. The managers directly invest primarily in long equity securities and, at times, opportunistically invest in short equity securities. Management seeks to achieve a return in excess of an 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 to 10 years.

(5) The amount represents investments in funds that invest in private equity in buyouts and venture capital, both domestically and internationally. The allocation to buyouts is 93% and to venture capital 7%. Uncalled commitments are approximately \$101,427 to buyouts and \$34,636 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 to 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 71% and to natural resources 29%. Uncalled commitments are approximately \$52,713 to real estate and \$14,349 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 to 10 years.

## Notes to Component Unit Statements (continued)

**Land, Buildings, and Equipment - Virginia Tech Foundation Inc.**

The following is a summary of land, buildings, and equipment at cost, less accumulated depreciation for the year ending June 30, 2022 (all dollars in thousands):

<b>Depreciable capital assets</b>	
Buildings	\$ 297,229
Equipment and other	45,531
Land improvements	27,907
Total depreciable capital assets, at cost	370,667
Less accumulated depreciation	(165,177)
Total depreciable capital assets, net	205,490
<b>Nondepreciable capital assets</b>	
Land	133,587
Vintage and other collection items	7,101
Livestock	738
Construction in progress	101,913
Total nondepreciable capital assets	243,339
Total capital assets, net	\$ 448,829

As of June 30, 2022, outstanding contractual commitments for projects under construction approximated \$32,238.

**Long-term Debt Payable - Virginia Tech Foundation****Notes payable**

The following is a summary of outstanding notes payable at June 30, 2022 (all dollars in thousands):

Unsecured revolving line of credit note payable with total availability of \$20,000 renewed November 1, 2021, plus variable interest at one-month term Secured Overnight Financing Rate (SOFR) plus 0.447% (1.599% as of June 30, 2022). Note matures November 1, 2024.	\$ 2,511
Unsecured note payable upon the sale of the hotel and repayment of all debt of the hotel and the Hotel Roanoke Foundation	1,775
Total notes payable	\$ 4,286

The aggregate annual maturities of notes payable for each of the five years and thereafter subsequent to June 30, 2022, are (all dollars in thousands):

Year ending June 30,	
2023	\$ -
2024	-
2025	2,511
2026	-
2027	-
Upon the sale of the hotel and repayment of all debt of the hotel and HRF	1,775
Total notes payable	\$ 4,286

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, earned 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, as well as the assignment of leases, rents, and security agreements.

**Bonds payable**

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 and two notes payable, retire certain interest rate swaps, and finance the construction of several commercial facilities and other 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, have 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, as further described below, refunded portions of the Series 2011A bonds. The Series 2019A and Series 2019B, as further described below, refunded portions of the Series 2011B bonds. The Series 2020A bonds refunded the remaining 2011A bonds. The Series 2011B bonds matured in 2022.

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%, respectively, 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. At June 30, 2022 unspent bond proceeds of \$309 were included in restricted cash and cash equivalents. The Series 2020A bonds, as further described below, refunded portions of the Series 2013A and 2013B bonds. The unrefunded portion of the Series 2013A and 2013B bonds currently have a final maturity of 2024.

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 a VTREF note payable, and renovate a facility used in support of the university. The Series 2017A and 2017B bonds, which bear a weighted average fixed interest rate of 2.93% and 3.43%, respectively, 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.

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 of the outstanding Series 2005 bonds and the remaining portion of the Series 2009A bonds. The Series 2017C bonds, which bear a variable interest rate calculated as 65% of one-month LIBOR plus 0.407%, have annual serial maturities beginning June 1, 2018 and concluding June 1, 2027 in varying amounts ranging from \$1,340 to \$3,380.

The foundation is obligated under a promissory note with Union Bank and Trust (Series 2017D) dated December 19, 2017. Proceeds were used to finance the construction of several facilities to be used in support of the university. The promissory note, which bears a fixed interest rate of 3.7%, has annual serial maturities beginning October 1, 2019 and concluding October 1, 2037 in varying amounts ranging from \$115 to \$825. At June 30, 2022 unspent bond proceeds of \$4 were included in restricted cash and cash equivalents.

During the year ended June 30, 2017, the foundation used the proceeds from the Series 2017 bond issuances to refinance all of its Industrial Development Authority of Montgomery County, Virginia Variable Rate Revenue Bonds Series 2005 and Industrial Development Authority of Montgomery County, Virginia Revenue Bonds Series 2009A bonds in the amounts of \$12,065 and \$16,495, respectively. The foundation also partially refunded \$44,190 of its 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 financial statements.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Revenue Bonds (Series 2019A) and Taxable Revenue and Refunding Bonds (Series 2019B) dated November 5, 2019. Proceeds will be used to finance costs related to the acquisition, construction, and equipping of certain facilities, funding capitalized interest, refinancing all or a portion of the outstanding Series 2010B and Series 2011B bonds, and paying certain costs of issuance. The Series 2019A and 2019B bonds, which bear a weighted average fixed interest rate of 2.54% and 3.06%, respectively, have annual serial and sinking fund maturities beginning June 1, 2020 and concluding June 1, 2044 in varying amounts ranging from \$60 to

\$7,615. At June 30, 2022 unspent bond proceeds of \$5,553 and \$15,043 are included in restricted cash and cash equivalents and short-term investments, respectively.

During the year ended June 30, 2020 the foundation refunded the remaining \$4,355 of its Series 2010B and partially refunded \$27,515 of its Series 2011B bonds. 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 consolidated financial statements.

The foundation is obligated under the Economic Development Authority of Montgomery County, Virginia Taxable Revenue and Refunding Bonds (Series 2020A) dated July 7, 2020. Proceeds will be used to finance costs related to the acquisition, construction, and equipping of certain facilities; refinance all or a portion of the outstanding Series 2011A, Series 2013A and Series 2013B bonds; and pay certain costs of issuance. The Series 2020A bonds, which bear a weighted average fixed interest rate of 2.24%, have annual serial maturities beginning June 1, 2021 and concluding June 1, 2038 in varying amounts ranging from \$565 to \$4,625.

During the year ended June 30, 2021 the foundation refunded the remaining \$29,150 of its Series 2011A, partially refunded \$13,170 of its Series 2013A, and partially refunded \$6,575 of its 2013B bonds. 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 financial statements.

Principal amounts outstanding for bonds payable and the related unamortized premium amounts where applicable as of June 30, 2022, are as follows (all dollars in thousands):

Bond Series	
Series 2012B	\$ 4,391
Series 2013A	1,280
Series 2013B	1,635
Series 2017A	33,640
Series 2017B	36,625
Series 2017C	9,075
Series 2017D	10,210
Series 2019A	50,815
Series 2019B	94,395
Series 2020A	47,680
Unamortized premium on Series 2013A	83
Unamortized premium on Series 2017A	1,732
Unamortized premium on Series 2019A	9,173
Unamortized discount on Series 2019B	(685)
Unamortized bond issuance cost	(2,095)
Total bonds payable	<u>\$ 297,954</u>

The aggregate annual maturities of bonds payable for each of the five years and thereafter subsequent to June 30, 2022, are as follows (all dollars in thousands):

Year ending June 30,	
2023	\$ 20,686
2024	19,830
2025	19,380
2026	26,631
2027	18,452
2028 – 2032	83,082
2033 – 2037	77,618
2038 – 2042	31,035
2043 - 2047	3,335
Total	<u>\$ 300,049</u>

Total interest expense incurred in the aggregate related to notes payable and bonds payable during the year ended June 30, 2022 totaled \$6,579.

#### Interest Rate Swaps - Virginia Tech Foundation Inc.

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 Series 2005 bonds and more 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, calculated using the weighted average of 70% of USD-LIBOR-BBA of 0.05889% at June 30, 2022.

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 3.21300% ending June 1, 2025. The lending institution participates as a floating rate payer with a floating interest rate, calculated based on the weighted average of 70% of USD-LIBOR-BBA of 0.95456% at June 30, 2022.

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, of 0.8150% at June 30, 2022.

The following table summarizes the fair values of the foundation's interest rate swaps at June 30 and changes in the fair values of those swaps during the year ended June 30, 2022 (all dollars in thousands):

	Fair values	Change in Fair values
Swap 1	\$ -	\$ 1
Swap 2	64	196
Swap 3	284	609
Total	<u>\$ 348</u>	<u>\$ 806</u>

#### Custodial 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 Funds. Under a similar agreement, the foundation also serves as agent for the investment and management of other university non-general funds to assist the university in its goal of achieving enhanced earnings. 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.

The following is a summary of custodial deposits held in trust at June 30, 2022 (all dollars in thousands):

University – Pratt Estate	\$ 45,210
University – other	468,343
Virginia Tech Alumni Association Inc.	4,710
Virginia Tech Services Inc.	5,149
Other	53,410
Total custodial deposits held in trust	<u>\$ 576,822</u>

#### Leases - Virginia Tech Foundation Inc.

##### Operating leases – Foundation as lessor

The foundation rents facilities to unrelated third parties, as well as various university departments and other university-related entities. For the year ended June 30, 2022, rental income of \$20,010, \$1,129, and \$-0-, was earned from the university, Virginia Tech Applied Research Corporation, and Virginia Tech Intellectual Properties, Inc., respectively. In addition, the foundation provides facilities for the use of various university departments at no charge or below market rates to the university. The fair value rental for this property in excess of actual rental income received totaled \$8,314 and is included in rental income and other university programs expense in the accompanying Virginia Tech Foundation statement of revenues, expenses and changes in net position.

Future minimum lease payments receivable under facility leases as of June 30, 2022 are as follows (all dollars in thousands):

	Related Parties	Other	Total
Year ending June 30,			
2023	\$ 15,887	\$ 7,977	\$ 23,864
2024	12,621	5,065	17,686
2025	4,415	3,656	8,071
2026	3,577	2,957	6,534
2027	2,516	2,130	4,646
Thereafter	18,333	11,805	30,138
Total	<u>\$ 57,349</u>	<u>\$ 33,590</u>	<u>\$ 90,939</u>

## Notes to Component Unit Statements (continued)

**Direct financing leases**

During fiscal year 2003, the foundation entered into two master lease agreements with the university for the lease of two buildings. The lease agreements terminated in fiscal year 2022, at which time the title to the buildings was transferred to the university.

During fiscal year 2009, the foundation entered into two master lease agreements with the university for the lease of a building. As of July 1, 2022, the annual payments under the lease agreements totaled \$2,196. The lease agreements terminate in fiscal year 2029.

During fiscal year 2013, the foundation entered into two master lease agreements with the university for the lease of a building and parking garage. As of July 1, 2022, the annual payments under the lease agreements totaled \$3,816. The lease agreements terminate in fiscal year 2036.

During fiscal year 2014, the foundation entered into a master lease agreement with the university for the lease of a building. As of July 1, 2022, the annual payments under the lease agreement totaled \$65. The lease agreement terminates in fiscal year 2044.

During fiscal year 2015, the foundation entered into a master lease agreement with the university for the lease of a building. As of July 1, 2022, the annual payments under the lease agreement totaled \$974. The lease terminates in fiscal year 2038.

During fiscal year 2016, the foundation entered into a master lease agreement with the university for the lease of land. As of July 1, 2022, the annual payments under the lease agreement totaled \$35. The lease terminates in fiscal year 2036.

During fiscal year 2017, the foundation entered into a master lease agreement with the university for the lease of land. As of July 1, 2022, the annual payments under the lease agreement totaled \$100. The lease terminates in fiscal year 2037.

During fiscal year 2019, the foundation entered into two master lease agreements with the university for the lease of two buildings. As of July 1, 2022, the annual payments under the two lease agreements totaled \$295 and \$1,129. The lease agreements terminate in fiscal year 2039.

During fiscal year 2020, the foundation entered into two master lease agreements with the university for the lease of two buildings. As of July 1, 2022, the annual payments under the two lease agreements totaled \$227 and \$148. The lease agreements terminate in fiscal year 2040 and fiscal year 2027, respectively.

During fiscal year 2022, the foundation entered into a master lease agreement with the university for the lease of a building. As of June 30, 2022, an amount of \$10.3 million was received from the university for tenant improvements, which is reflected as deferred revenue and other liabilities on the Virginia Tech Foundation statement of net position. The lease is expected to commence on November 1, 2022 with annual payments of \$2,797.

Future minimum lease payments receivable under these leases as of June 30, 2022 are as follows (all dollars in thousands):

	Related Parties	Other	Total
Year ending June 30,			
2023	\$ 8,375	\$ -	\$ 8,375
2024	8,984	-	8,984
2025	8,989	-	8,989
2026	8,998	-	8,998
2027	8,879	-	8,879
Thereafter	69,085	1,768	70,853
Minimum future lease receipts	113,310	1,768	115,078
Less unearned income	(42,488)	(1,077)	(43,565)
Net investment in direct financing leases	\$ 70,822	\$ 691	\$ 71,513

**Leases – Foundation as lessee**

The foundation leases various buildings. The terms of these leases range from 1 to 9 years for operating leases and from 3 to 5 years for finance leases, expiring on various dates from 2022 to 2031. Annual payments under these agreements range from \$2 to \$149 for finance leases and \$1 to \$320 for operating leases. Rent expense under these leases amounted to \$165 for finance leases and \$998 for operating leases for the year ended June 30, 2022.

The foundation leases various land. The terms of these leases range from 1 to 10 years for operating leases and from 72 to 76 years for finance leases, expiring at various dates from 2023 to 2098. Annual payments under these agreements range from \$1 to \$24 for finance leases and \$18 to \$91 for operating leases. Rent expense under these leases amounted to \$72 for finance leases and \$145 for operating leases for the year ended June 30, 2022.

The foundation leases various equipment. The terms of these leases range from 1 to 4 years for both operating and finance leases, expiring at various dates from 2022 to 2026. Annual payments under these agreements range from \$1 to \$7 for finance leases and \$1 to \$49 for operating leases. Rent expense under these leases amounted to \$21 for finance leases and \$54 for operating leases for the year ended June 30, 2022.

The foundation's lease contracts may include options to extend or terminate the lease. The foundation exercises judgment to determine the term of those leases when such options are present and include such options in the calculation of the lease term when it is reasonably certain that it will exercise those options.

The foundation includes contract lease components in its determination of lease payments, while non-lease components of the contracts, such as taxes, insurance, and common area maintenance, are expensed as incurred. At commencement, right-of-use assets and lease liabilities are measured at the present value of future lease payments over the lease term. The foundation uses its incremental borrowing rate based on information available at the time of lease commencement to measure the present value of future payments.

Operating lease expense is recognized on a straight-line basis over the lease term. Short-term leases with an initial term of 12 months or fewer are expensed as incurred. The foundation's short-term leases have month-to-month terms.

At June 30, 2022 right-of-use assets were \$2,353 for operating leases and \$2,143 for finance leases and lease liabilities were \$2,433 for operating leases and \$2,194 for finance leases. Right-of-use assets and right-of-use liabilities are reflected on the Virginia Tech Foundation statement of financial position as land, buildings, and equipment and deferred revenue and other liabilities, respectively.

The weighted average remaining lease term was 38 months for operating leases and 597 months for finance leases and the weighted average discount rate was 0.55% for operating leases and 2.25% for finance leases as of June 30, 2022.

The foundation's future payments due under operating leases reconciled to the lease liability are as follows (all dollars in thousands):

	Operating Leases	Finance Leases	Total
Year ending June 30,			
2023	\$ 1,113	\$ 227	\$ 1,340
2024	824	228	1,052
2025	249	224	473
2026	59	226	285
2027	42	143	185
Thereafter	175	3,877	4,052
Total future lease payments	2,462	4,925	7,387
Less present value discount	(29)	(2,731)	(2,760)
Total lease liability	\$ 2,433	\$ 2,194	\$ 4,627

For the year ended June 30, 2022, cash paid for lease liabilities totaled \$1,161 for operating leases and \$224 for finance leases and right-of-use assets obtained in exchange for lease liabilities totaled \$3,046 for operating leases and \$2,342 for finance leases.

## 27. 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 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, 2022. The administrative offices for the Hotel Roanoke Conference Center Commission are located at 106 Shenandoah Avenue, Roanoke, Virginia 24016.

## 28. 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 five-member board governs the authority with one member appointed by each governing body and one at-large member 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 \$1,672,000 to the authority for the purchase of water for the fiscal year ended June 30, 2022.

### *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 \$1,198,000 to the authority for the purchase of sewer services for the fiscal year ended June 30, 2022.

### *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 which is comprised of representatives from each of the four jurisdictions served. 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 processing and marketing of the recyclables. All indebtedness is the obligation of the authority and payable from its revenues. The university paid \$265,000 to the authority for disposal fees for the fiscal year ended June 30, 2022.

### *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 promoting and assisting 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 2022 was \$60,000, 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 provides 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 \$926,000 to the authority for the fiscal year ended June 30, 2022.

## 29. 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, as well as 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, and overseas liability coverage. Information relating to the commonwealth's insurance plans is available in the Commonwealth of Virginia's *Annual Comprehensive Financial Report*.

## 30. COVID-19 Relief Funding

During the fiscal year, the university expended its remaining institutional Higher Education Emergency Relief Fund (HEERF) awards under Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan (ARP). The university expended CRRSAA funds of \$2.0 million for recovery of lost revenues. ARP funds of \$24.9 million were spent to provide students with emergency aid grants. The university also expended ARP funds of \$1.5 million on campus safety and operations, \$0.2 million on personal protective equipment, and \$23.1 million for recovery of lost revenues. The university's total lost revenues stemming from the pandemic exceeded the lost revenues recovered under the university's HEERF award. Additionally, the university expended other small awards throughout the year totaling \$1.4 million.

## 31. 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.

## 32. Subsequent Event

In November 2022 the Commonwealth of Virginia, on behalf of the university, issued \$94,880,000 of general obligation revenue bonds (Series 2022A). Bond proceeds will be used for the following construction projects (*all dollars in thousands*):

Hitt Hall academic and dining facility	\$ 40,100
Innovation Campus academic building parking	29,375
New Upper Quad residence hall	25,405
Total	<u>\$ 94,880</u>

# Required Supplementary Information

## Required Supplementary Information for Pension Plans

### Schedule of Virginia Tech's Share of Net Pension Liability (SERP)

For the measurement dates of June 30, 2021-2014  
(all dollars in thousands)

	Proportion of net pension liability	Proportionate share of net pension liability	Employer's covered payroll	Proportionate share of net pension liability as a percentage of employer's covered payroll	Plan fiduciary net position as a percentage of total pension liability
2021	6.28%	\$ 277,619	\$ 271,869	102.11%	86.44%
2020	6.35%	\$ 460,400	\$ 283,418	162.45%	72.15%
2019	6.42%	\$ 405,894	\$ 270,954	149.80%	75.13%
2018	6.46%	\$ 349,811	\$ 270,309	129.41%	77.39%
2017	6.55%	\$ 381,766	\$ 262,376	145.50%	75.33%
2016	6.58%	\$ 433,375	\$ 263,416	164.52%	71.29%
2015	6.52%	\$ 398,980	\$ 246,488	161.60%	72.81%
2014	6.30%	\$ 352,916	\$ 243,099	145.17%	74.28%

### Schedule of Virginia Tech's Share of Net Pension Liability (VaLORS)

For the measurement dates of June 30, 2021-2014  
(all dollars in thousands)

	Proportion of net pension liability	Proportionate share of net pension liability	Employer's covered payroll	Proportionate share of net pension liability as a percentage of employer's covered payroll	Plan fiduciary net position as a percentage of total pension liability
2021	0.66%	\$ 3,435	\$ 2,296	149.61%	78.18%
2020	0.64%	\$ 5,024	\$ 2,367	212.25%	65.74%
2019	0.66%	\$ 4,557	\$ 2,293	198.74%	68.31%
2018	0.66%	\$ 4,144	\$ 2,294	180.65%	69.56%
2017	0.67%	\$ 4,397	\$ 2,315	189.94%	67.22%
2016	0.67%	\$ 5,201	\$ 2,328	223.41%	61.01%
2015	0.66%	\$ 4,716	\$ 2,247	209.88%	62.64%
2014	0.70%	\$ 4,706	\$ 2,461	191.22%	63.05%

### Schedule of Virginia Tech's Pension Contributions (SERP)

For the years ended June 30, 2022 - 2015  
(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 employer's covered payroll
2022	\$ 41,085	\$ 41,085	\$ -	\$ 283,379	14.50%
2021	\$ 39,309	\$ 39,309	\$ -	\$ 271,869	14.46%
2020	\$ 37,758	\$ 37,758	\$ -	\$ 283,418	13.32%
2019	\$ 36,003	\$ 36,003	\$ -	\$ 270,954	13.29%
2018	\$ 36,466	\$ 36,466	\$ -	\$ 270,309	13.49%
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 Virginia Tech's Pension Contributions (VaLORS)

For the years ended June 30, 2022 - 2015  
(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 employer's covered payroll
2022	\$ 557	\$ 557	\$ -	\$ 2,535	21.97%
2021	\$ 512	\$ 512	\$ -	\$ 2,296	22.30%
2020	\$ 503	\$ 503	\$ -	\$ 2,367	21.25%
2019	\$ 496	\$ 496	\$ -	\$ 2,293	21.63%
2018	\$ 483	\$ 483	\$ -	\$ 2,294	21.05%
2017	\$ 487	\$ 487	\$ -	\$ 2,315	21.04%
2016	\$ 439	\$ 439	\$ -	\$ 2,328	18.86%
2015	\$ 397	\$ 397	\$ -	\$ 2,247	17.67%

All schedules above are intended to show information for 10 years. Since 2015 was the first year for this presentation, only eight years are available. Additional years will be included as they become available.

*Notes to Required Supplementary Information for Pension Plans*

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The actuarial assumptions used in the June 30, 2020, valuation were based on the results of an actuarial experience study for the period from July 1, 2016, through June 30, 2020, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows.

**VRS – State Employee Retirement Plans (SERP)**

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

**ValORS Retirement Plan**

Mortality Rates	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Increased rates at some younger ages, decreased at age 62, and changed final retirement from 65 to 70
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change



*Holden Hall Expansion  
Photo by Mary Desmond for Virginia Tech.*

## Required Supplementary Information for Other Postemployment Benefit Plans

## Schedule of Virginia Tech's Share of OPEB Liability (Asset)

For the years ended June 30, 2022-2018

(all dollars in thousands)

	Year*	PMRH	VSDP	GLI	HIC	LODA
Employer's proportion of the collective total OPEB liability (asset)	2022	9.02%	3.69%	3.03%	8.66%	0.25%
	2021	8.93%	3.72%	3.03%	8.63%	0.23%
	2020	8.72%	3.79%	2.99%	8.59%	0.24%
	2019	8.53%	3.81%	2.95%	8.32%	0.23%
	2018	8.34%	3.79%	2.87%	8.19%	0.25%
Employer's proportionate share of the collective total OPEB liability (asset)	2022	\$ 40,472	\$ (12,709)	\$ 35,260	\$ 73,126	\$ 1,103
	2021	\$ 50,797	\$ (8,213)	\$ 50,486	\$ 79,244	\$ 957
	2020	\$ 59,214	\$ (7,438)	\$ 48,635	\$ 79,327	\$ 868
	2019	\$ 85,746	\$ (8,583)	\$ 44,770	\$ 75,868	\$ 735
	2018	\$ 108,278	\$ (7,790)	\$ 43,235	\$ 74,567	\$ 663
<u>Employer's covered payroll</u> (where applicable)	2022		\$ 159,351	\$ 625,278	\$ 623,963	
	2021		\$ 161,260	\$ 622,611	\$ 621,914	
	2020		\$ 153,447	\$ 585,890	\$ 585,614	
	2019		\$ 147,739	\$ 553,929	\$ 558,853	
	2018		\$ 142,553	\$ 526,681	\$ 531,560	
Proportionate share of the collective total OPEB liability (asset) as a percentage of <u>employer's covered payroll</u>	2022		7.98%	5.64%	11.72%	
	2021		5.09%	8.11%	12.74%	
	2020		4.85%	8.30%	13.55%	
	2019		5.81%	8.08%	13.58%	
	2018		5.46%	8.21%	14.03%	
<u>Covered-employee payroll</u> (where applicable)	2022	\$ 689,890				N/A**
	2021	\$ 642,357				N/A**
	2020	\$ 601,489				N/A**
	2019	\$ 575,313				N/A**
	2018	\$ 548,609				N/A**
Proportionate share of the collective total OPEB liability (asset) as a percentage of <u>covered-employee payroll</u>	2022	5.87%				N/A**
	2021	7.91%				N/A**
	2020	9.84%				N/A**
	2019	14.90%				N/A**
	2018	19.74%				N/A**
Plan Fiduciary Net Position as a percentage of the total OPEB liability (asset)	2022	N/A	229.01%	67.45%	19.75%	1.68%
	2021	N/A	181.88%	52.64%	12.02%	1.02%
	2020	N/A	167.18%	52.00%	10.56%	0.79%
	2019	N/A	194.74%	51.22%	9.51%	0.60%
	2018	N/A	186.63%	48.86%	8.03%	1.30%

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

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

This schedule is intended to show information for 10 years. Since 2018 is the first year for this presentation, only five years are available. Additional years will be included as they become available.

### Schedule of Virginia Tech's Share of OPEB Contributions

For the years ended June 30, 2022-2018  
(all dollars in thousands)

	Year	VSDP	GLI	HIC	LODA
Contractually required contribution	2022	\$ 998	\$ 3,584	\$ 7,429	\$ 32
	2021	\$ 971	\$ 3,397	\$ 7,050	\$ 34
	2020	\$ 968	\$ 3,231	\$ 7,262	\$ 31
	2019	\$ 950	\$ 3,039	\$ 6,836	\$ 32
	2018	\$ 977	\$ 2,880	\$ 6,653	\$ 25
Contributions in relation to contractually required contribution	2022	\$ 998	\$ 3,584	\$ 7,429	\$ 32
	2021	\$ 971	\$ 3,397	\$ 7,050	\$ 34
	2020	\$ 968	\$ 3,231	\$ 7,262	\$ 31
	2019	\$ 950	\$ 3,039	\$ 6,836	\$ 32
	2018	\$ 977	\$ 2,880	\$ 6,653	\$ 25
Contribution deficiency (excess)	2022	\$ -	\$ -	\$ -	\$ -
	2021	\$ -	\$ -	\$ -	\$ -
	2020	\$ -	\$ -	\$ -	\$ -
	2019	\$ -	\$ -	\$ -	\$ -
	2018	\$ -	\$ -	\$ -	\$ -
<u>Employer's covered payroll</u> (where applicable)	2022	\$ 164,921	\$ 664,979	\$ 664,536	
	2021	\$ 159,351	\$ 625,278	\$ 623,963	
	2020	\$ 161,260	\$ 622,611	\$ 621,914	
	2019	\$ 153,447	\$ 585,890	\$ 585,614	
	2018	\$ 147,739	\$ 553,929	\$ 558,853	
Contributions as a percentage of <u>employer's covered payroll</u>	2022	0.61%	0.54%	1.12%	
	2021	0.61%	0.54%	1.13%	
	2020	0.60%	0.52%	1.17%	
	2019	0.62%	0.52%	1.17%	
	2018	0.66%	0.52%	1.19%	
<u>Covered-employee payroll</u> (where applicable)	2022				N/A*
	2021				N/A*
	2020				N/A*
	2019				N/A*
	2018				N/A*
Contributions as a percentage of <u>covered-employee payroll</u>	2022				N/A*
	2021				N/A*
	2020				N/A*
	2019				N/A*
	2018				N/A*

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

This schedule is intended to show information for 10 years. Since 2018 is the first year for this presentation, only five years are available. Additional years will be included as they become available.

*Notes to Required Supplementary Information for OPEB Plans***PMRH program**

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

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

Changes of assumptions – The following assumptions were updated since the June 30, 2020 valuation based on recent experience:

- Retiree Participation – reduced the rate from 45% to 40%

Spousal coverage and retiree participation were based on a blend of recent experience and the prior year assumptions. The mortality table has been updated from adjusted RP-2014 mortality tables using Scale BB to adjusted Pub-2010 Headcount-Weighted mortality tables projected generationally with modified MP-2021 Improvement Scales.

No excise tax has been reflected due to the SECURE Act. Among the provisions was a repeal of three taxes and fees that were originally intended to help fund the Affordable Care Act (ACA): i) the excise tax on high-cost health plans (Cadillac tax); ii) the annual fee on health insurance providers; and iii) the medical device excise tax.

The trend rates were updated based on economic conditions as of June 30, 2021. Additionally, the discount rate was decreased from 2.21% to 2.16% based on the Bond Buyers GO 20 Municipal Bond Index as of June 30, 2022.

**GLI, HIC, LODA, and VSDP programs**

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

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

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change (N/A for LODA)

**Teachers (GLI)**

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Discount Rate	No change

**SPORS Employees (GLI, HIC)**

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Increased rates for ages 55 to 61, 63, and 64 with 26 or more years of service; changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rate for 0 years of service and increased rates for 1 to 6 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

**SPORS Employees (LODA, VSDP)**

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Increased rates for ages 55 to 61, 63, and 64 with 26 or more years of service and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rate for 0 years of service and increased rates for 1 to 6 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount rate	No change (N/A for LODA)

**VaLORS Employees (GLI, HIC)**

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Increased rates at some younger ages, decreased at age 62, and changed final retirement age from 65 to 70
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

**VaLORS Employees (LODA, VSDP)**

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Increased rates at some younger ages, decreased at age 62, and changed final retirement age from 65 to 70
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service decrement through 9 years of service

Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change (N/A for LODA)

JRS (GLI, HIC)

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Review separately from State employees because exhibit fewer deaths. Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Decreased rates for ages 60-66 and 70-72
Withdrawal Rates	No change
Disability Rates	No change
Salary Scale	Reduce increases across all ages by 0.50%
Discount Rate	No change

Largest Ten Locality Employers – General Employees (GLI)

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each age and service decrement through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience for Plan 1; set separate rates based on experience for Plan 2/Hybrid; changed final retirement age from 75 to 80 for all
Withdrawal Rates	Adjusted rates to better fit experience at each age and service decrement through 9 years of service
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

Largest Ten Locality Employers – Hazardous Duty Employees (GLI)

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rates
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

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

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rates and changed from rates based on age and service to rates based on service only to better fit experience and to be more consistent with Locals Top 10 Hazardous Duty
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change
Discount Rate	No change

Largest Ten Locality Employers with Public Safety Employees (LODA)

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rates
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change

Non-Largest Ten Locality Employers with Public Safety Employees (LODA)

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled)	Update to PUB2010 public sector mortality tables. Increased disability life expectancy. Increased disability life expectancy. For future mortality improvements, replace load with a modified Mortality Improvement Scale MP-2020
Retirement Rates	Adjusted rates to better fit experience and changed final retirement age from 65 to 70
Withdrawal Rates	Decreased rates and changed from rates based on age and service to rates based on service only to better fit experience and to be more consistent with Locals Top 10 Hazardous Duty
Disability Rates	No change
Salary Scale	No change
Line of Duty Disability	No change

# Optional Supplementary Information

## Virginia Tech Foundation Inc.

The purpose of Virginia Tech Foundation, Inc. (VTF) is to receive, manage, and disburse private funds given for the support of the university, and to foster and promote the growth, progress, and general welfare of the university.

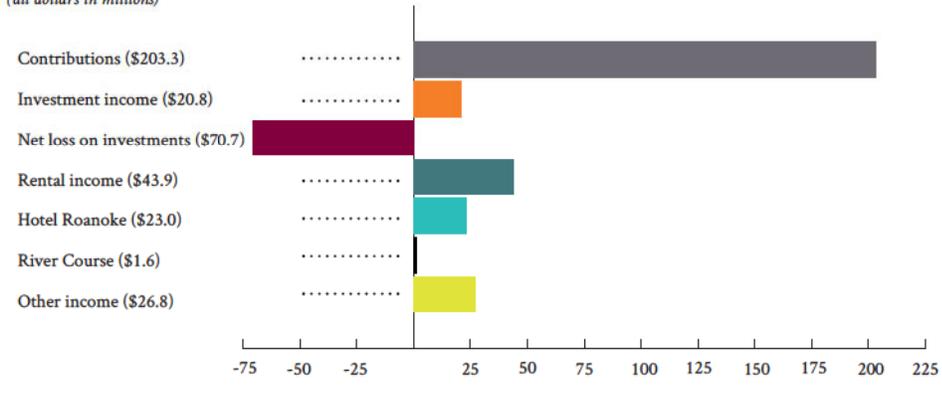
During the current fiscal year, the foundation recognized \$203.3 million in contributions for support of the university. Investment income of \$20.8 million, along with net loss on investments of \$70.7 million, resulted in a \$49.9 million net loss on investment activity. Property rental, hotel operating, and golf course income totaled \$68.5 million. Other income accounted for \$26.8 million.

Total income of \$248.7 million was offset by \$242.2 million in expenses that supported the university and its programs. Direct support to various university programs aggregated \$170.3 million, which included \$36.4 million in scholarship support to students and faculty and \$21.0 million towards university capital projects. Additional expenses such as fundraising, management and general, research center, hotel operating, golf course, and other costs totaled \$71.9 million. Total net position decreased by \$14.6 million over the previous year.

The graphs on this page are categorized as presented in the foundation's audited financial statements that follow the Financial Accounting Standards Board (FASB) presentation requirements.

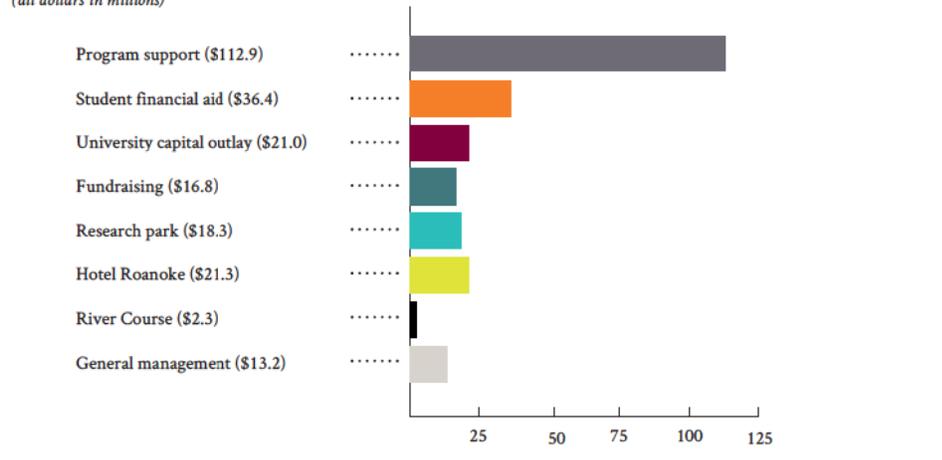
### VTF Revenues, Gains & Other Support

For the year ended June 30, 2022  
(all dollars in millions)



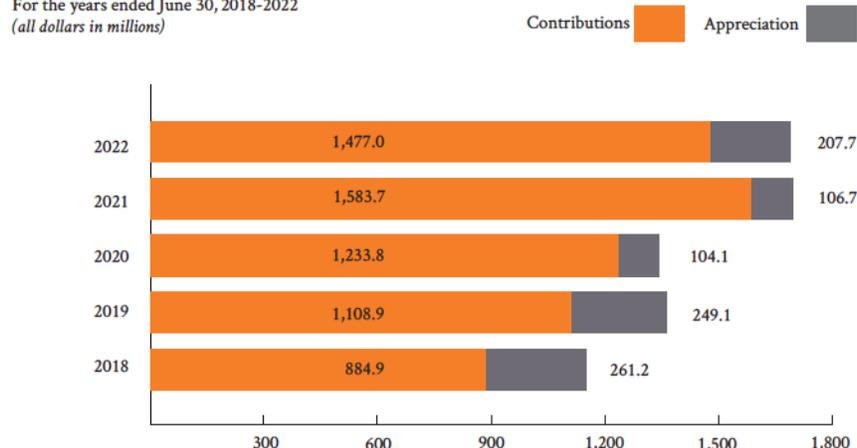
### VTF Expenses

For the year ended June 30, 2022  
(all dollars in millions)



### VTF Endowment Market Value\*

For the years ended June 30, 2018-2022  
(all dollars in millions)



\*Market value of endowment funds includes custodial deposits held in trust of \$576.8 million.  
(Source: Virginia Tech Investment Managers, unaudited)

## Affiliated Corporations

### Affiliated Corporations Financial Highlights

For the years ended June 30, 2022-2018

(all dollars in thousands)

	2022 <sup>(1)</sup>	2021	2020	2019 <sup>(2)</sup>	2018
<b>Assets</b>					
Virginia Tech Foundation Inc.	\$ 2,667,802	\$ 2,687,603	\$ 2,265,838	\$ 2,107,138	\$ 1,891,019
Virginia Tech Innovation Corporation	N/A	9,145	9,488	10,798	11,646
Virginia Tech Services Inc.	8,677	7,380	7,311	6,803	8,762
Virginia Tech Applied Research Corporation	5,827	4,610	4,219	4,885	4,414
Virginia Tech Intellectual Properties Inc.	2,752	2,102	1,735	1,201	1,063
Total Assets	<u>\$ 2,685,058</u>	<u>\$ 2,710,840</u>	<u>\$ 2,288,591</u>	<u>\$ 2,130,825</u>	<u>\$ 1,916,904</u>
<b>Revenues</b>					
Virginia Tech Foundation Inc.	\$ 248,744	\$ 465,260	\$ 210,179	\$ 257,082	\$ 266,582
Virginia Tech Innovation Corporation	N/A	4,731	4,921	7,015	5,564
Virginia Tech Services Inc.	3,938	2,533	4,172	18,872	22,160
Virginia Tech Applied Research Corporation	18,949	13,419	11,233	11,431	12,038
Virginia Tech Intellectual Properties Inc.	3,075	2,502	2,052	2,193	1,932
Total Revenues	<u>\$ 273,460</u>	<u>\$ 488,445</u>	<u>\$ 232,557</u>	<u>\$ 296,593</u>	<u>\$ 308,276</u>
<b>Expenses</b>					
Virginia Tech Foundation Inc.	\$ 242,232	\$ 155,779	\$ 180,673	\$ 170,041	\$ 179,567
Virginia Tech Innovation Corporation	N/A	5,347	6,612	6,655	5,600
Virginia Tech Services Inc.	3,130	2,433	3,438	18,957	22,133
Virginia Tech Applied Research Corporation	17,930	13,262	11,415	10,715	10,985
Virginia Tech Intellectual Properties Inc.	2,888	2,138	2,016	2,155	1,727
Total Expenses	<u>\$ 263,649</u>	<u>\$ 178,959</u>	<u>\$ 204,154</u>	<u>\$ 208,523</u>	<u>\$ 220,012</u>

(1) Virginia Tech Innovation Corporation amounts for the current year were not available at publication date.

(2) Virginia Tech Services Inc. restated.

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 or will be 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, 2022  
(all dollars in thousands)

	Current Funds		Loan Funds	Endowment & Similar Funds	Plant Funds	Custodial Funds	Total
	Unrestricted	Restricted					
<b>Assets</b>							
<b>Current assets</b>							
Cash and cash equivalents <sup>(Note 4)</sup>	\$ 242,280	\$ 21,302	\$ 3,000	\$ -	\$ -	\$ 13,628	\$ 280,210
Accounts and contributions receivable, net <sup>(Notes 1, 5, 26)</sup>	21,214	65,853	-	-	-	-	87,067
Notes receivable, net <sup>(Notes 1, 6)</sup>	206	-	907	-	-	-	1,113
Due from Commonwealth of Virginia <sup>(Note 10)</sup>	18,069	-	-	-	-	-	18,069
Inventories	17,626	-	-	-	-	-	17,626
Prepaid expenses	22,547	771	-	-	-	-	23,318
Due to (from) other funds	(104,864)	47,529	-	(542)	57,877	-	-
Total current assets	<u>217,078</u>	<u>135,455</u>	<u>3,907</u>	<u>(542)</u>	<u>57,877</u>	<u>13,628</u>	<u>427,403</u>
<b>Noncurrent assets</b>							
Cash and cash equivalents <sup>(Note 4)</sup>	6	-	-	356	40,746	-	41,108
Due from Commonwealth of Virginia <sup>(Note 10)</sup>	-	-	-	-	13,120	-	13,120
Accounts and contributions receivable, net <sup>(Notes 1, 5, 26)</sup>	871	-	-	2	2,395	-	3,268
Notes receivable, net <sup>(Notes 1, 6)</sup>	4,413	-	5,357	-	-	-	9,770
Long-term investments <sup>(Notes 4, 26)</sup>	673,686	-	-	68,179	35,997	-	777,862
Long-term right-to-use leases, net <sup>(Note 15)</sup>	-	-	-	-	126,812	-	126,812
Depreciable capital assets, net <sup>(Notes 7, 26)</sup>	-	-	-	-	1,787,647	-	1,787,647
Nondepreciable capital assets <sup>(Notes 7, 26)</sup>	-	-	-	-	365,221	-	365,221
Other assets	91	12,804	-	-	200	-	13,095
Total noncurrent assets	<u>679,067</u>	<u>12,804</u>	<u>5,357</u>	<u>68,537</u>	<u>2,372,138</u>	<u>-</u>	<u>3,137,903</u>
Total assets	<u>896,145</u>	<u>148,259</u>	<u>9,264</u>	<u>67,995</u>	<u>2,430,015</u>	<u>13,628</u>	<u>3,565,306</u>
Deferred outflows of resources <sup>(Note 24)</sup>	96,755	7,875	-	-	3,970	-	108,600
<b>Liabilities</b>							
<b>Current liabilities</b>							
Accounts payable and accrued liabilities <sup>(Note 8)</sup>	115,639	19,722	-	-	36,938	2,871	175,170
Accrued compensated absences <sup>(Notes 1, 16)</sup>	24,648	4,855	-	-	-	-	29,503
Unearned revenue <sup>(Notes 1, 9)</sup>	26,425	35,794	-	-	-	-	62,219
Funds held in custody for others	-	-	-	-	-	10,757	10,757
Commercial paper <sup>(Note 11)</sup>	-	-	-	-	46,449	-	46,449
Long-term leases payable <sup>(Note 15)</sup>	-	-	-	-	17,099	-	17,099
Long-term debt payable <sup>(Notes 12, 13, 26)</sup>	-	-	-	-	21,483	-	21,483
Other postemployment benefits liabilities <sup>(Notes 16, 20)</sup>	2,568	407	-	-	-	-	2,975
Total current liabilities	<u>169,280</u>	<u>60,778</u>	<u>-</u>	<u>-</u>	<u>121,969</u>	<u>13,628</u>	<u>365,655</u>
<b>Noncurrent liabilities</b>							
Accrued compensated absences <sup>(Notes 1, 16)</sup>	20,309	3,973	-	-	-	-	24,282
Federal student loan program contributions refundable <sup>(Note 16)</sup>	-	-	6,240	-	-	-	6,240
Long-term leases payable <sup>(Note 15)</sup>	-	-	-	-	104,471	-	104,471
Long-term debt payable <sup>(Notes 12, 13, 26)</sup>	-	-	-	-	406,073	-	406,073
Pension liability <sup>(Notes 16, 18)</sup>	232,238	(1,183)	-	-	-	-	231,055
Other postemployment benefits liabilities <sup>(Notes 16, 20)</sup>	151,747	(4,761)	-	-	-	-	146,986
Other liabilities	3,124	-	-	-	-	-	3,124
Total noncurrent liabilities	<u>407,418</u>	<u>(1,971)</u>	<u>6,240</u>	<u>-</u>	<u>510,544</u>	<u>-</u>	<u>922,231</u>
Total liabilities	<u>576,698</u>	<u>58,807</u>	<u>6,240</u>	<u>-</u>	<u>632,513</u>	<u>13,628</u>	<u>1,287,886</u>
Deferred inflows of resources <sup>(Note 24)</sup>	255,775	4,753	-	-	1,550	-	262,078
<b>Net position</b>							
Net investment in capital assets	-	-	-	-	1,704,367	-	1,704,367
Restricted, nonexpendable	-	-	-	13,588	-	-	13,588
Restricted, expendable							
Scholarships, research, instruction, and other	-	92,574	3,024	54,407	-	-	150,005
Capital projects	-	-	-	-	10,194	-	10,194
Debt service and auxiliary operations	-	-	-	-	85,361	-	85,361
Unrestricted	160,427	-	-	-	-	-	160,427
Total net position	<u>\$ 160,427</u>	<u>\$ 92,574</u>	<u>\$ 3,024</u>	<u>\$ 67,995</u>	<u>\$ 1,799,922</u>	<u>\$ -</u>	<u>\$ 2,123,942</u>

**Consolidating Schedule of Revenues, Expenses, and Changes in Net Position**As of June 30, 2022  
(all dollars in thousands)

	Current Funds		Loan Funds	Endowment & Similar Funds	Plant Funds	Total
	Unrestricted	Restricted				
<b>Operating revenues</b>						
Student tuition and fees <sup>(Note 1)</sup>	\$ 611,497	\$ (475)	\$ -	\$ -	\$ -	\$ 611,022
Federal appropriations	-	15,612	-	-	-	15,612
Federal grants and contracts	61,305	190,031	-	-	554	251,890
State grants and contracts	1,318	18,287	-	-	-	19,605
Local grants and contracts <sup>(Note 3)</sup>	404	15,542	-	-	-	15,946
Nongovernmental grants and contracts	12,021	47,455	-	-	-	59,476
Sales and services of educational departments	29,129	32	-	-	-	29,161
Auxiliary enterprise revenue <sup>(Note 1)</sup>	299,625	51	-	-	-	299,676
Other operating revenues	5,528	3,428	72	229	-	9,257
Total operating revenues	<u>1,020,827</u>	<u>289,963</u>	<u>72</u>	<u>229</u>	<u>554</u>	<u>1,311,645</u>
<b>Operating expenses</b>						
Instruction	439,741	6,430	-	-	-	446,171
Research	120,592	230,856	-	-	-	351,448
Public service	48,947	44,272	-	-	-	93,219
Academic support	104,003	8,575	-	-	-	112,578
Student services	28,827	1,290	-	-	-	30,117
Institutional support	70,540	10,806	-	-	-	81,346
Operation and maintenance of plant	74,555	(75)	-	-	10,158	84,638
Student financial assistance	11,305	33,924	50	-	-	45,279
Auxiliary enterprises	258,271	(164)	-	-	-	258,107
Depreciation and amortization <sup>(Note 7)</sup>	-	-	-	-	135,774	135,774
Total operating expenses	<u>1,156,781</u>	<u>335,914</u>	<u>50</u>	<u>-</u>	<u>145,932</u>	<u>1,638,677</u>
<b>Operating income (loss)</b>	<u>(135,954)</u>	<u>(45,951)</u>	<u>22</u>	<u>229</u>	<u>(145,378)</u>	<u>(327,032)</u>
<b>Non-operating revenues (expenses)</b>						
State appropriations <sup>(Note 23)</sup>	292,653	33,766	-	-	-	326,419
Gifts	20,262	58,512	(72)	-	-	78,702
Coronavirus relief funds	24	53,115	-	-	-	53,139
Non-operating grants and contracts	-	2,421	-	-	-	2,421
Federal student financial aid (Pell)	-	22,722	-	-	-	22,722
Investment income, net	(22,792)	(223)	-	(3,952)	(10,537)	(37,504)
Interest expense on debt related to capital assets	(804)	-	-	-	(10,118)	(10,922)
Interest expense on long-term leases	(5,590)	(167)	-	-	-	(5,757)
Other non-operating revenue	5,857	464	-	-	624	6,945
Net non-operating revenues (expenses)	<u>289,610</u>	<u>170,610</u>	<u>(72)</u>	<u>(3,952)</u>	<u>(20,031)</u>	<u>436,165</u>
<b>Income (loss) before other revenues, expenses, gains, or losses</b>	<u>153,656</u>	<u>124,659</u>	<u>(50)</u>	<u>(3,723)</u>	<u>(165,409)</u>	<u>109,133</u>
Capital appropriations <sup>(Note 23)</sup>	-	-	-	-	13,726	13,726
Capital grants and gifts <sup>(Note 10)</sup>	17,756	2,287	-	-	160,713	180,756
Gain on disposal of capital assets	8	-	-	-	5,250	5,258
Total other revenues, expenses, gains, and losses	<u>17,764</u>	<u>2,287</u>	<u>-</u>	<u>-</u>	<u>179,689</u>	<u>199,740</u>
<b>Increase in net position</b>	<u>171,420</u>	<u>126,946</u>	<u>(50)</u>	<u>(3,723)</u>	<u>14,280</u>	<u>308,873</u>
Mandatory transfers	(41,809)	(554)	-	-	42,363	-
Nonmandatory transfers	(51,847)	(28,380)	(355)	(2,527)	83,109	-
Equipment and library book transfers	(44,429)	(8,049)	-	-	52,478	-
Scholarship allowance transfer	84,948	(84,948)	-	-	-	-
Total transfers	<u>(53,137)</u>	<u>(121,931)</u>	<u>(355)</u>	<u>(2,527)</u>	<u>177,950</u>	<u>-</u>
<b>Increase (decrease) in net position after transfers</b>	<u>118,283</u>	<u>5,015</u>	<u>(405)</u>	<u>(6,250)</u>	<u>192,230</u>	<u>308,873</u>
<b>Net position - beginning of year (restated) <sup>(Note 1)</sup></b>	<u>42,144</u>	<u>87,559</u>	<u>3,429</u>	<u>74,245</u>	<u>1,607,692</u>	<u>1,815,069</u>
<b>Net position - end of year</b>	<u>\$ 160,427</u>	<u>\$ 92,574</u>	<u>\$ 3,024</u>	<u>\$ 67,995</u>	<u>\$ 1,799,922</u>	<u>\$ 2,123,942</u>



Staci A. Henshaw, CPA  
Auditor of Public Accounts

# Commonwealth of Virginia

*Auditor of Public Accounts*

P.O. Box 1295  
Richmond, Virginia 23218

November 11, 2022

The Honorable Glenn Youngkin  
Governor of Virginia

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 unit of **Virginia Polytechnic Institute and State University** (Virginia Tech) as of and for the year ended June 30, 2022, 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 11, 2022. Our report includes a reference to other auditors who audited the financial statements of the component unit of Virginia Tech, as described in our report on Virginia Tech's financial statements. The other auditors did not audit the financial statements of the component unit of Virginia Tech in accordance with Government Auditing Standards, and accordingly, this report does not include reporting on internal control over financial reporting or compliance and other matters associated with the component unit of the University.

### Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Virginia Tech's internal control over financial reporting (internal control) as a basis for designing 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 Virginia Tech's internal control. Accordingly, we do not express an opinion on the effectiveness of Virginia Tech's internal control.

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

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

### **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether Virginia Tech'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 financial statements. 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.

### **Status of Prior Findings**

We did not perform audit work related to the finding included in our report dated November 12, 2020, and reissued in our [Student Financial Assistance Cluster](#) report dated February 4, 2022, titled "Improve Compliance over Enrollment Reporting," because Virginia Tech did not implement corrective action during our audit period. We will follow up on this finding during the fiscal year 2023 audit.

### **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 Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose. We discussed this report with management at an exit conference held on November 18, 2022.

Staci A. Henshaw  
AUDITOR OF PUBLIC ACCOUNTS

KJS/vks

# University Administrative Officers

(as of June 30, 2022)

## Virginia Tech Board of Visitors

Letitia A. Long, <i>Rector</i>	Edward H. Baine, <i>Vice Rector</i>
Shelley Butler Barlow	Carrie H. Chenery
Greta J. Harris	Charles T. Hill
Anna L. James	Sharon Brickhouse Martin
Melissa Byrne Nelson	L. Chris Petersen
Mehul P. Sanghani	Horacio A. Valeiras
Jeffrey E. Veatch	Preston M. White

## Academic Deans

Alan L. Grant <i>College of Agriculture and Life Sciences</i>
Rosemary Blieszner ( <i>interim</i> ) <i>College of Architecture, Arts and Design</i>
Julia M. Ross <i>College of Engineering</i>
Aimée Surprenant <i>College of Graduate Education</i>
Paul Knox <i>Honors College</i>
Laura Belmonte <i>College of Liberal Arts and Human Sciences</i>
Paul M. Winistorfer <i>College of Natural Resources and Environment</i>
Robert T. Sumichrast <i>Pamplin College of Business</i>
Kevin T. Pitts <i>College of Science</i>
Tyler O. Walters <i>University Libraries</i>
M. Daniel Givens <i>Virginia-Maryland College of Veterinary Medicine</i>
Lee A. Learman <i>Virginia Tech Carilion School of Medicine</i>

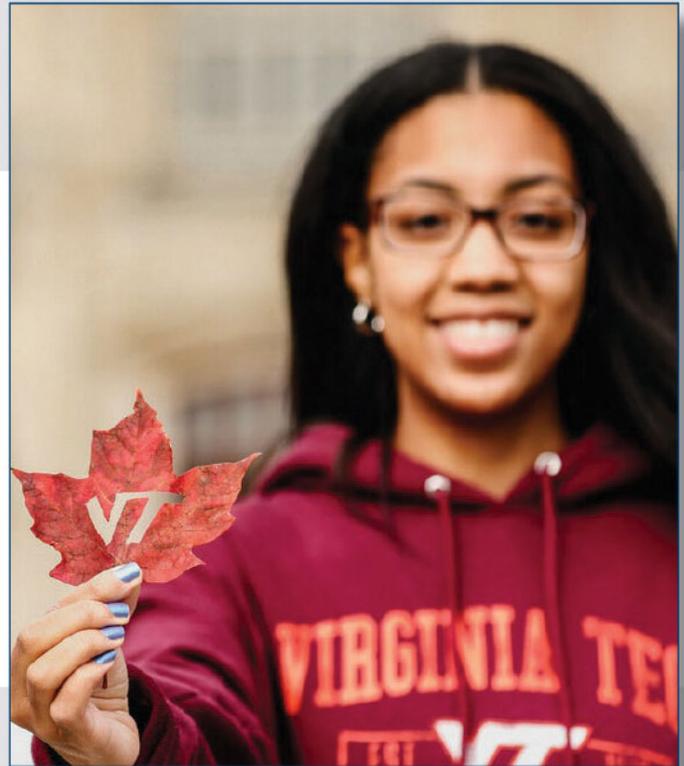
## Financial and Business Officers

John J. Cusimano <i>University Treasurer and Associate Vice President for Finance for the VT Foundation</i>
Melinda J. West <i>Associate Vice President for Finance and University Controller</i>
Sharon M. Kurek <i>Executive Director of Audit, Risk, and Compliance</i>

## Senior Officers

Timothy D. Sands <i>President</i>
Cyril R. Clarke <i>Executive Vice President and Provost</i>
Christopher H. Kiwus <i>Interim Senior Vice President and Chief Business Officer Vice President for Campus Planning, Infrastructure, and Facilities</i>
Lance R. Collins <i>Vice President and Executive Director, Innovation Campus</i>
Charles D. Phlegar <i>Vice President for Advancement</i>
Tracy Vosburgh <i>Vice President of Communications and Marketing</i>
Menah Pratt-Clarke <i>Vice President for Diversity, Inclusion, and Strategic Affairs</i>
Lynsay Belshe <i>Vice President for Enterprise Administrative and Business Services</i>
Kenneth E. Miller <i>Vice President for Finance</i>
Chris Yianilos <i>Vice President for Government and Community Relations</i>
Michael J. Friedlander <i>Vice President for Health Sciences and Technology</i>
Bryan Garey <i>Vice President for Human Resources</i>
Scott F. Midkiff <i>Vice President for Information Technology and Chief Information Officer</i>
Guru Ghosh <i>Vice President for Outreach and International Affairs</i>
Kim T. O'Rourke <i>Vice President for Policy and Governance</i>
Daniel Sui <i>Senior Vice President and Chief Research and Innovation Officer</i>
Steven H. McKnight <i>Vice President for Strategic Alliances</i>
Lisa J. Wilkes <i>Vice President for Strategic Initiatives / Special Assistant to the President</i>
Frank Shushok Jr. <i>Vice President for Student Affairs</i>

On the back cover: The Institute for Creativity, Arts, and Technology (ICAT) collaborated with the university's Communications and Marketing unit to create a projection on Torgersen Bridge that explored Virginia Tech's past 150 years through images and sound. Photo by Luke Hayes for Virginia Tech.



Prepared by the Virginia Tech Office of the University Controller

Published January 2023.

This report and reports from prior years are available at [www.controller.vt.edu/resources/financialreporting.html](http://www.controller.vt.edu/resources/financialreporting.html).

Photos courtesy of Virginia Tech University Relations.

For more information, contact the Financial Reporting department at 540.231.6418.



VIRGINIA  
TECH.



# CONSTRUCTION AUDITS

PREPARED FOR THE COMPLIANCE, AUDIT & RISK COMMITTEE OF THE BOARD OF VISITORS

JUSTIN NOBLE  
DIRECTOR OF INTERNAL AUDIT

DWYN TAYLOR  
ASSISTANT VICE PRESIDENT FOR CAPITAL CONSTRUCTION  
MARCH 20, 2023

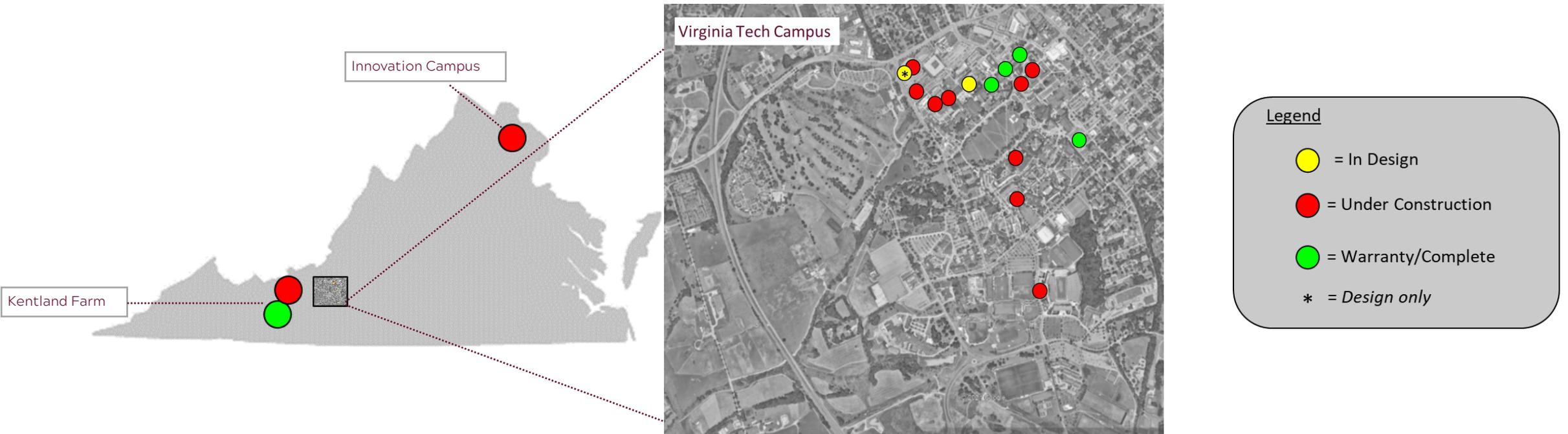
# Enterprise Risk Landscape



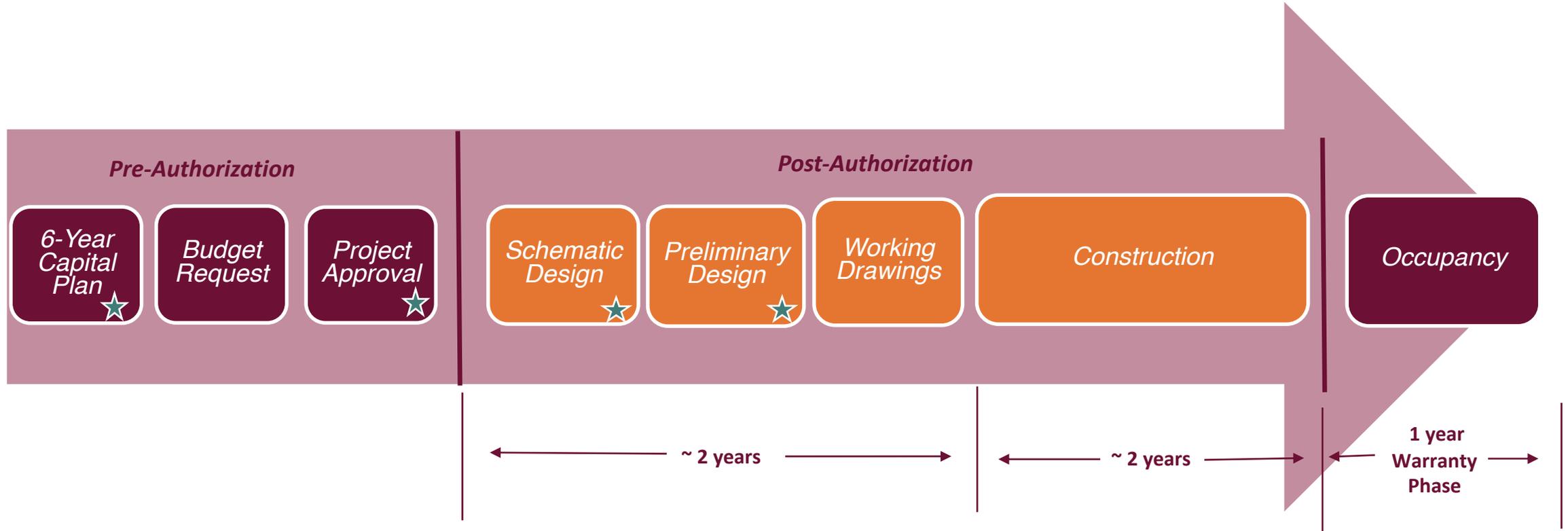
# Capital Construction Program

## Current portfolio:

- 18 authorized projects -- active and complete (w/in 1-year warranty phase)
- Total value of ~\$1.3B
- Adds ~1.6M gross square feet (GSF) of new construction
- Renovates nearly 300K GSF of existing space

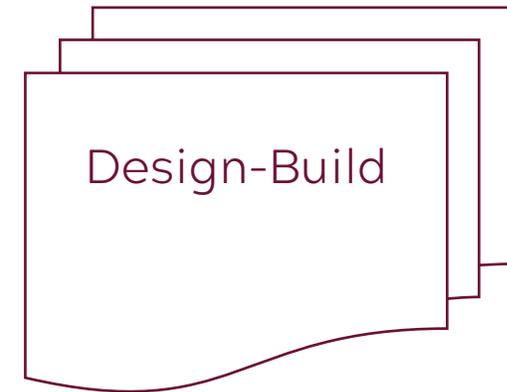


# Overall Capital Project Process



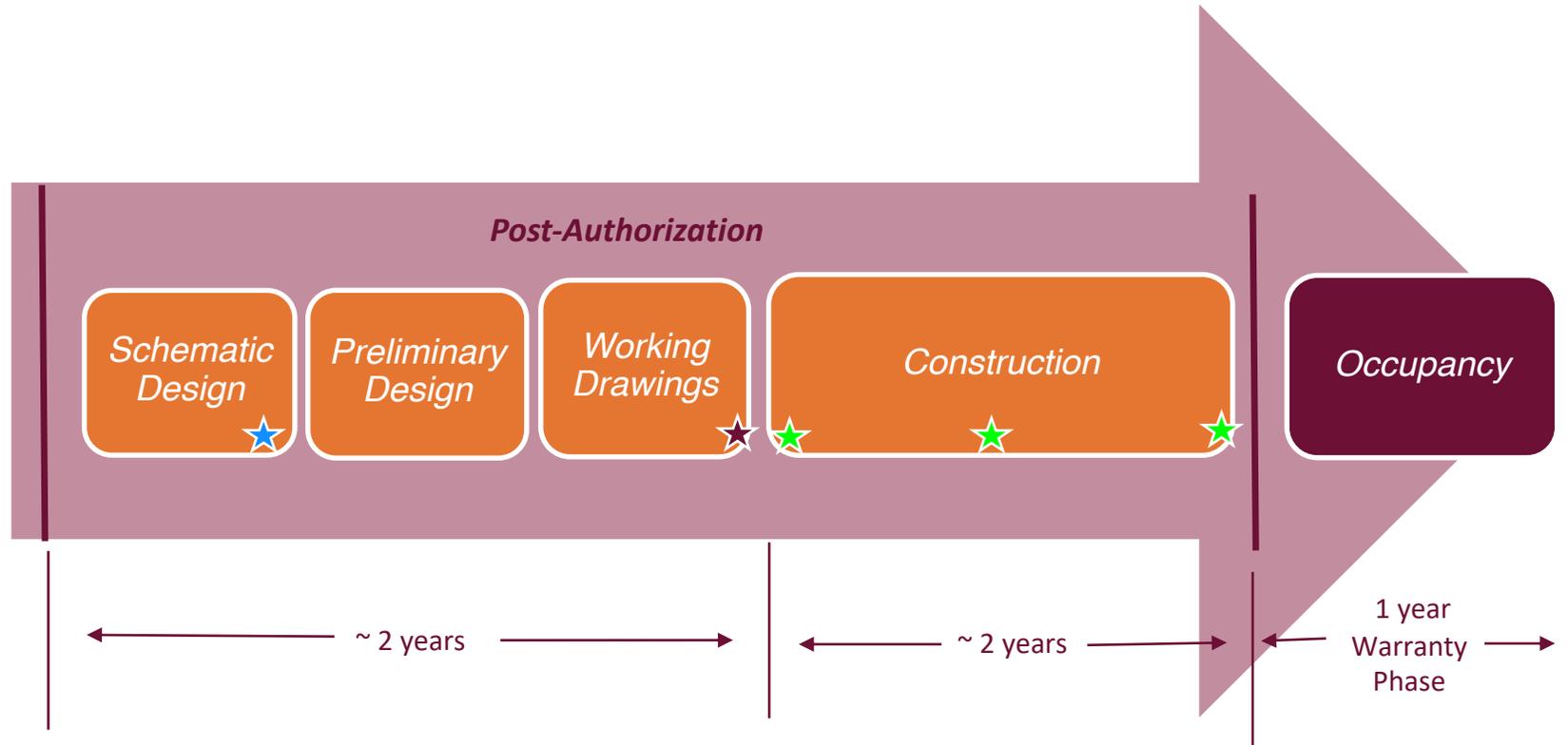
★ - Requires BOV review & approval

## Three methods for capital construction contracting:



- Construction audit program applies to CMaR delivery projects only
- Reason: construction pricing established through Guaranteed Maximum Price (GMP) contract
- Audits provide validation of contractor costs relative to GMP

# Construction Audits Process



★ - CMAA hired for Pre-Construction Services [pricing established for (1) general conditions, (2) taxes & insurance rate and (3) contractor fee]

★ - Guaranteed Maximum Price (GMP) Contract [pricing established for "cost of the work"]

★ - Construction Audits [pre-construction, midpoint of construction, and post-construction]

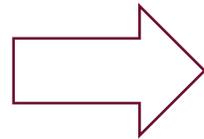
Recognizing the strategic importance and technical expertise required to effectively manage this projects, Internal Audit has procured the following firms to conduct these reviews:

- CBIZ Risk and Advisory Services
- Fort Hill Associates
- RTDQ

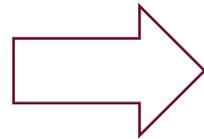
# Construction Audits Schedule

Project Title	CY 2021				CY 2022				CY 2023				CY 2024			
	JAN-MAR	APR-JUN	JUL-SEP	OCT-DEC												
	FY21		FY22				FY23			FY24				FY25		
	Q3	Q4	Q1	Q2												
Holden Hall Renovations																
Data & Decision Sciences Building (D&DS)	1															
Corps Leadership & Military Science Building		1														
New Upper Quad Residence Hall			1													
Innovation Campus - Academic Building				1		1										3
HITT Hall					1		1									3
Undergraduate Science Laboratory Building																3
Student Wellness Improvements																3
Mitchell Hall (Replace Randolph Hall)																1
Planning: New Business Building																

# Snapshot of Results



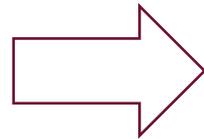
Recommended refinements to procurement/contract language



Unallowable contractor billing or over-billing to VT\*

2022: \$334,000

2023: \$2,880,000



Under-billing by contractor\*

2022: \$61,000

2023: \$18,000

\* "Over/under-billing" doesn't mean "over/under-payment"

Over the last 5 years, VT has conducted ~20 audits resulting in avoided costs exceeding \$3M

*Questions...?*

# *Additional Information*

# Construction Methods

## Design-Bid-Build (DBB):

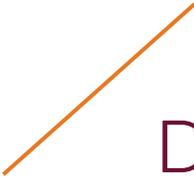
- A/E completes full design
- Invitation For Bid (IFB) issued...contract awarded to lowest bidder

## Construction Manager at Risk (CMaR): Subject to Audit

- A/E completes full design
- Prospective CMaR's compete for project during early stage of design
- CMaR selected based upon "best value" during Schematic Design phase
- When final designs are complete, CMaR develops Guaranteed Maximum Price (GMP)

## Design-Build (D/B):

- A/E completes partial design ("criteria docs")
- D/B teams (builder + A/E) compete for project and propose full price for project delivery
- Selection based upon "best value"
- D/B team completes design and executes construction

A thin orange diagonal line starting from the top left and extending towards the right.

# Definitions

- **State Authorized:** Authorized and funded (whole or in part) by the Virginia General Assembly
- **BOV Authorized:** Authorized and funded by the Virginia Tech Board of Visitors
- **Schematic Design Phase** = 0% to approx 20% design complete
- **Preliminary Design Phase** = Approx 20% to approx 50% design complete
- **Working Drawing Phase** = Approx 50% to 100% design complete
- **GMP** = Guaranteed Maximum Price