

## **BOARD OF VISITORS INFORMATION SESSION MINUTES**

An information session (open session) for the Board of Visitors was held on Monday, June 6, 2022, at 1:30 p.m. in the New Classroom Building, Room 260, in Blacksburg, Virginia. There was no public comment period.

### **Present**

Edward H. Baine (Vice Rector)  
Shelley Butler Barlow  
Carrie H. Chenery  
C. T. Hill  
Anna L. James  
Letitia A. Long (Rector)  
Sharon Brickhouse Martin  
Melissa Byrne Nelson  
L. Chris Petersen  
Mehul Sanghani  
Horacio A. Valeiras  
Jeff Veatch  
Preston M. White

### **Absent**

Greta J. Harris

### **Constituent Representatives:**

Holli Drewry, Administrative and Professional Faculty Representative  
Paolo Fermin, Undergraduate Student Representative  
Phil Miskovic, Graduate/Professional Student Representative  
Robert Weiss, Faculty Representative  
Serena Young, Staff Representative

Also present at the meeting were: President Timothy Sands, Kim O'Rourke (Secretary to the Board), Beth Armstrong, Janice Austin, Callan Bartel, Danette Beane, Lynsay Belshe, Eric Brooks, Bob Broyden, Anna Buhle, Allen Campbell, Cyril Clarke, Lance Collins, Al Cooper, David Crotts, Gannon Davis, Corey Earles, Jeff Earley, Alisha Ebert, Kari Evans, Ron Fricker, Deborah Fulton, Rachel Gabriele, Bryan Garey, Debbie Greer, Rebekah Gunn, Tony Haga, Wendy Halsey, Ryan Hamilton, Trish Hammer, Kay Heidbreder, Mary Helmick, Trish Hillman, Tim Hodge, Rachel Holloway, Elizabeth Hooper, Byron Hughes, Travis Jessee, Robin Jones, Frances Keene, Chris Kiwus, Sharon Kurek, Rob Mann, Meghan Marsh, Elizabeth McClanahan, Ken McCrery, Nancy Meacham, Ross Mecham, Bernadette Mondy, Liza Morris, Heidi Myers, Julian Nunez Nova, Scott Midkiff, Ken Miller, April Myers, Justin Noble, Kelly Oaks, Mark Owczarski, James Perkins, Charlie Phlegar, Catherine Piche, Ellen Plummer, Robin Queen, Jamal Ross, Julia Ross, Lexi Simmers, Frank Shushok, Adam Smith, Ken Smith, Aimee Surprenant, Dwyn Taylor, Jon Clark Teglas, Rob Viers, Tracy Vosburgh, Lisa Wilkes, and Chris Wise.

\*\*\*\*\*

Rector Long convened the meeting and welcomed everyone to the Information Session. The agenda included:

- **Tuition and Fees Presentation:** Ken Miller, Vice President for Finance, presented the proposed tuition and fee rates for 2022-23. The 2004 General Assembly authorized “The Board of Visitors . . . of institutions of higher education may set tuition and fee charges at levels they deem to be appropriate for all resident student groups based on, but not limited to, competitive market rates...” The Board received an overview of the unavoidable cost drivers of tuition and fee rates, including faculty and staff compensation and student financial aid support. For 2022-23, the university proposes a 3.0 percent increase in tuition.

Consistent with this, the package proposes an increase of \$358 to a total tuition and mandatory E&G fee rate of \$12,289 for in-state undergraduate students and an increase of \$930 to a total tuition and mandatory E&G fee rate of \$32,543 for out-of-state undergraduate students.

For on-campus graduate students, this package proposes to increase tuition and mandatory E&G fees by \$428 to a total rate of \$14,706 for in-state students, and by \$857 to a total rate of \$30,056 for out-of-state students.

For Virginia Tech Carilion School of Medicine Students, the university proposes an increase of \$1,645 to a total tuition and mandatory E&G fee rate of \$56,478.

Additionally, this package proposes to increase the tuition and mandatory E&G fees for Virginia/Maryland Veterinary Medicine students by \$679. For out-of-state, non-Maryland students, the package proposes to increase the tuition and mandatory E&G fees by \$1,549.

The university recommends an increase of \$133 or 5.9 percent to total comprehensive fees for a total of \$2,377 for in-state and out-of-state undergraduate and graduate students. An average 4.9 percent increase in room and board on the Blacksburg campus is recommended.

Upon approval of the state budget, the Executive Committee of the Board of Visitors will vote for approval of the 2022-23 tuition and fee rates at the June 14, 2022 meeting.

- **FY2022-23 Operating and Capital Budgets:** Tim Hodge, Associate Vice President for Budget and Financial Planning, and Bob Broyden, Associate Vice President for Campus Planning and Capital Financing Operating Budget presented the Operating and Capital Budgets. For 2022-23, the recommended internal budget for all operations is \$1.9 billion. This is an increase of \$68.3 million, approximately 3.7 percent, over the adjusted 2021-22 budget. For 2022-23, the university’s total General Fund allocation is estimated to be approximately \$374.9 million, an increase of \$37.7 million from the 2021-22 adjusted budget. The overall change in the budget includes an increase of \$59.2 million attributable to the Educational and General programs and \$38.1 million of projected growth in Auxiliary Enterprises.

The Auxiliary Enterprise budget includes the four Auxiliary System budgets (Dormitory and Dining Hall System, Electric Service Utility System, University Services System, and Athletic Facilities System) in accordance with the resolutions authorizing and securing revenue bonds. General Fund revenues will provide \$344.6 million in support for the instructional, research, and extension programs, \$27.0 million for student financial assistance, and \$3.3 million for the Unique Military Activities program. The

university's Educational and General budget will be \$1.0 billion in 2022-23. The total 2022-23 Auxiliary Enterprise revenue budget is \$403.6 million. The projected annual budget for Financial Assistance for Educational and General Programs (primary sponsored projects which are expected to increase 10%) is \$389.1 million, a decrease of \$2.0 million or 0.5 percent lower than the adjusted 2021-22 budget due to removal of one-time pandemic support.

Capital Budget: The capital outlay program for 2022-23 is comprised of a total of 22 projects. The total multi-year capital program includes approximately \$1.321 billion of authorizations with an annual expenditure budget of approximately \$275 million for 2022-23.

Upon approval of the state budget, the Executive Committee of the Board of Visitors will vote for approval of the 2022-23 operating and capital budgets at the June 14, 2022 meeting.

- Update on the Innovation Campus – Lance Collins, Vice President and Executive Director of the Innovation Campus, briefed the Board on recent activities. He introduced the first faculty cohort joining the Innovation Campus from the departments of computer science and computer engineering, who will retain tenured positions in the College of Engineering. The goal is to reach 50 faculty by 2029. Dr. Collins spoke about Innovation Campus research areas that build upon existing strengths of the university and research interests of partners and the continued transition to project-based learning. The Academic Building One Project is on schedule for 2024 opening.
- IT Transformation Update: Chris Kiwus, Interim Senior Vice President and Chief Business Officer; Scott Midkiff, Vice President for Information Technology & Chief Information Officer; Bryan Garey, Vice President for Human Resources; and David Crotts, Interim Director, IT Transformation Program Office, gave an update on the IT Transformation timeline. They also reviewed the six IT Transformation focus areas (IT Governance, IT Finance, IT Talent, Technology Capabilities, Service Management, and Cybersecurity) and relevant projects under way in each area.
- Discussion of Construction Costs: Bob Broyden, Associate Vice President for Campus Planning and Capital Financing, presented a comparison of Campus and Foundation project costs with “institutional” versus “commercial” grade construction information.
- Enterprise Risk Management Update: Sharon Kurek, Executive Director of Audit, Risk, and Compliance, explained that the ERM process is a key tool in setting strategic goals across the enterprise, and is designed to identify potential events that may affect the university, manage those risks within the university's risk tolerance, and support the achievement of Virginia Tech's mission and objectives. She identified the updated Enterprise Risk Landscape and the top ten risks as Access & Affordability, Global & National Economy, IT Security & Operations, Health Safety & Security, Research: Competitive Growth, Faculty & Staff Recruitment & Retention, Resource Management, Student Wellness & Experience, Enrollment Management, and Athletics.

\* \* \* \* \*

Following a motion by Rector Long, second by Mr. Baine, and unanimous approval, the

meeting was adjourned at 5:53 p.m.

*(Copies of the presentations and reports are filed with the permanent minutes and attached.)*



# **Virginia Tech Board of Visitors Meeting**

## **Information Session**

**Monday, June 6, 2022  
1:15 p.m.**

**New Classroom Building, Room 260  
Virginia Tech Campus**

### **◆ Tuition and Fees Presentation**

- Dr. Chris Kiwus, Interim Senior Vice President and Chief Business Officer
- Mr. Ken Miller, Vice President for Finance

### **◆ FY2022-23 Operating and Capital Budgets**

- Dr. Chris Kiwus, Interim Senior Vice President and Chief Business Officer
- Mr. Ken Miller, Vice President for Finance
- Mr. Bob Broyden, Associate Vice President for Campus Planning and Capital Financing
- Mr. Tim Hodge, Associate Vice President for Budget and Financial Planning

### **+ Innovation Campus Update**

- Dr. Lance Collins, Vice President and Executive Director for the Innovation Campus

### **+◆ IT Transformation Update**

- Dr. Chris Kiwus, Interim Senior Vice President and Chief Business Officer
- Dr. Scott Midkiff, Vice President for Information Technology & Chief Information Officer
- Mr. Bryan Garey, Vice President for Human Resources
- Mr. David Crotts, Interim Director, IT Transformation Program Office

### **◆ Discussion of Construction Costs**

- Mr. Bob Broyden, Associate Vice President for Campus Planning and Capital Financing

### **Enterprise Risk Management Update**

- Ms. Sharon Kurek, Executive Director of Audit, Risk, and Compliance

**◆ Discusses Enterprise Risk Management Topic**

**+ Discusses Strategic Investment Priorities Topic**

# Update on Tuition and Fee Development for 2022-23

KEN MILLER, VICE PRESIDENT FOR FINANCE

JUNE 6, 2022

# Current Environment

---

- The university develops tuition and fee rates informed by several factors:
  - Level of state support
  - Known costs
  - Strategic initiatives
  - Market competitiveness
- Virginia Tech strives to advance access and affordability while balancing the needs to address inflationary costs and enhancements to the quality of Virginia Tech education

# 2022 State Budget Update

	Executive Budget	Conference Budget
Affordable Access	\$9.8M per year	\$15.3M per year
Student Financial Aid	<u>Virginia Undergraduate</u> <ul style="list-style-type: none"> <li>\$1.0M in first year</li> <li>\$6.6M in second year</li> </ul> <u>Graduate</u> <ul style="list-style-type: none"> <li>\$1.0M in first year</li> <li>\$1.4M in second year</li> </ul>	<u>Virginia Undergraduate</u> <ul style="list-style-type: none"> <li>\$1.0M in first year</li> <li>\$6.6M in second year</li> </ul> <u>Graduate</u> <ul style="list-style-type: none"> <li>\$1.0M in first year</li> <li>\$1.4M in second year</li> </ul> <u>Undocumented Virginians</u> <ul style="list-style-type: none"> <li>\$560K in each year via SCHEV</li> </ul>
Unique Military Activities	<ul style="list-style-type: none"> <li>\$371K in first year</li> <li>\$742K in second year</li> </ul>	<ul style="list-style-type: none"> <li>\$371K in first year</li> <li>\$742K in second year</li> </ul>
Research	<ul style="list-style-type: none"> <li>Focused Ultrasound: \$2.0 million in each year</li> </ul>	<ul style="list-style-type: none"> <li>Focused Ultrasound: \$1.0M per year</li> <li>VTTI Autonomous Heavy Vehicles: \$2.5M per year</li> <li>Potomac Aquifer Monitoring Lab: \$0.5M per year</li> </ul>
Cooperative Extension	<ul style="list-style-type: none"> <li>\$653K in first year and \$1.3M in second year to increase number of extension specialists and make progress on salary competitiveness.</li> <li>\$1.3M in the first year to complete the research equipment portion of the initiative.</li> </ul>	<ul style="list-style-type: none"> <li>\$653K in first year and \$1.3M in second year to increase number of extension specialists and make progress on salary competitiveness.</li> <li>\$1.6M in the first year to complete the research equipment portion of the initiative.</li> </ul>

# 2022 State Budget Update - Compensation

	Executive Budget	Conference Budget
<b>Employee Raise</b>	Effective June 10, 2022 and June 10, 2023: <ul style="list-style-type: none"> <li>• 5% increase for all state employees</li> <li>• Includes adjunct faculty and graduate teaching assistants</li> <li>• Merit can be used for faculty and University Staff</li> </ul>	Effective July 10, 2022 and June 10, 2023 <ul style="list-style-type: none"> <li>• 5% increase for all state employees</li> <li>• Includes adjunct faculty and graduate teaching assistants</li> <li>• Merit can be used for faculty and University Staff as long as increases do not exceed five percent on average of faculty and university staff</li> </ul>
<b>Bonus</b>	N/A	<ul style="list-style-type: none"> <li>• <b>\$1,000 bonus</b> for all full-time state employees, effective December 1, 2022.</li> <li>• Must have been employed on August 10, 2022 and remain employed through November 10, 2022</li> </ul>
<b>Health Insurance</b>	<ul style="list-style-type: none"> <li>• 2.0 percent increase in first year</li> <li>• 2.5 percent in the second year</li> </ul>	<ul style="list-style-type: none"> <li>• No increase in first year</li> <li>• 2.5 percent increase in second year</li> </ul>

# 2022 Other Statewide Budget Updates

---

- Innovative Internship Fund and Program (VTOP)
  - \$3M the first year and \$10M the second year to expand internships programs in collaboration with Virginia employers
- Pell Grant Student Recruitment
  - \$25M pool in 2<sup>nd</sup> year for SCHEV to use to help institutions enhance efforts to recruit and retain students eligible for Pell grant assistance
- 4-H Support for Covid-19 Interruption
  - \$1.0M in first year via the Department of Agriculture & Consumer Services
- Roanoke Biotechnology Accelerator
  - \$15.7M in first year to renovate facility for advanced laboratory/business/accelerator space

# Fund Sources

---

## Inflation

- General Fund for state share of costs and reducing tuition
- Tuition Rate

## Initiatives (Strategic and Impact Needs)

- General Fund for initiatives
- Net from Enrollment Growth
- Other Self-Generated Resources
- Reallocations

# 2022-23 E&G Inflationary Cost Drivers

	<i>\$s in Millions</i>		
	GF	NGF	Total
<b><u>State Assigned Costs</u></b>			
5% State Faculty, Staff, and Graduate Assistant Compensation	\$(11.9)	\$(17.6)	\$(29.5)
Virginia Military Survivors and Dependents Tuition Waiver		(1.4)	(1.4)
Employee Fringe Benefits	(0.5)	(1.2)	(1.7)
<b><u>Other Inflationary Costs</u></b>			
Promotion and Tenure		(1.0)	(1.0)
Fixed Cost Increases: Electricity, Insurance, Leases, Fuels	(0.1)	(4.1)	(4.2)
Subscription Inflation: Library Journals/Collection, Software		(0.7)	(0.7)
Operations & Maintenance of New Facilities <sup>(1)</sup>	(0.8)	(0.7)	(1.5)
<b>Subtotal Inflationary Costs</b>	<b>\$(13.3)</b>	<b>\$(26.7)</b>	<b>\$(40.0)</b>

(1) O&M for Data and Decision Sciences, Corps Leadership and Military Sciences



# 2022-23 Resources to Support Inflation

	<i>\$s in Millions</i>		
	GF	NGF	Total
<u>Inflationary Costs</u> (from prior slide)	\$(13.3)	\$(26.9)	\$(40.0)
<u>Resources</u>			
General Fund Share of Compensation and Fringe Benefits	12.5		12.5
General Fund Support for Operations & Maintenance	0.8		0.8
General Fund Support for Access and Affordability	15.3		15.3
Tuition Rate Increase (3.0%)		16.3	16.3
(less) Financial Aid Maintenance (FFF, Mgt Agreement)		(2.1)	(2.1)
Subtotal Resources			\$ 42.8
Net Resources after Inflationary Costs			\$ 2.8

# 2022-23 Resources to Support Initiatives

	<i>\$s in Millions</i>
	<u>Total</u>
Undergraduate Enrollment Growth	\$ 16.7
Graduate Enrollment Growth	5.3
Special Session Enrollment Growth & Misc.	5.4
(less) Instructional Cost of Growth	(7.8)
(less) Gilbert St. Lease (space for growth)	(3.3)
(less) Student Access and Affordability (aid for growth)	(3.0)
General Fund Recognition for Tech Talent Undergraduate	1.0
Reallocations of Existing Resources	0.7
Auxiliary Enterprise Indirect Cost Recoveries Growth	1.2
Net from Prior Slide on Inflation	2.6
Range of Resources to Support Initiatives	<u>\$ 19.0</u>

# Multi-Year E&G Planning Requests (dollars in millions)

Attachment C

STRATEGIC VISION		FY23	FY24	FY25	FY26	FY27	TOTAL
Initiatives: Mission	Tech Talent Investment Program – Innovation Campus	\$0.0	\$3.5	\$13.6	\$7.6	\$4.3	\$29.0
	Health & Biomedical Sciences	6.1	4.9	4.8	2.6	2.1	20.5
	Integrated Security	1.0	0.7	0.4	0.4	0.4	2.9
Initiatives: Enabling Infrastructure & Capacity	IT Transformation	6.6	4.9	3.3	2.7	2.5	20.0
	Human Resources	0.6	0.3	0.3	0	0	1.2
Initiatives: Advancing Critical Programs	Athletics (supplant scholarship funding)	0.6	0.6	0.5	0.5	0.5	2.7
	Advancement *	0.5	0.5	0.5	0.5	0.5	2.5
	Access and Affordability	1.5	1.6	3.3	3.6	3.8	13.8
Impact Needs	University Wide - Climate Action Commitments	0.2	2.0	0	0	0	2.2
	University Wide - Campus Accessibility	1.0	1.0	1.0	1.0	1.0	5.0
	University Wide - Campus Culture & Climate	0.6	0.5	0.5	0.5	0.5	2.6
	University Wide - Facilities Renewal	1.8	1.8	1.8	1.8	1.8	9.0
	University Wide – Wage/Salary Increase to \$15/hour	2.1	0	0	0	0	2.1
	Support for Destination Area Initiative	0.2	0.6	0.9	0.9	1.0	3.6
	VT Carilion School of Medicine (VTCsOM)	0.5	0.4	0.3	0.3	0.3	1.8
	Incremental Support for Academic Maintenance (PIBB Colleges)	2.1	2.1	2.1	2.1	2.1	10.5
	Improving Academic Quality (PIBB Colleges)	3.3	3.3	3.3	3.3	3.3	16.5
	Critical Needs	6.2	6.2	6.2	6.2	6.2	31.0
Initiative & Impact Needs Total		\$34.9	\$34.9	\$42.8	\$34.0	\$30.3	\$176.9

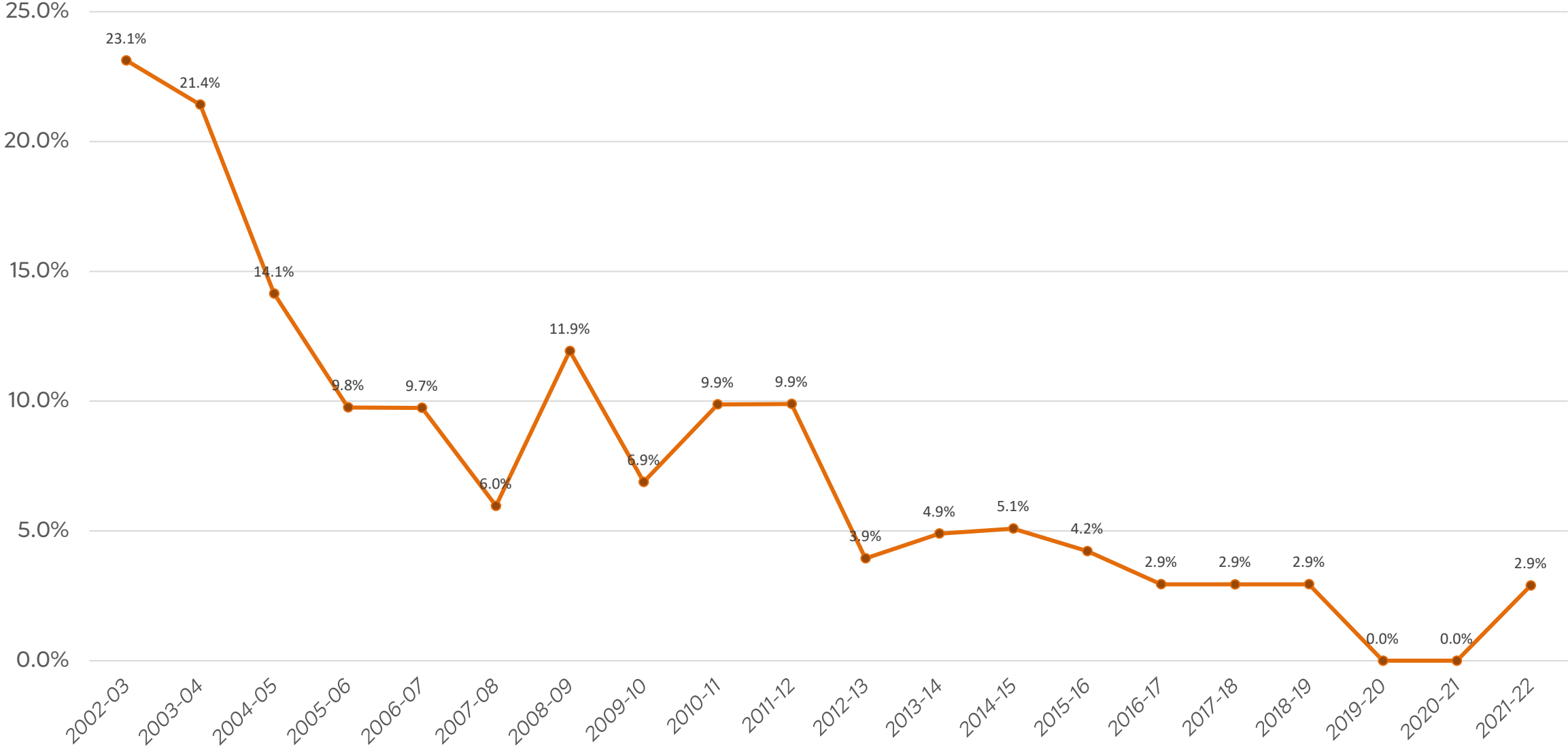
\* The Advancement budget has several components that are funded in part by the university and in part by the Virginia Tech Foundation. The above includes funding for only the core development/fundraising costs to be paid by the university.

# Advancing Affordability and Access

---

- At least \$5.1 million increase planned for 2022-23 in the baseline scenario (primarily for inflation & enrollment growth).
- Funds for the Future holds net tuition flat by offsetting tuition and fee increases for returning undergraduates with family income of up to \$100,000
- Financial aid model seeks to reduce unmet need of incoming students and provide multi-year awards
- Specific aid programs provide targeted support
  - Presidential Scholarship Initiative, Beyond Boundaries, Provost Excellence Scholarship

# Virginia Undergraduate Tuition & E&G Fee Increases



# Virginia Public Four-Year Institutions, 2021-22 Resident Undergraduate

	Tuition and E&G Fees		Mandatory Fees		Room & Board		Total Cost	
	\$	Rank	\$	Rank	\$	Rank	\$	Rank
<b><u>Institutions</u></b>								
William and Mary (Freshmen)	\$17,570	1	\$6,242	2	\$13,602	1	\$37,414	1
Virginia Military Institute	9,782	5	9,888	1	10,362	13	30,032	2
University of Virginia (First Year)	14,658	2	2,752	13	12,376	4	29,786	3
Christopher Newport University	9,100	7	5,824	4	11,760	5	26,684	4
Virginia Commonwealth University	12,459	3	2,569	14	11,615	6	26,643	5
Longwood University	8,180	9	5,910	3	12,394	3	26,484	6
George Mason University	9,510	6	3,609	10	12,630	2	25,749	7
University of Mary Washington	8,678	8	5,092	7	11,082	11	24,852	8
James Madison University	7,460	11	5,178	5	11,550	8	24,188	9
<b>Virginia Tech</b>	<b>11,931</b>	<b>4</b>	<b>2,244</b>	<b>15</b>	<b>9,876</b>	<b>15</b>	<b>24,051</b>	<b>10</b>
University of Virginia's College at Wise	6,042	13	5,119	6	11,593	7	22,754	11
Old Dominion University	7,047	12	4,113	8	11,523	10	22,683	12
Radford University	8,018	10	3,554	11	10,036	14	21,608	13
Virginia State University	5,769	14	3,385	12	11,544	9	20,698	14
Norfolk State University	5,752	15	3,870	9	10,844	12	20,466	15

# Market Considerations for Tuition and fees, 2021-22

	Average	VT Rank	
In-State Undergraduate			
Virginia Tech	\$14,175		
Public SCHEV Peers	\$12,910	10 out of 24	
Virginia Institutions	\$14,081	6 out of 15	(b)
UVA	\$17,410		
CWM	\$23,812		
Out-of-State Undergraduate			
Virginia Tech	\$33,857		
Public SCHEV Peers	\$35,957	15 out of 24	
Virginia Institutions	\$33,003	6 out of 15	
Regional Competitive Peers (a)	\$34,741	5 out of 7	

(a) Regional competitive peers: Penn State, Rutgers, University of Maryland, Ohio State, University of Pittsburgh, and North Carolina State

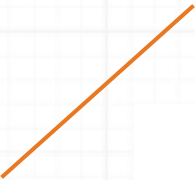
(b) Behind W&M, VMI, UVA, CNU, and VCU

# Virginia Public Four-Year Institutions, 2022-23 Resident Undergraduate


Several Virginia public institutions have already approved tuition increases for 2022-23:

	Virginia Undergraduate	Nonresident Undergraduate
University of Virginia	4.7%	4.7%
James Madison University	3.9%	1.5%
University of Mary Washington	3.5%	3.5%
Old Dominion University	3.0%	0.0%
UVA-Wise	3.0%	2.9%
George Mason University	3.0%	3.0%
Virginia Military Institute	3.0%	3.0%
Virginia Commonwealth University	3.0%	3.0%
William & Mary	0.0%	0.0%
Norfolk State University	0.0%	0.0%
Virginia State University	0.0%	0.0%





# Tuition & Fee Rate Recommendations



# Resident Undergraduate

	2021-22	Proposed	Increase	
	Charge	2022-23	\$	%
Tuition	\$11,751	\$12,104	\$353	3.0%
E&G Fees	180	185	5	2.8%
<i>Tuition &amp; E&amp;G Fees</i>	11,931	12,289	358	3.0%
Comprehensive Fee	2,244	2,377	133	5.9%
<i>Tuition &amp; Mandatory Fees</i>	14,175	14,666	491	3.5%
<i>Room and Board <sup>(a)</sup></i>	10,250	10,756	506	4.9%
<i>Total Cost</i>	\$24,425	\$25,422	\$997	4.1%

<sup>(a)</sup> Board fee for 2021-22 includes mid-year approved increase.

# Nonresident Undergraduate

	2021-22	Proposed	Increase	
	Charge	2022-23	\$	%
Tuition	\$30,829	\$31,754	\$925	3.0%
E&G Fees	784	789	5	0.6%
<i>Tuition &amp; E&amp;G Fees</i>	31,613	32,543	930	2.9%
Comprehensive Fee	2,244	2,377	133	5.9%
<i>Tuition &amp; Mandatory Fees</i>	33,857	34,920	1,063	3.1%
<i>Room and Board</i> <sup>(a)</sup>	10,250	10,756	506	4.9%
<i>Total Cost</i>	\$44,107	\$45,676	\$1,569	3.6%

<sup>(a)</sup> Board fee for 2021-22 includes mid-year approved increase.

# Graduate

	2021-22 Charge	Proposed 2022-23	Increase	
			\$	%
<u>Resident Tuition</u>	\$14,098	\$14,521	\$423	3.0%
E&G Fees	180	185	5	2.8%
<i>Tuition &amp; E&amp;G Fees</i>	<b>14,278</b>	<b>14,706</b>	<b>428</b>	<b>3.0%</b>
Comprehensive Fee	2,244	2,377	133	5.9%
<i>Total Resident Graduate</i>	\$16,522	\$17,083	\$561	3.4%
<u>Nonresident Tuition</u>	\$28,415	\$29,267	\$852	3.0%
E&G Fees	784	789	5	0.6%
<i>Tuition &amp; E&amp;G Fees</i>	<b>29,199</b>	<b>30,056</b>	<b>857</b>	<b>2.9%</b>
Comprehensive Fee	2,244	2,377	133	5.9%
<i>Total Nonresident Graduate</i>	\$31,443	\$32,433	\$990	3.1%

# Veterinary Medicine

	2021-22 Charge	Proposed 2022-23	Increase	
			\$	%
<b>Virginia/Maryland Students</b>				
Tuition	\$22,462	\$23,136	\$674	3.0%
Educational and General Fee	180	185	5	2.8%
Comprehensive Fee	2,244	2,377	133	5.9%
Vet Med Facility Fee	1,200	1,200	0	0.0%
<b>Total Cost for Virginia/Maryland Students</b>	<b>\$ 26,086</b>	<b>\$26,898</b>	<b>\$812</b>	<b>3.1%</b>
<b>Out-of-State Students</b>				
Tuition	\$51,459	\$53,003	\$1,544	3.0%
Educational and General Fee	784	789	5	0.6%
Comprehensive Fee	2,244	2,377	133	5.9%
Vet Med Facility Fee	1,200	1,200	0	0.0%
<b>Total Cost for Out-of-State Students</b>	<b>\$55,687</b>	<b>\$57,369</b>	<b>\$1,682</b>	<b>3.0%</b>

# Virginia Tech Carilion School of Medicine

	2021-22 Charge	Proposed 2022-23	Increase	
			\$	%
Tuition	\$54,653	\$56,293	\$1,640	3.0%
Educational and General Fee	180	185	5	2.8%
VTCSOM Student Services Fees (a)	1,192	1,243	51	4.3%
Total Cost	<u>\$56,025</u>	<u>\$57,721</u>	<u>\$1,696</u>	<u>3.0%</u>

(a) Includes VTCSOM Student Services, Health Services, Student Government/Activities, and Recreational Sports (M1, M2, M3, M4) fees.

# Comprehensive Fee Components for 2022-23

	2021-22 Charge	Proposed 2022-23	Increase	
			\$	%
<b><u>Comprehensive Fee</u></b>				
Student Activity Fee <sup>(a)</sup>	\$494	\$511	\$17	3.4%
Health Service Fee	557	585	28	5.0%
Athletic Fee	362	384	22	6.1%
Transportation Services Fee	194	236	42	21.6%
Recreational Sports Fee	335	351	16	4.8%
Student Services Fee	302	310	8	2.6%
<b>Total Comprehensive Fee</b>	<b>\$2,244</b>	<b>\$2,377</b>	<b>\$133</b>	<b>5.9%</b>

- Comprehensive fees at the other Virginia doctoral institutions range from \$2,569 to \$6,242.
- Athletic fees at other Virginia institutions range from \$644 to \$3,740.

<sup>(a)</sup> Beginning with 2022-23, the Student Cultural Activities Fee will be consolidated with the Student Activity Fee due to overlapping student programming. The 2021-22 fee and proposed 2022-23 fee reflect this consolidation.

# *Student Service Enhancements*

- **Health Services:** Student well being & inclusion embedded counselors, intervention & recovery; sexual violence prevention staff & operational support; mental health operational & programming support; health center testing & electronic records system
- **Student Engagement & Campus Life:** Student well-being event programming, event production support staffing
- **Cultural & Community Centers:** Assistant directors and programming support
- **Dining Services:** Food cost inflation, Perry Place staffing, capital project planning
- **Residence Halls:** well-being & inclusion staffing, residence hall furniture replacement, microwave-refrigerators, living learning community program growth, AED purchase and installation, capital project planning



# Average Cost of Education

	2021-22		Estimated 2022-23	
	Amount	% of Average	Amount	% of Average
Average Cost of Education	\$20,404		\$21,414	
<u>Undergraduates</u>				
Residents	11,931	58%	12,289	57%
Nonresidents	31,009	152%	31,939	149%
<u>Graduates</u>				
Residents	14,278	70%	14,706	69%
Nonresidents	28,595	140%	29,452	138%
<u>Residency</u>				
Residents		59%		58%
Nonresidents		149%		146%

## Other Rates and Changes for 2022-23

---

- Pamplin College of Business Undergraduate Supplemental Fee
  - In support of college strategic initiatives, a \$30 per credit increase will be implemented over 4 years starting with 1000 level courses
  
- Online Programs and Pricing
  - New Graduate Certificate in Construction Engineering for Infrastructure Projects has been approved.
    - This program will be incorporated into the online graduate program rate structure at \$950 per credit.



# University Budget Process

---

- University budget process is still underway
- Final decisions have not been made yet
- Vision currently exceeds resource capacity, and will need to be refined

# Next Steps

Tomorrow the Board will receive a resolution for approval which delegates the authority to approve both the 2022-23 tuition and fee rates and the 2022-23 Operating and Capital budgets to the Executive Committee of the Board of Visitors without the need for subsequent ratification by the full Board of Visitors.



# DISCUSSION



# 2022-23 OPERATING AND CAPITAL BUDGETS

KEN MILLER, VICE PRESIDENT FOR FINANCE

TIM HODGE, ASSOCIATE VICE PRESIDENT FOR BUDGET AND  
FINANCIAL PLANNING

BOB BROYDEN, ASSOCIATE VICE PRESIDENT FOR CAMPUS  
PLANNING AND CAPITAL FINANCING

JUNE 6, 2022



# OPERATING BUDGET

# 2022-23 Operating Budget

(Dollars in Millions)

		2021-22 Adjusted Budget	2022-23 Proposed Budget	Change	
				\$	%
<b><u>Educational and General</u></b>					
University Division		\$891.0	\$944.5	\$53.5	6.0%
CE/AES Division		97.2	102.9	5.7	5.8%
<b>Subtotal</b>		<b>\$988.2</b>	<b>\$1,047.4</b>	<b>\$59.2</b>	<b>6.0%</b>
Auxiliary Enterprises		\$365.5	\$403.6	\$38.1	10.4%
Financial Assistance for E&G Programs (Sponsored Programs)		391.1 (a)	389.1	(2.0) (b)	(0.5%)
Student Financial Assistance		38.1	41.4	3.3	8.7%
All Other Programs (including UMA)		46.5	16.1	(30.3) (b)	(65.3%)
<b>Total</b>		<b>\$1,829.3</b>	<b>\$1,897.6</b>	<b>\$68.3</b>	<b>3.7%</b>

(a) FY22 Financial Assistance for E&G programs budget includes Federal COVID support which is removed for FY23.

(b) Decreased due to one-time funds received in FY22.

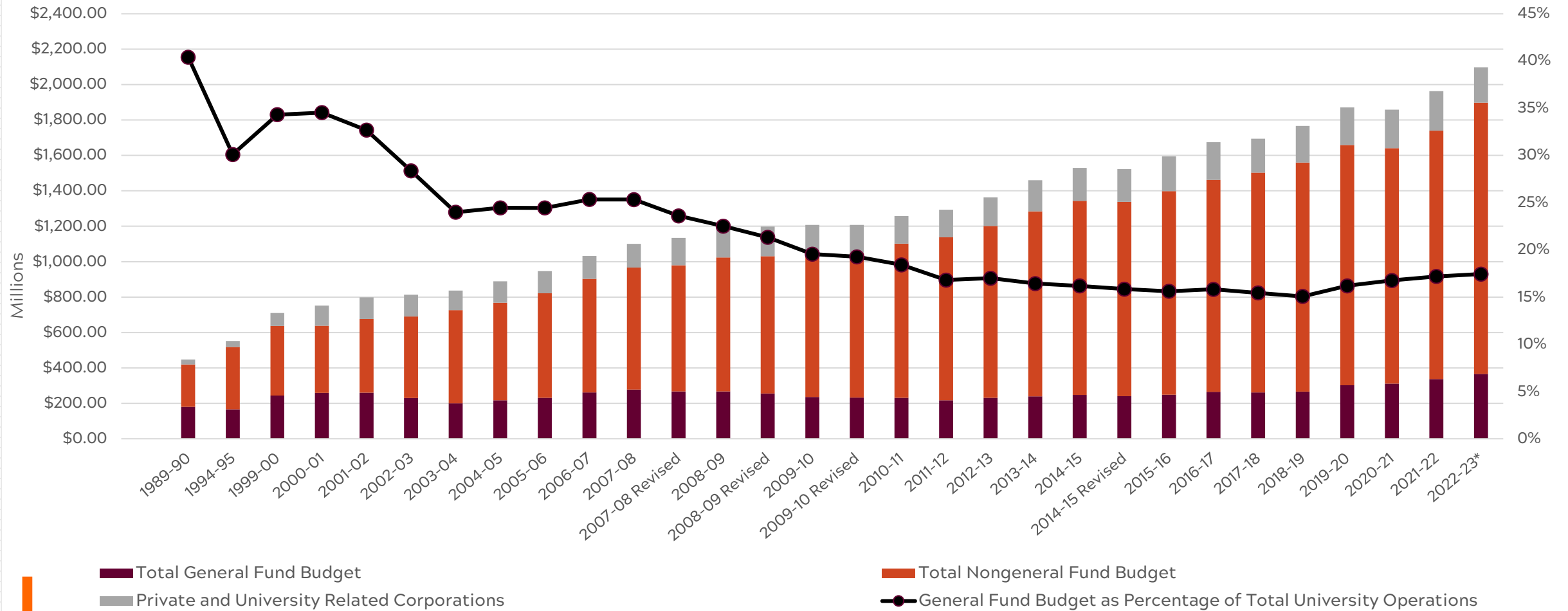


# 2022-23 Annual Change in University Division Educational and General Budget

(Dollars in Millions)

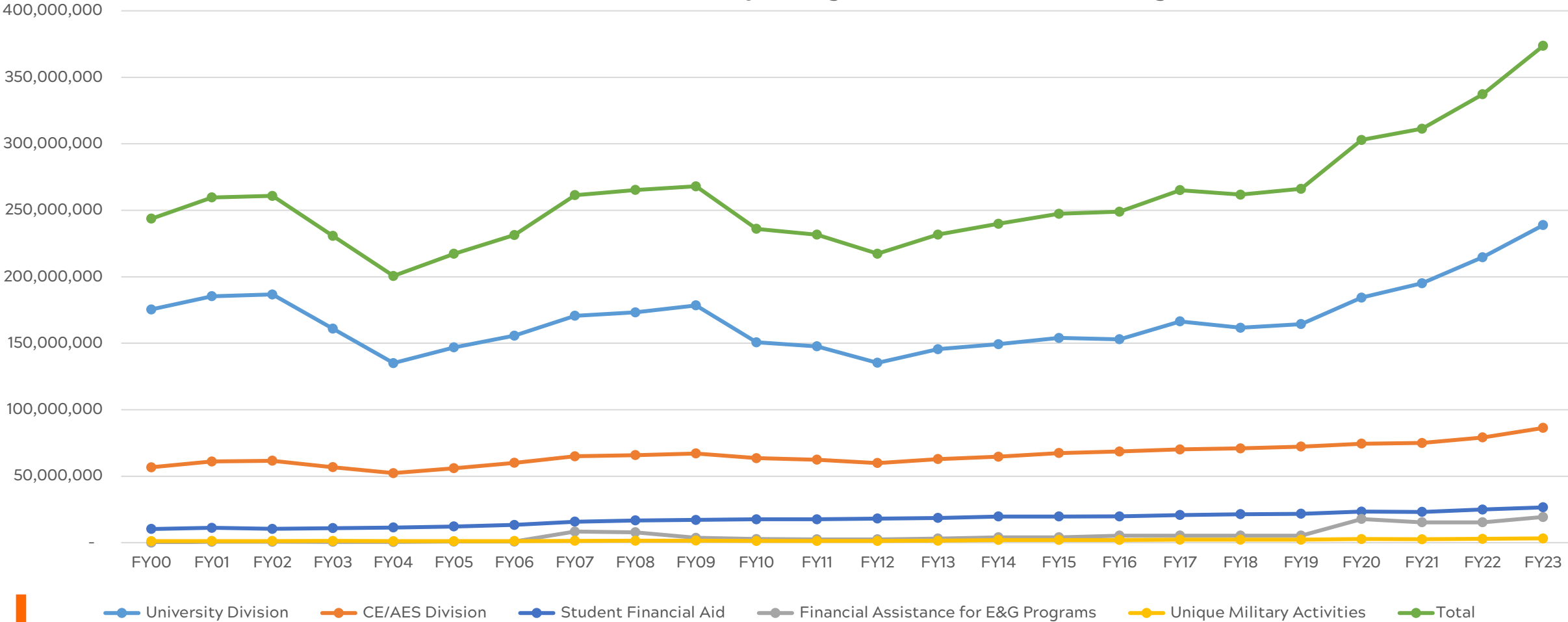
	2021-22 Adjusted Budget	2022-23 Proposed Budget	Change	
			\$	%
<b><u>University Division (E&amp;G)</u></b>				
General Fund	\$214.3	\$238.8	\$24.5	11.4%
Tuition and Fees	631.7	660.2	28.5	4.5%
All Other Income	45.0	45.5	0.5	1.1%
<b>Subtotal</b>	<b>\$891.0</b>	<b>\$944.5</b>	<b>\$53.5</b>	<b>6.0%</b>

# Historical General Fund Support Percentages



# General Fund Support by Program

Trend of General Fund by Major Program from FY2009-10 through FY2022-23



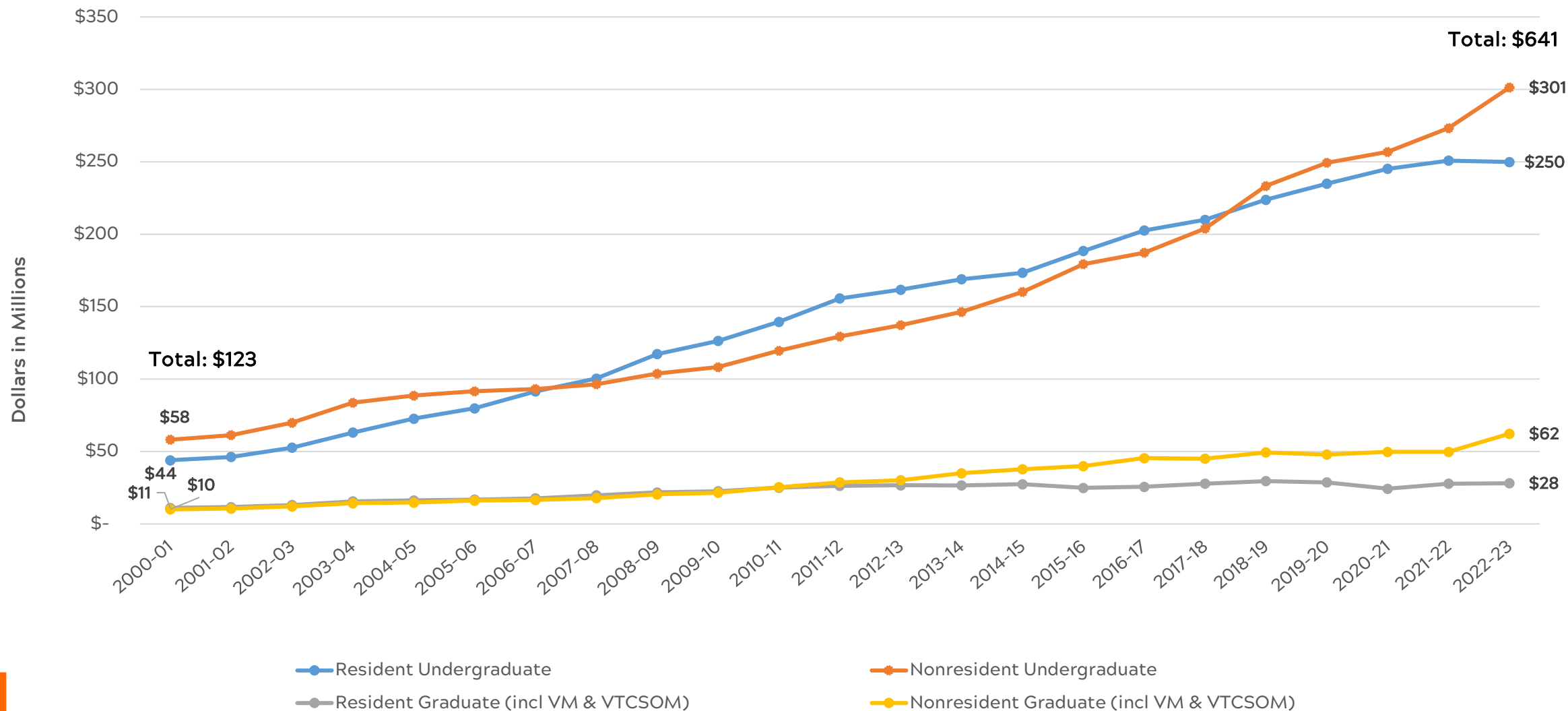
\*Projected

# 2022-23 Educational and General Fund Splits

(Dollars in Millions)

	University Division	CE/AES Division	Total
<b>Educational and General Budget</b>			
General Fund	\$238.8	\$86.3	\$325.1
Tuition and Fees	660.2	-	660.2
Federal Funds	-	15.6	15.6
Other	45.5	0.9	46.4
<b>Total Educational and General</b>	<b>\$944.5</b>	<b>\$102.8</b>	<b>\$1,047.3</b>
<b>Percent of Total</b>			
General Fund	25.3%	84.0%	31.0%
Tuition and Fees	69.9%	0.0%	63.1%
Federal Funds	0.0%	15.1%	1.5%
Other	4.8%	0.9%	4.4%
<b>Total Percentage</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

# Net Tuition and E&G Fee Revenue Trend by Student Group



# 2022-23 Components of Financial Assistance for E&G Programs

(Dollars in Millions)

	2021-22 Adjusted Budget	2022-23 Proposed Budget	Change	
			\$	%
General Fund	\$5.4	\$9.4	4.00	74.2%
Commonwealth Cyber Initiative	10.0	10.0	-	0.0%
Nongeneral Fund				
Sponsored Grants and Contracts	254.1	280.3	26.2	10.3%
Other*	86.2	89.4	3.2	3.7%
Pandemic Relief	35.4		(35.4)	-100.0%
Subtotal	\$391.1	\$389.1	(\$2.0)	-0.5%

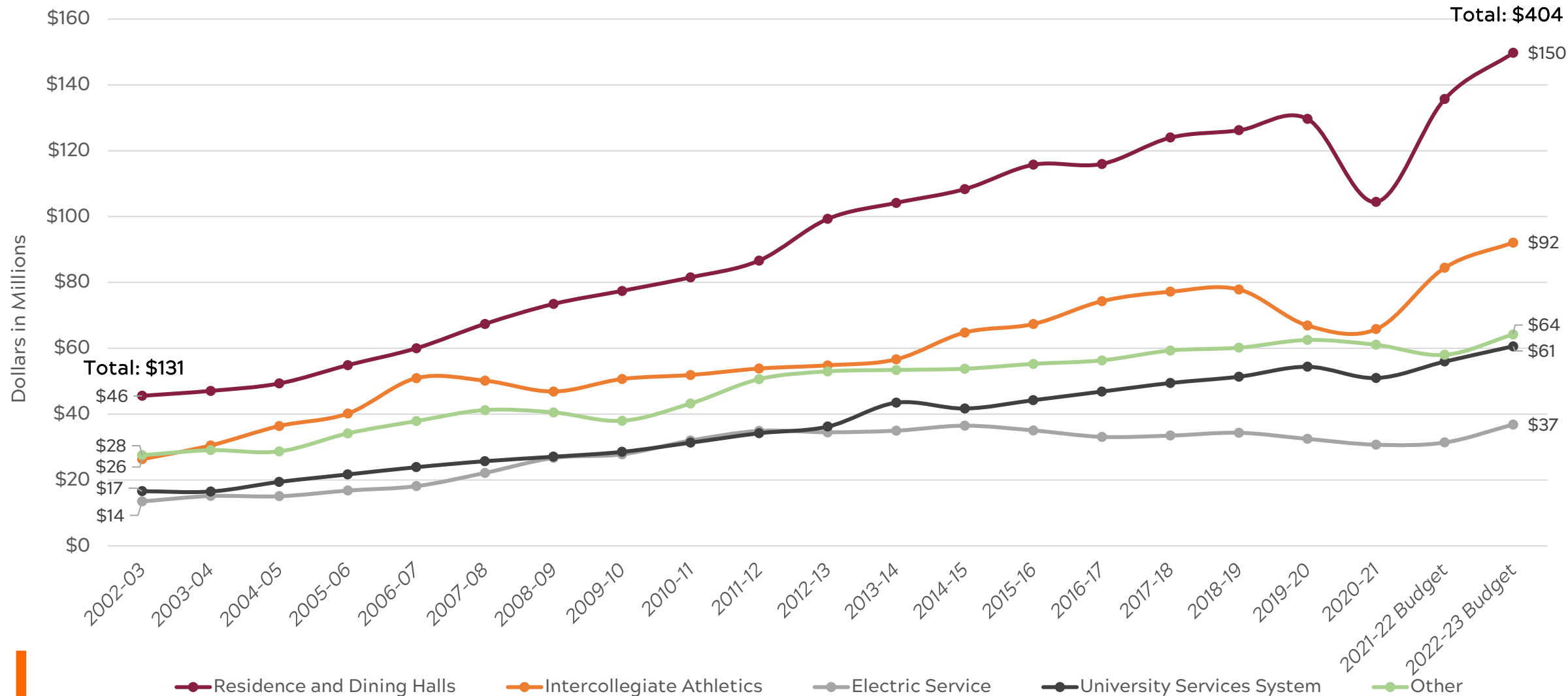
\*Comprised primarily of Overhead, Eminent Scholars, and Enterprise Fund for distance learning

# Undergraduate Student Financial Aid

State and Institutional Undergraduate Scholarship Support



# Auxiliary Enterprise Revenue Trend by Unit



Other includes: Hotel & Conference Center, Software Sales, Parking, Photocopy, Printing, Tailor Shop, Licensing, Pouring Rights, Telecommunications, New Student Programs, Hokie Passport Office, Fleet Services.



# 2022-23 Key Auxiliary Enterprise Revenue Budget Changes

(Dollars in Millions)

	2021-22 Original Budget	2021-22 Adjusted Budget	2022-23 Proposed Budget	Change (Adjusted to Proposed)	
				\$	%
Residence and Dining Hall System	\$132.4	\$135.7	\$149.7	\$14.0	10.3%
Intercollegiate Athletics	78.3	84.4	92.1	7.7	9.1%
<b>Subtotal</b>	<b>\$210.7</b>	<b>\$220.1</b>	<b>\$241.8</b>	<b>\$21.7</b>	<b>9.9%</b>

# Compensation Plan

- The university is planning the following compensation programs to be effective on July 10, 2022 based on the anticipated state compensation plan:
  - 5.0% merit and distinction program for T&R and A/P Faculty
  - 5.0% University Staff program (3.0% base and 2.0% merit pool)
  - 5.0% Classified Staff program (across-the-board in anticipation of state-mandated compensation program).
  - 5.0% Stipend increase for graduate students (effective August 10, 2022)
  - Promotion and Tenure
- \$1,000 bonus, effective December 1, 2022, for all full-time employees.

# CAPITAL BUDGET

# FISCAL YEAR 2023 CAPITAL PROJECTS

Attachment C

End FY22	27
Projects closed June 30 <sup>th</sup>	- 6
New projects effective July 1 <sup>st</sup>	1
Start FY23	<hr/> 22

- 5 in design
- 10 in construction
- 4 in close-out
- 3 in equipment support

# MAJOR BUDGET ADJUSTMENTS FISCAL YEAR 2023

Attachment C

## Increases for FY23

Mitchell Hall (Randolph Hall Replacement)	\$ 248,000
Maintenance Reserve, E&G	17,462
Life, Health, Safety, Accessibility, & Code Compliance Supplement	7,300
Planning to replace Hampton Roads AREC	500
Total Increases for FY23	<u>\$ 273,262</u>

## Deletions for Close of FY22

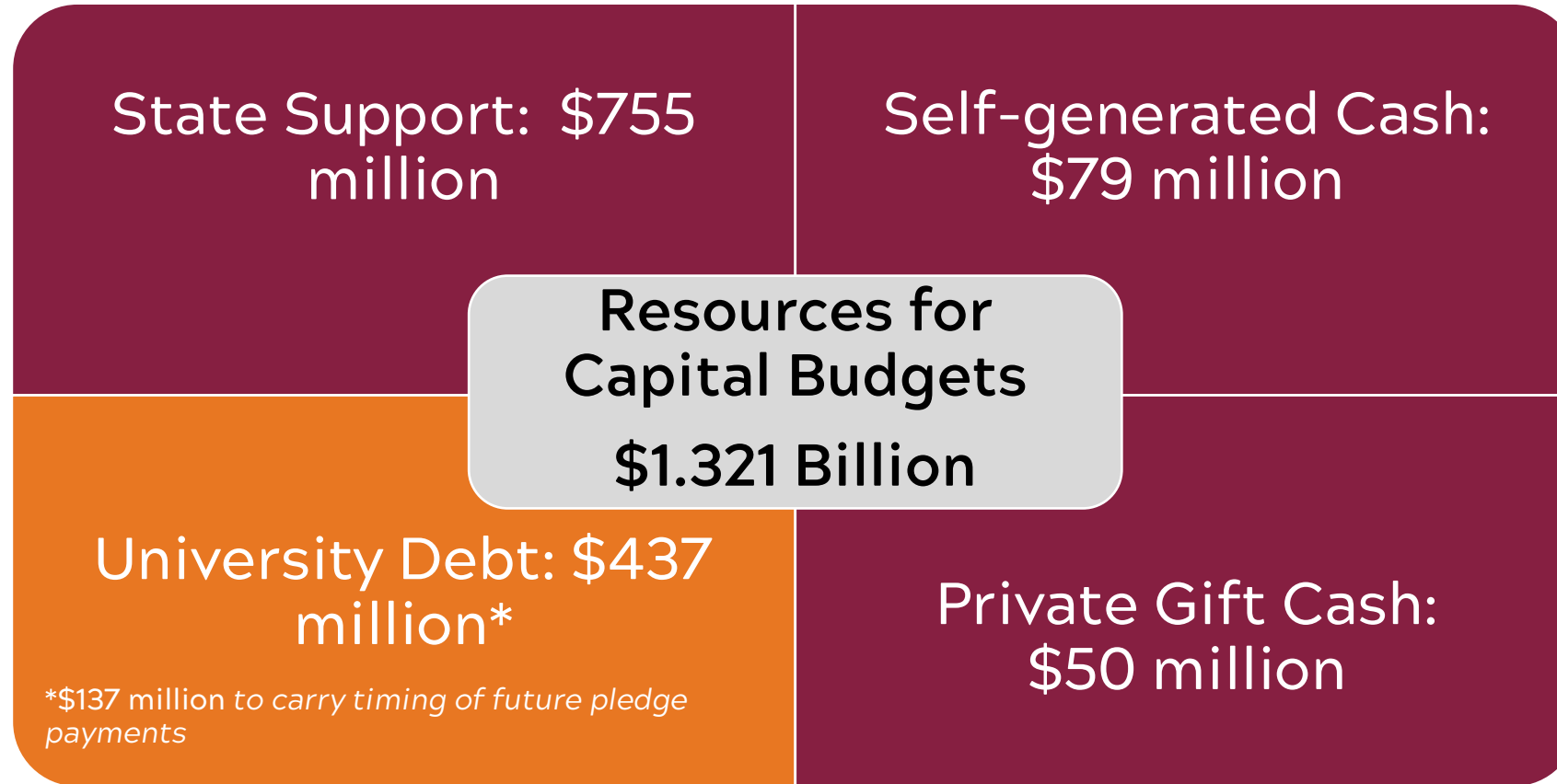
Global Business and Analytics Complex Residence Halls	\$ 84,000
Student Athlete Performance Center	20,417
Gas Fired Boiler	8,200
Falls Church Property Acquisition	2,850
Virginia Seafood AREC	2,500
Tennis Center Planning	809
Total Deletions for Close of FY22	<u>\$ 118,776</u>

## Net Change

\$ 154,486

# CAPITAL AUTHORIZATION FUND SOURCES

Attachment C



# ESTIMATING CAPITAL PROJECT SPEND RATE

Attachment C



Most sensitive to construction start dates

# FISCAL YEAR 2023 CAPITAL BUDGET Attachment C

(Dollars in thousands)

FY23 starting total capital budget	\$1,321,000
Less project to-date expenditures as of June 30th	<u>-435,000</u>
Budget available for FY23	\$886,000
 Estimated capital expenditures for FY23	 <u>\$275,000</u>



# Next Steps

- Tomorrow the Board will receive a resolution for approval which delegates the authority to approve both the university's 2022-23 tuition and fee rates and the 2022-23 Operating and Capital budgets to the Executive Committee of the Board of Visitors without the need for subsequent ratification by the full Board of Visitors.

# DISCUSSION

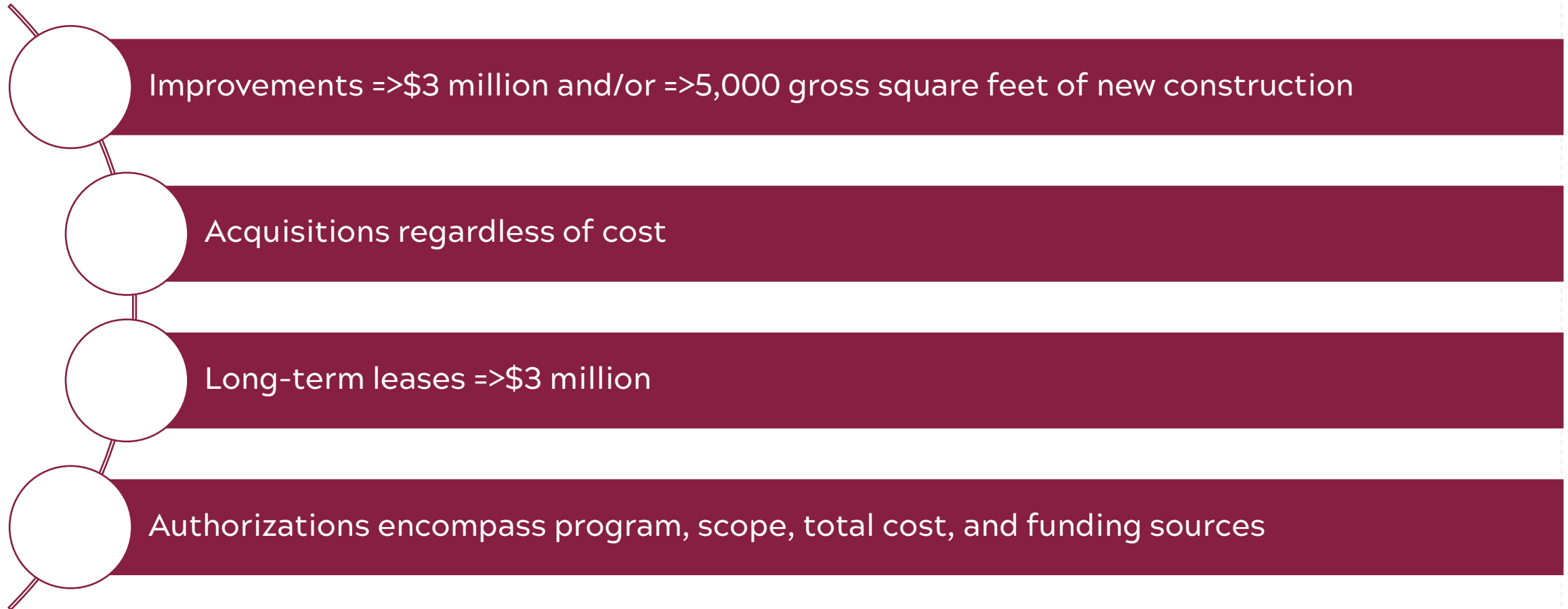
---

---

# ADDITIONAL CAPITAL BUDGET INFORMATION

# CAPITAL PROJECT AUTHORIZATION LEVELS

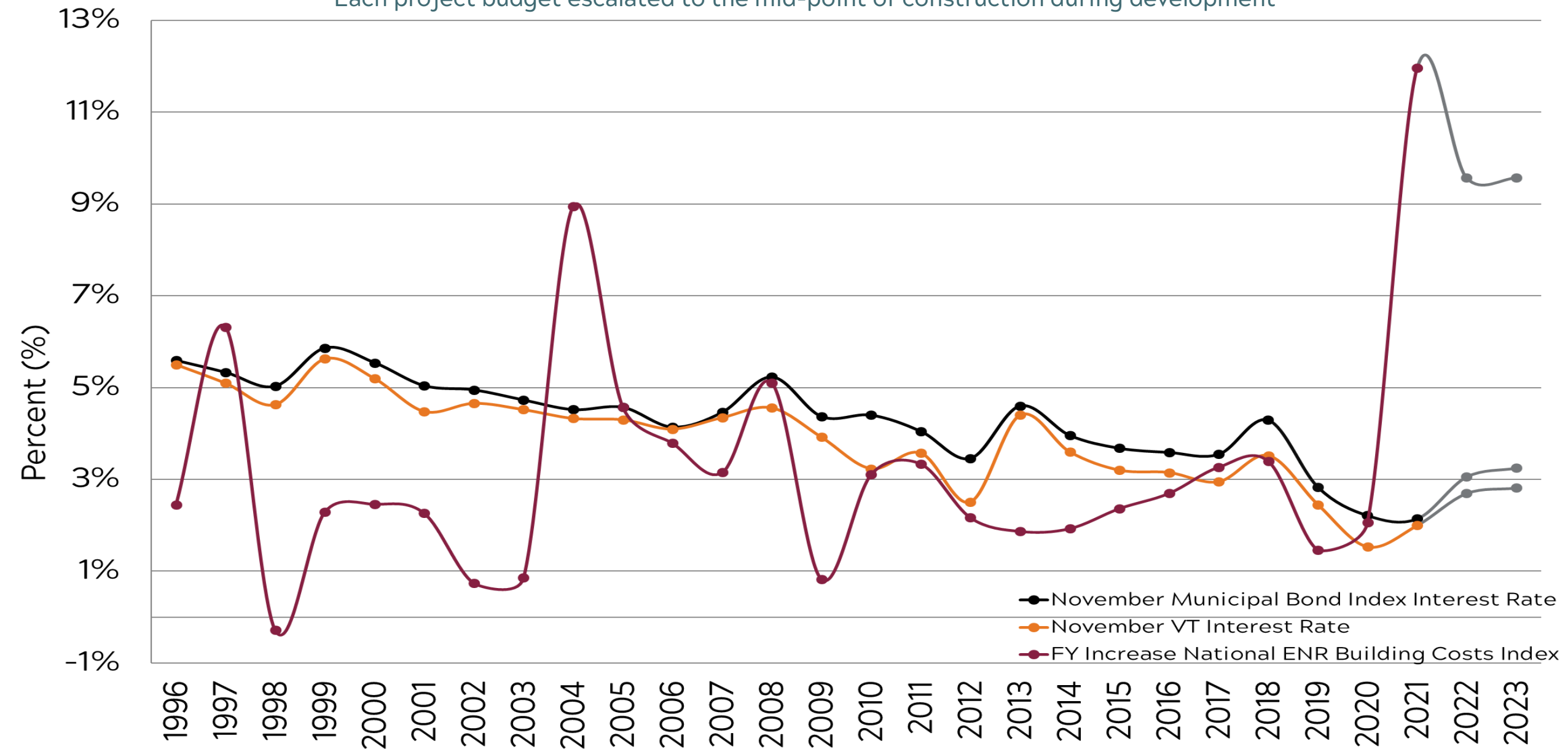
Attachment C



# TREND OF ESCALATION AND INTEREST RATES

Attachment C

Each project budget escalated to the mid-point of construction during development



# ESCALATION AND CONSTRUCTION COST

Attachment C

## 2022 Material and Equipment Supply Chain Outlook

*Most Troublesome Categories During 2021 & 2022*



### Structural Steel

Engineered Bar Joists

Lead Time

Price

Expected  
Trend



Current Lead  
Time

32 weeks

Expected Change  
(6-12 months)

Stable

+8-15%



### Roofing

PolyISO Insulation

Lead Time

Price



48-52 weeks

Stable

+5-10%



### HVAC

AHUs/RTUs

Lead Time

Price



35-45 weeks

Up 15%

+15-20%



### Electrical Gear

UL 1558 Switchgear

Lead Time

Price



45-65 weeks

Up 20%

+10-20%



### Plumbing

Pipe & Fittings

Lead Time

Price



35-45 weeks

Up ?

Up ?

*Lead times do not include 3-4 months time to get an approved submittal*

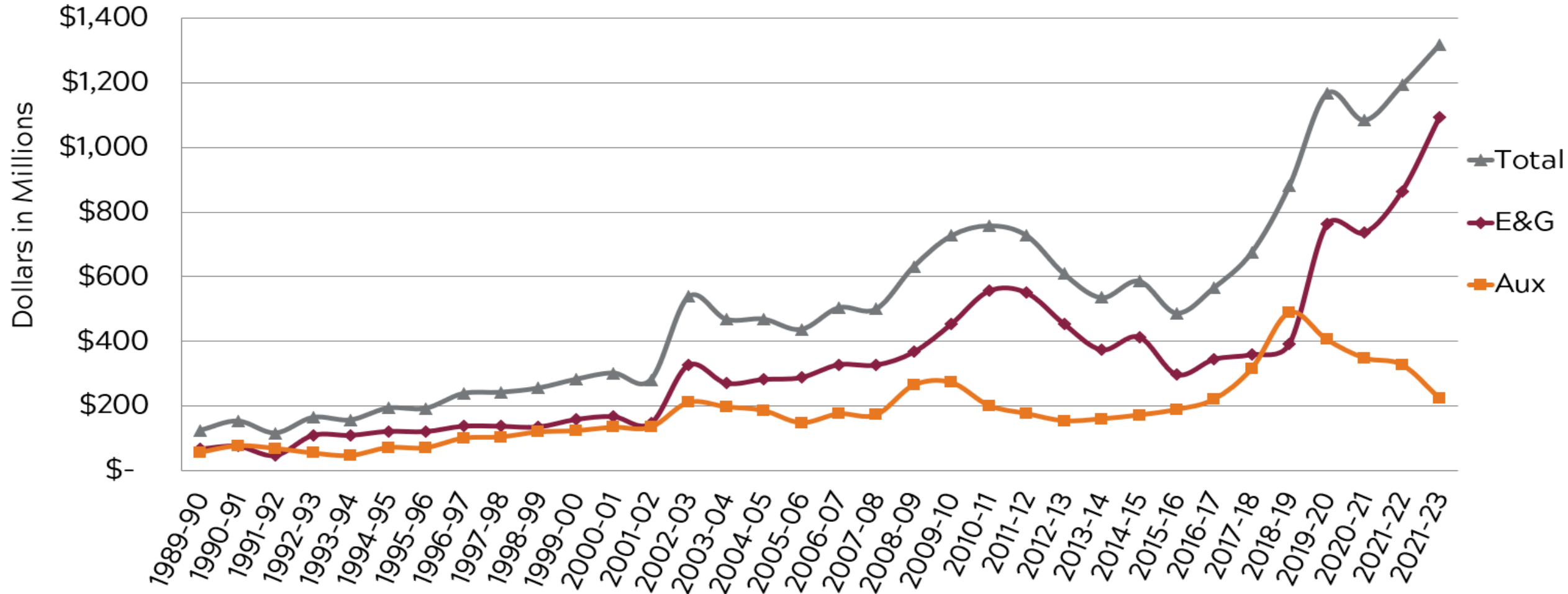
*Cover board lead times – 5-6months  
XPS & EPS lead times – 4-5 months*

*Ductile Iron Pipe – 35-45 weeks  
HDPE Pipe – 12-35 weeks*

# TREND OF CAPITAL PROGRAM TOTAL BUDGET

Attachment C

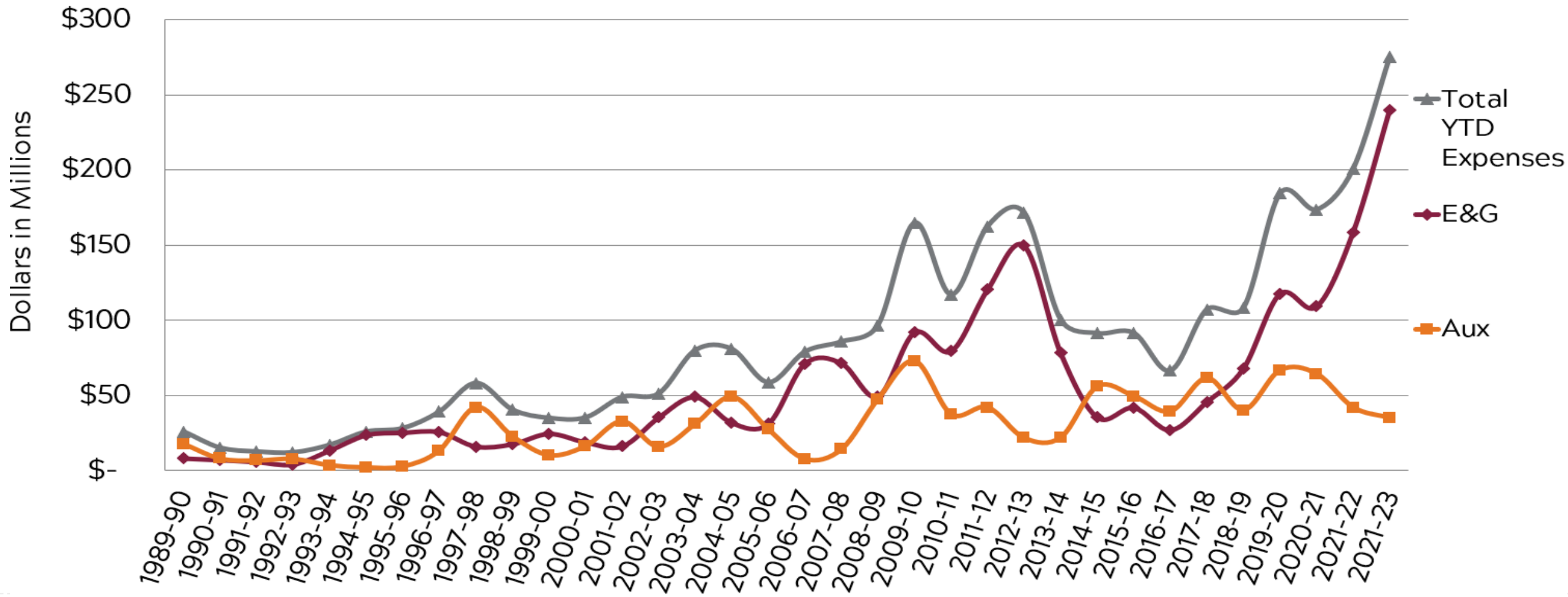
Fiscal Year 1990 - Fiscal Year 2023



# TREND OF CAPITAL PROGRAM ANNUAL EXPENDITURES

Attachment C

Fiscal Year 1990 - Fiscal Year 2023





VIRGINIA TECH



# **INNOVATION CAMPUS**

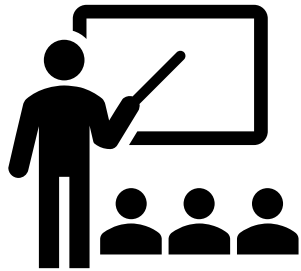
## **UPDATE TO BOARD OF VISITORS**

---

Lance Collins, Vice President and Executive Director

June 2022

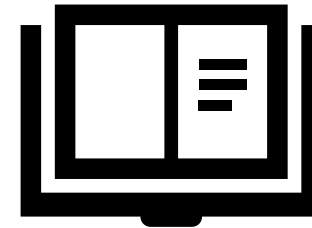
# Innovation Campus Progress Report



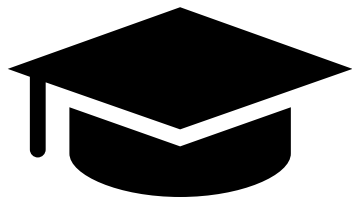
Faculty



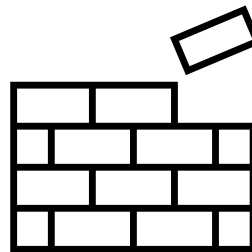
Research



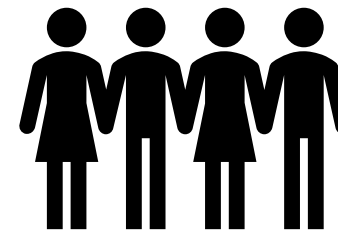
Curriculum



Students



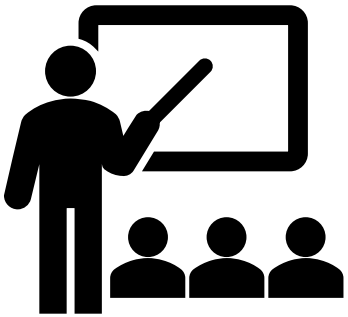
Facilities



Staffing

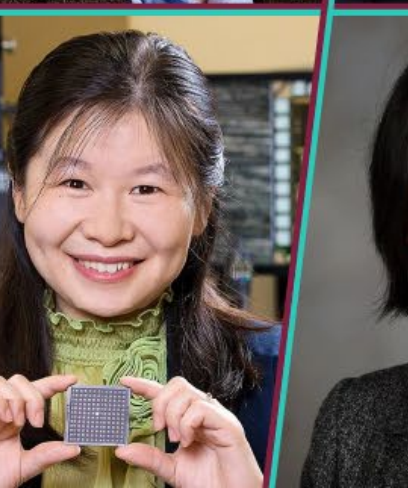
# Introducing Innovation Campus Faculty

- First faculty cohort joins the Innovation Campus from the departments of computer science and computer engineering.
- These 12 faculty members retain tenured positions in the College of Engineering.
- They bring expertise in artificial intelligence (AI), cybersecurity, human-computer interaction, applied machine learning, 5G/6G networks, energy efficient systems, and more!



Faculty





# Faculty Leads

Attachment C



**KIRK CAMERON**  
Professor of  
Computer Science  
*Faculty Lead*



**NAREN RAMAKRISHIAN**  
Professor of  
Computer Science  
*AI/ML Lead*



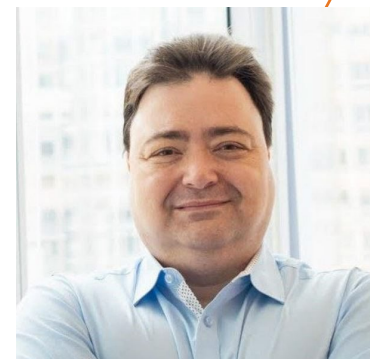
**PAUL AMPADU**  
Professor of  
Electrical and  
Computer  
Engineering  
*Diversity Lead*



**WALID SAAD**  
Professor of  
Electrical and  
Computer  
Engineering  
*Next G Lead*



**CHANG-TIEN LU**  
Professor of  
Computer Science  
*Curriculum Lead*



**ANGELOS STAVROU**  
Professor of Electrical  
and Computer  
Engineering  
*Entrepreneurship Lead*



# Our Goal: 50 Faculty by 2029

External searches and hiring for faculty underway.

- Launched senior search in AI/ML.
- Hired two collegiate faculty to focus on curricular innovations. They will start in the 2022-23 AY.
- Jeremi London has joined the Innovation Campus on a partial appointment from the College of Engineering to assist with curriculum development.



Faculty

# Innovation Campus Research

Faculty will be clustered around research areas that build upon existing strengths of the university and research interests of our partners.



Research

- **Intelligent Interfaces; Wireless**
  - Boeing Company
- **Quantum Information Science**
  - Northrop Grumman Corporation
- **AI and Machine Learning**
  - Amazon



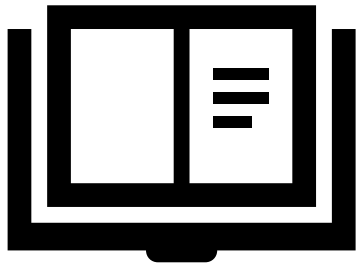
*Announcement of Northrop Grumman Partnership Supporting Quantum Information Science.*

# Transition to Project-Based Learning

- Faculty joining the Innovation Campus will take the lead in enhancing the project-based learning curriculum.
- Pilot projects are set to expand this fall and will include Boeing and Collins Aerospace.
- Jeremi London in Engineering Education brings expertise in project-based learning.



*Learning Commons, Academic Building One.*



Curriculum

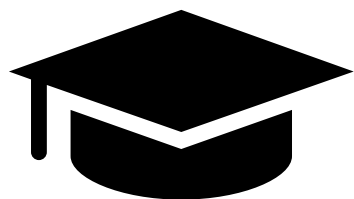


# Enrollment Growth – DC Region

Our focus: Grow M.Eng programs in the DC region.

We are kicking off Phase III of our Tech Talent Investment Project – Innovation Campus Enrollment Program.

- Applications for Northern Virginia for fall 2022 through May 15: 296, with big increases in domestic, in-state.
- We expect an increase in diversity student enrollment for the fall semester, in alignment with our diversity goals.



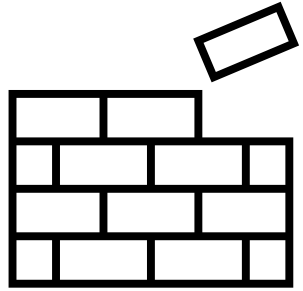
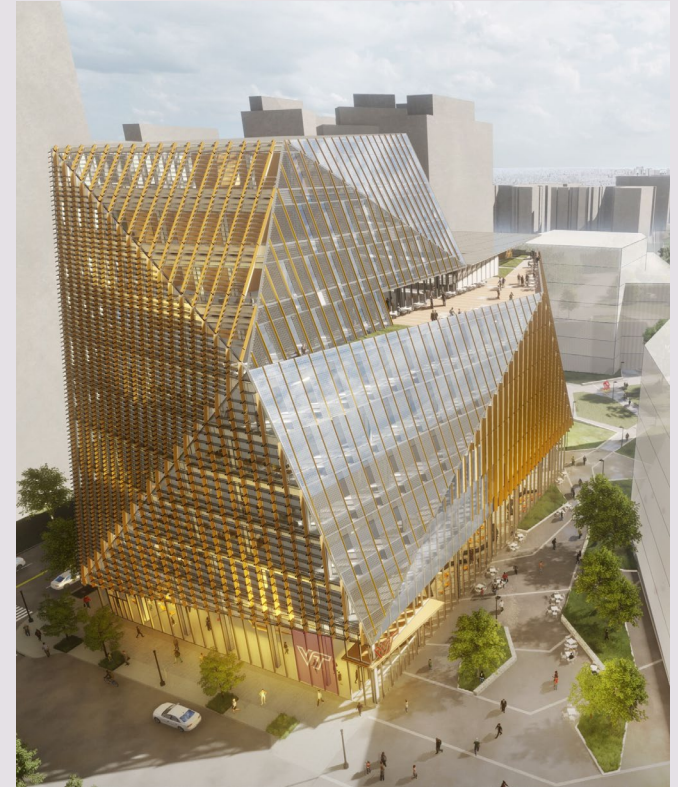
Students



*Fall 2021 Boeing Graduate Scholars*

# Update – Academic Building One

- Project is on schedule for 2024 opening.
- Structural steel construction started in May.
- Beginning selection of furniture and equipment for all interiors.



Facilities



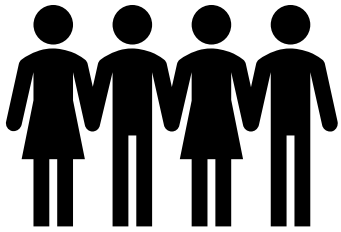




# Growing Team

Held a Team Building Retreat in Mid May

- Focused on planning the next two years leading up to the opening of Academic Building One.



Staffing

Planning Searches this Summer  
for Additional Positions in:

- Enrollment Management
- Communications/Marketing
- Administrative and Support Staff



*Team visit to the ACCelerate Festival at the National Museum of American History.*

# *Thank You!*

*We appreciate your continued support of the Virginia Tech Innovation Campus.*

**vt.edu/innovationcampus**





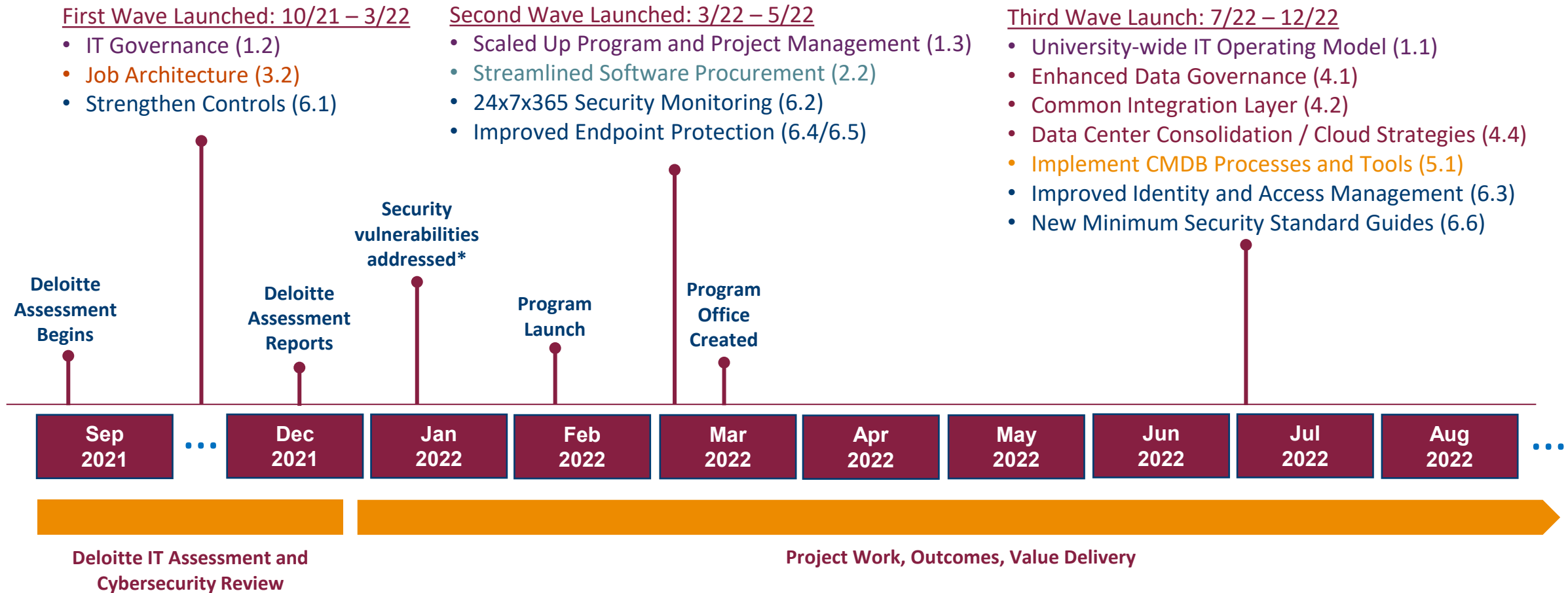
# IT TRANSFORMATION Program Update

June 6, 2022

D. Crotts, B. Garey, C. Kiwus, S. Midkiff

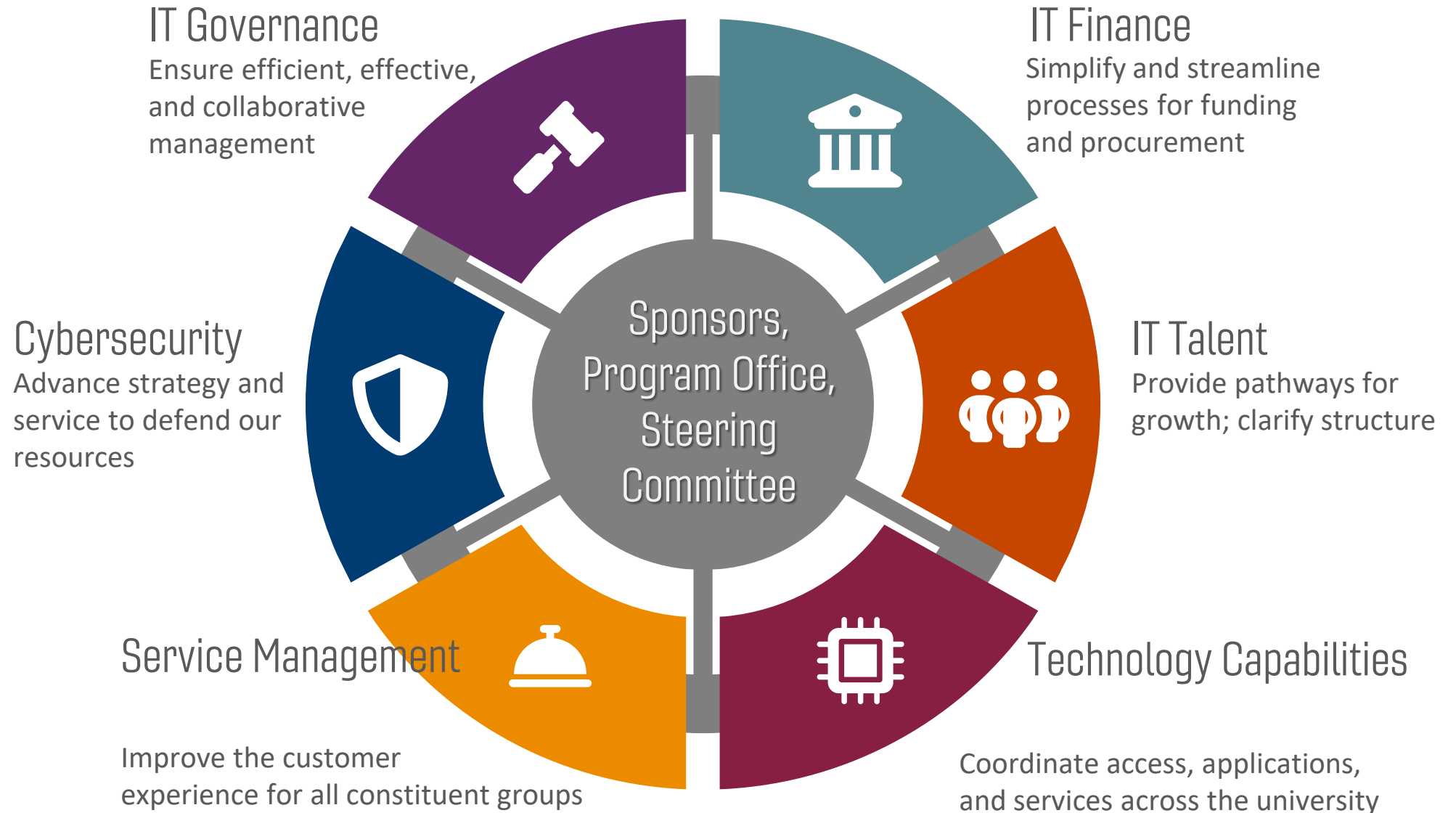


# Timeline, IT Transformation Project Starts



\* Athletics vulnerabilities addressed in May 2022.

# IT TRANSFORMATION FOCUS AREAS





# PROJECTS UNDERWAY

Ensure efficient, effective, and collaborative management



## IT Governance

- Establish university-wide IT governance model
  - Committee model approved
  - Supporting documentation for committee operations proposed
- Program Office and Project Management
  - Staffing
  - Steering Committee
  - Budgets and timelines revised

Simplify and streamline processes for funding and procurement



## IT Finance

- Streamline Software Procurement Process
  - Beginning pilot of an IT Procurement process consultant
  - Proposal to update University Policy 3015: University Contract Signature Policy and Procedures, and related standards
  - Identified plan to reduce current backlog of requests

# PROJECTS UNDERWAY

Provide pathways for  
growth; clarify structure



## IT Talent

- Standardize job classifications for IT staff across VT (led by Division of Human Resources)
  - Received responses to position description questionnaires for IT related positions

Advance strategy and  
service to defend our resources



## Cybersecurity

- Implement CIS IG2 controls across all platforms
  - 37 units are assessing IG2 controls
  - 2 units have started IG2 control implementation
- Augment 24x7x365 monitoring with a Security Operations Center (SOC)
  - Contract executed with Indiana University OmniSOC for 24x7x365 coverage
- Improved endpoint protection
  - EDR-DLP project charter drafted
  - MS Defender for endpoint pilot in progress

# Project Schedule, active projects

	FY2022										FY2023												FY2024											
	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	
Strengthen Controls (6.1)																							+ ++											
IT Governance (1.2)											+ ++																							
Program Office and Project Management (1.3)											+																							
Software Procurement (2.2)											+ ++																							
Job Architecture (3.2)											+ ++																							
24x7 Security Operations Center (6.2)											+																							
Improved Endpoint Protection (6.4/6.5)											Initial planning only																							

Initial planning only



# Supplemental: Implement and Enforce CIS IG2 Security Controls

<b>Project Start</b>	<b>10/2021</b>	<b>Project End</b>	<b>06/2025</b>
<b>Project Description</b>  Implement compliance with the Center for Internet Security (CIS) Critical Security Controls Implementation Group 2 (IG2) minimum for systems, areas, and units processing sensitive data across Virginia Tech.		<b>Deliverables</b> <ul style="list-style-type: none"> <li>+ Completion of IG2-level assessments for units with high-risk data (June 2023)</li> <li>++ All units with high- and moderate-risk data have completed IG2 assessment (March 2024)</li> <li>All units with high- and moderate-risk data complete implementation plan for additional IG2 controls (October 2024)</li> </ul>	
<b>Overall Status</b>	<b>On Track</b>	<b>Percent Complete</b>	<b>1 – 25 %</b>
<b>Initial Benefits Realized / Key Accomplishments</b> <ul style="list-style-type: none"> <li>Increased awareness of cybersecurity risk</li> <li>37 organizational units are implementing IG2 controls</li> <li>2 organizational units have started IG2 controls implementation</li> </ul>		<b>Success Metrics / Measures</b> <ul style="list-style-type: none"> <li>Improved IT security control environment (increased number of preventive controls)</li> </ul>	

## Supplemental: IT Governance

Project Start	02/2022	Project End	11/2022
<b>Project Description</b>  Enhance the IT governance model through more inclusive membership; domain-focused oversight over research computing, teaching and learning technologies, university-wide applications, and security; and clearer escalation paths between distributed units and university IT governance.		<b>Deliverables</b> <ul style="list-style-type: none"> <li>• Approved committee model</li> <li>• + Approve supporting committee documentation: charters, thresholds, interaction model, procedural rules, membership structures (July 2022)</li> <li>• ++ Recruit and form committees (August 2022)</li> </ul>	
Overall Status	On Track	Percent Complete	26 – 50 %
<b>Initial Benefits Realized / Key Accomplishments</b> <ul style="list-style-type: none"> <li>• Committee model approved</li> <li>• Supporting documentation for committee operations proposed</li> <li>• Committee membership structures under evaluation</li> </ul>		<b>Success Metrics / Measures</b> <ul style="list-style-type: none"> <li>• Establishment of a university-wide IT Strategic Plan</li> </ul>	

# Supplemental: Program Office and Project Management

<b>Project Start</b>	<b>03/2022</b>	<b>Project End</b>	<b>11/2022</b>
<b>Project Description</b>  Establish the IT Transformation Program Office to lead implementation effort for Deloitte recommendations. Initiate a university-wide IT project management (PM) function to provide clear oversight of VT-wide IT initiatives and facilitate development of standards and tools to govern and manage projects consistently. Define roles and responsibilities for the PM function and create a pool of PM resources.		<b>Deliverables</b> <ul style="list-style-type: none"> <li>Establish the IT Transformation Program Office</li> <li>Design the structure and size of the PM function</li> <li>Develop and set-up standards and processes</li> <li><b>+ Operationalize the PM function (June 2022)</b></li> <li>Establish PM as a service</li> <li>Transition PM to the Division of IT under a Project Management Office (October 2024)</li> </ul>	
<b>Overall Status</b>	<b>On Track</b>	<b>Percent Complete</b>	<b>26 – 50 %</b>
<b>Initial Benefits Realized / Key Accomplishments</b> <ul style="list-style-type: none"> <li>IT Transformation Program Office created and staffing underway</li> <li>PM support identified and secured to assist with active and upcoming projects</li> </ul>		<b>Success Metrics / Measures</b> <ul style="list-style-type: none"> <li>Improved insights into performance of projects delivered on time, in scope, and on budget</li> <li>Improved resource estimation to facilitate more accurate budget and resource requests, including ongoing support costs</li> </ul>	

## Supplemental: Software Procurement

<b>Project Start</b>	<b>02/2022</b>	<b>Project End</b>	<b>08/2023</b>
<b>Project Description</b>  Improve the IT procurement experience by implementing a systematic and customer-oriented approach. Analyze procurement workflow to identify gaps, bottlenecks, and areas of uncertainty in the request process. Streamline the procurement workflow process to efficiently approve requests and reduce backlog.		<b>Deliverables</b> <ul style="list-style-type: none"> <li>• Implement pilot phase of IT Procurement process consultant</li> <li>• <b>+ Finalize and approve updates to University Policy 3015: University Contract Signature Policy and Procedures (September 2022)</b></li> <li>• Eliminate backlog of existing IT Procurement requests</li> <li>• <b>++ Assess impact of pilot program and policy changes and recommend any further adjustments (June 2023)</b></li> </ul>	
<b>Overall Status</b>	<b>On Track</b>	<b>Percent Complete</b>	<b>1 – 25 %</b>
<b>Initial Benefits Realized / Key Accomplishments</b> <ul style="list-style-type: none"> <li>• Beginning pilot of an IT Procurement process consultant</li> <li>• Proposal to update University Policy 3015: University Contract Signature Policy and Procedures, and related standards</li> <li>• Identified plan to reduce current backlog of requests</li> </ul>		<b>Success Metrics / Measures</b> <ul style="list-style-type: none"> <li>• Improved customer satisfaction</li> <li>• Reduced time from request to procurement</li> </ul>	



## Supplemental: HR Job Architecture - Pilot phase, including IT

<b>Project Start</b>	<b>02/2022</b>	<b>Project End</b>	<b>TBD</b>
<b>Project Description</b>  The Division of Human Resources is leading an evaluation of Administrative and Professional (A/P) faculty positions to develop recommendations for a structure that improves consistency in job titling, enhances career pathway opportunities, and aligns salary ranges to competitive market-based rates. The Division of IT is in the first pilot group.		<b>Deliverables</b> <ul style="list-style-type: none"> <li>+ Job titling and codes, career mapping, and market pricing assessment (July 2022)</li> <li>++ Competitive analysis report, recommended salary ranges, and cost impact analysis (August 2022)</li> <li>Implementation of Job Architecture recommendations</li> </ul>	
<b>Overall Status</b>	<b>On Track</b>	<b>Percent Complete</b>	<b>1 – 25 %</b>
<b>Initial Benefits Realized / Key Accomplishments</b> <ul style="list-style-type: none"> <li>Received responses to position description questionnaires for IT related positions</li> </ul>		<b>Success Metrics / Measures</b> <ul style="list-style-type: none"> <li>Reduction of unique job titles</li> <li>Higher retention rates within individual positions, and within the university</li> </ul>	

# Supplemental: 24 x 7 x 365 Security Operations Center

<b>Project Start</b>	<b>04/2022</b>	<b>Project End</b>	<b>06/2023</b>
<b>Project Description</b>  The VT Security Operations Center (SOC) will provide comprehensive (24x7x365) monitoring and detection, threat intelligence, and incident response capabilities to mitigate cybersecurity risks. To accomplish this VT will contract with Indiana University's OmniSOC, higher education's shared cybersecurity operations center for 24x7x365 coverage.		<b>Deliverables</b> <ul style="list-style-type: none"> <li>• + Fully operationalized SOC, providing 24x7x365 security monitoring (November 2022)</li> <li>• Enhanced cybersecurity capabilities: proactive threat response; incident response and coordination; forensics; network security monitoring; threat intelligence; self-assessment</li> <li>• Virtual command center</li> <li>• Comprehensive visibility: network traffic inspection; log analysis</li> </ul>	
<b>Overall Status</b>	<b>On Track</b>	<b>Percent Complete</b>	<b>1 – 25 %</b>
<b>Initial Benefits Realized / Key Accomplishments</b> <ul style="list-style-type: none"> <li>• Contract established with OmniSOC, Indiana University's Security Operations Center</li> </ul>		<b>Success Metrics / Measures</b> <ul style="list-style-type: none"> <li>• Improved response time and triage for incidents occurring after work hours</li> </ul>	

## Supplemental: Improved Endpoint Protection

<b>Project Start</b>	<b>05/2022</b>	<b>Project End</b>	<b>TBD</b>
<b>Project Description</b>  Improve endpoint protection through deployment of endpoint detection and response (EDR) and endpoint data loss prevention (DLP) solutions. These solutions will elevate security across many of the cybersecurity domains, including monitoring, auditing, real-time protection, and configuration, and aid in regulating data as it moves within and between systems, providing proactive opportunities to defeat disclosure and breach attempts across the network and removable storage media.		<b>Deliverables</b>  To be determined, project is still in initial planning phase	
<b>Overall Status</b>	<b>On Track</b>	<b>Percent Complete</b>	<b>1 – 25 %</b>
<b>Initial Benefits Realized / Key Accomplishments</b>  None at this time, project is still in initial planning phase		<b>Success Metrics / Measures</b>  To be determined, project is still in initial planning phase	

# Discussion on Construction Costs

**BOB BROYDEN**

ASSOCIATE VICE PRESIDENT CAMPUS PLANNING & CAPITAL  
FINANCING

JUNE 6, 2022

# Discussion Points

- Comparing Campus and Foundation Project Costs
  - “institutional” versus “commercial” grade construction
- Additional Information Slides:
  - Benchmarking VT Projects: HKA (third party consultant) Analysis
  - Illustration of Total Budget Breakdown for Campus Projects: Undergraduate Science Laboratory Building
  - State Capital Budget Review and Approval Processes

# Comparing Campus and Foundation Project Costs Attachment C

	New Business Building (Campus)	Gilbert Street (Foundation)	Research Swing Space (Foundation)
Base Year for Costs	2025	2021	2021
Project Budget	\$80.8M	\$71.7M	\$20.0M
Gross Square Feet (GSF)	104,000	197,000	68,000
Base Metric	\$777/GSF	\$364/GSF	\$294/GSF
<u>University Adjustments</u>	<u>Cost per GSF</u>	<u>Cost per GSF</u>	<u>Cost per GSF</u>
FF&E	0	50	50
Parking Replacements	0	12	6
Interior Fit Outs	0	0	35
<u>Sense of Place - "Brand"</u>			
Hokie Stone Material	0	8	8
Install Hokie Stone/Precast	0	30	30
Architectural Complexity	0	0	63
<u>Building Performance</u>			
Life-Cycle Requirements	0	77	77
Structure & Foundation	0	17	17
Schedule & Overhead	0	6	6
Plus-Ups Subtotal	N/A	200/GSF	292/GSF
Adjusted Metric	557/GSF	564/GSF	586/GSF
Escalation True-up (2021 to 2025)	220/GSF	223/GSF	231/GSF
Escalation Adjusted Metric	\$777/GSF	\$787/GSF	\$817/GSF

*Plus-ups to  
compare with  
campus  
standards*

# └ Campus Building Performance Examples

- VT Construction Standards - Orange Manual -- define expectations greater than required by commercial customers or code to withstand long-term, intense use
- Heavier steel structure and larger foundations to stiffen building
- More durable interior finishes: terrazzo flooring, solid surface countertops, solid core doors, proprietary door hardware, masonry or abuse-resistant drywall partitions
- Acoustical controls, e.g., floor to floor partition walls, double dry-wall, and acoustic insulation
- State requirement for LEED Silver and university goals for energy performance
- Manufacturer specific building control system
- Manufacturer specific mechanical systems
- Electrical feeds are copper instead of aluminum
- Flashings are stainless steel instead of painted steel
- Electrical distribution in metal conduit instead of metal clad electrical cable (MC Cable)
- Sprinkler piping is steel and not CPVC piping
- Plumbing piping is copper instead of PVC
- Roofing thickness of 90 mil instead of 40 mil

# Opportunities for Strategic Cost Controls

Attachment C

## Past Successes:

Andrews Information Systems Building  
Gilbert Street Project  
Hume Center Building  
Integrated Life Sciences Building  
Network Infrastructure and Services Building  
North End Center  
VTTI Research Complex  
South-West Chiller Plant  
Southgate Center  
Veterinary Medicine Instruction Addition

## Future Opportunity:

Student Life Village

## Lessons Learned:

“Donaldson Brown” Hotel and  
Conference Center  
Femoyer Hall  
Food Sciences Technology Building  
Litton-Reaves Hall  
Squires (Addition)  
Surge Space Building  
Wallace Hall



# DISCUSSION

# Additional Information

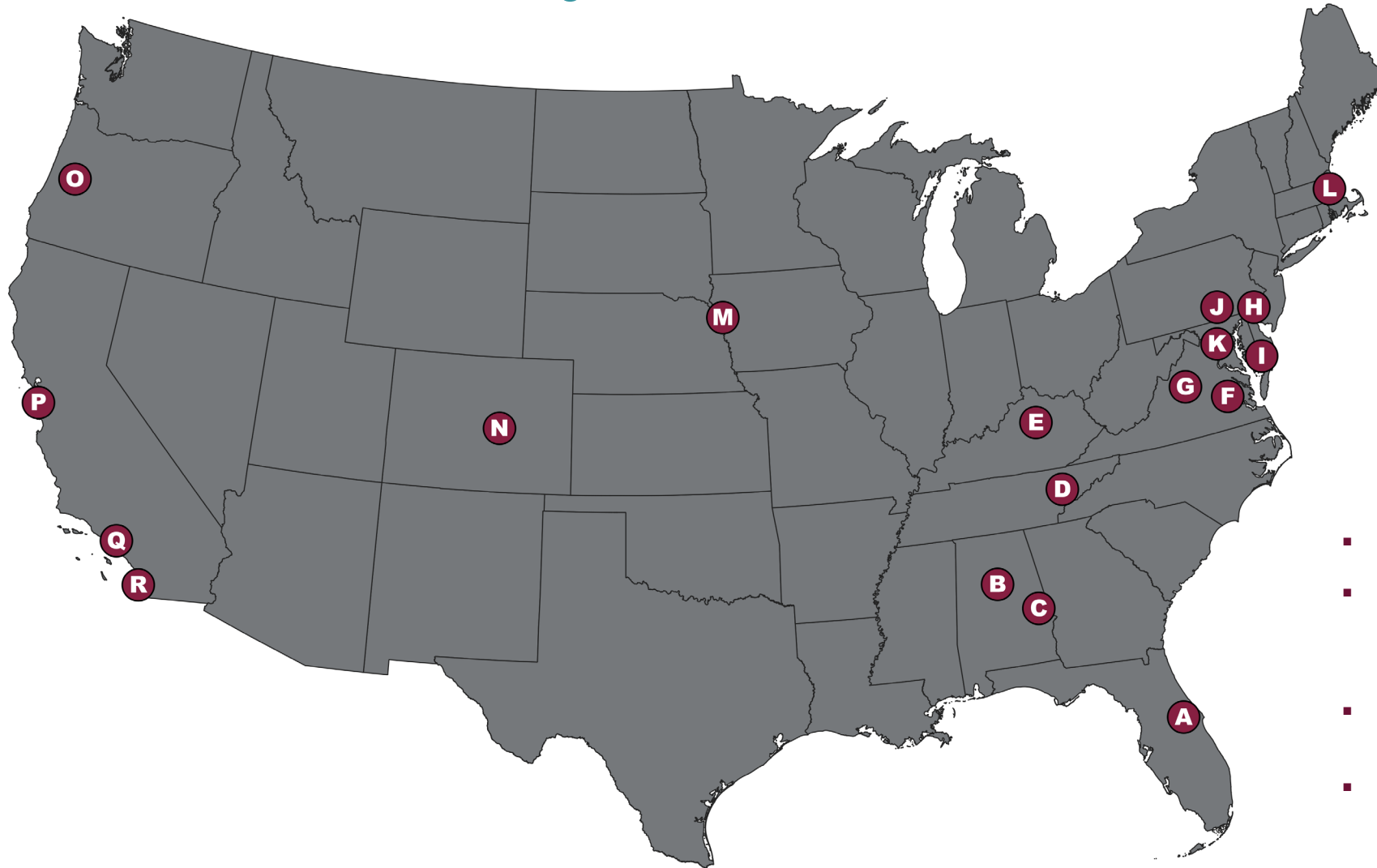
# Benchmarking VT Projects: HKA Analysis

# Benchmarking VT Projects: HKA Analysis

- VT projects compared to HKA's project database: size and program
- HKA database includes good comparisons to VT projects for instruction, research, and residential
- Costs were adjusted for geographical location and escalation
- HKA: "Our high-level benchmarking exercise indicates that VT's costs are generally in line with other institutions and industry norms."
- HKA: "Change orders are a key performance measure for construction cost performance and VT is performing better than industry norms."

# HKA Analysis of Construction Cost Benchmarks

## Map of similar projects from 18 institutions

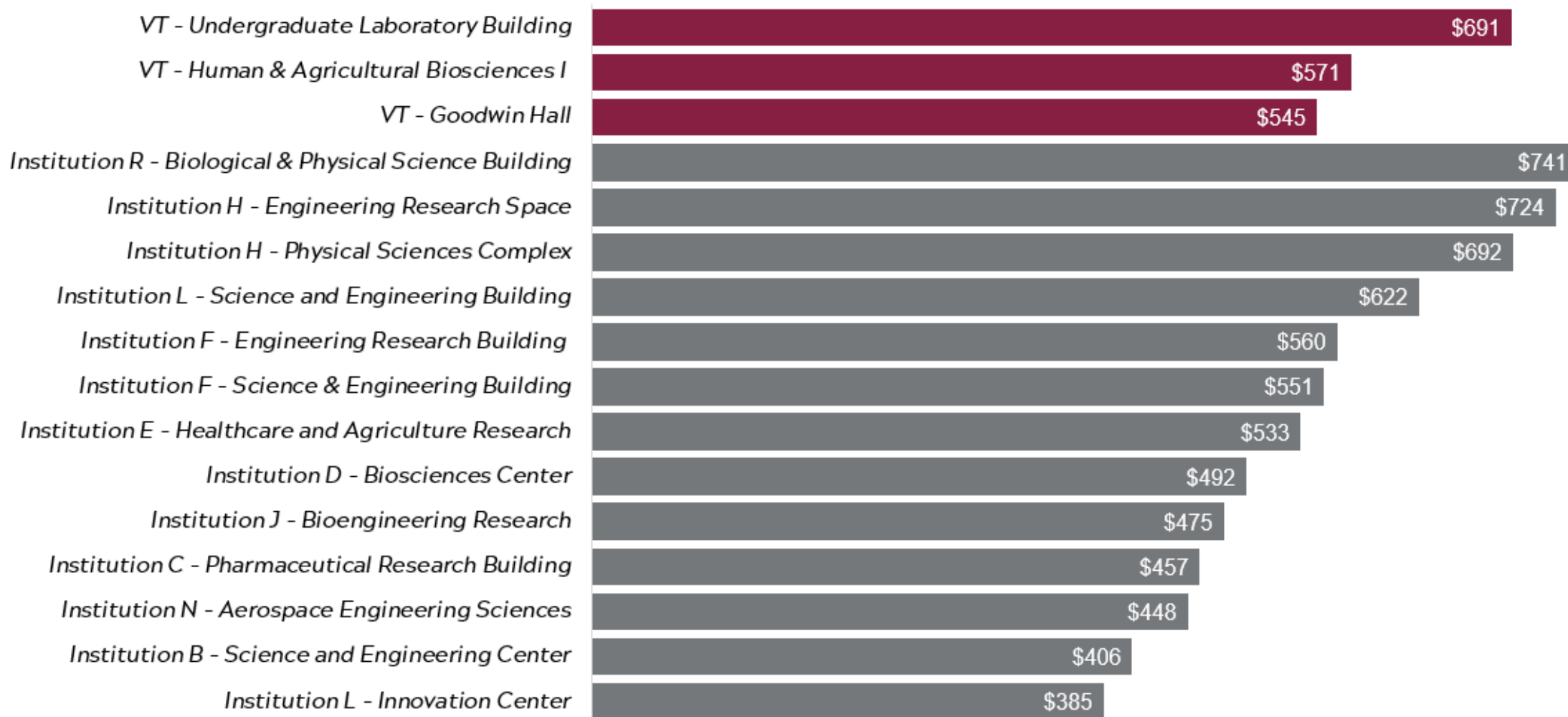


### Database Profile

- 4 land-grant institutions
- 17 R1 research institutions
  - 12 public
  - 5 private
- 12 institutions with medical schools
- All projects since 2014

# Research & Science Benchmarks: New Construction

## Construction Cost per SF

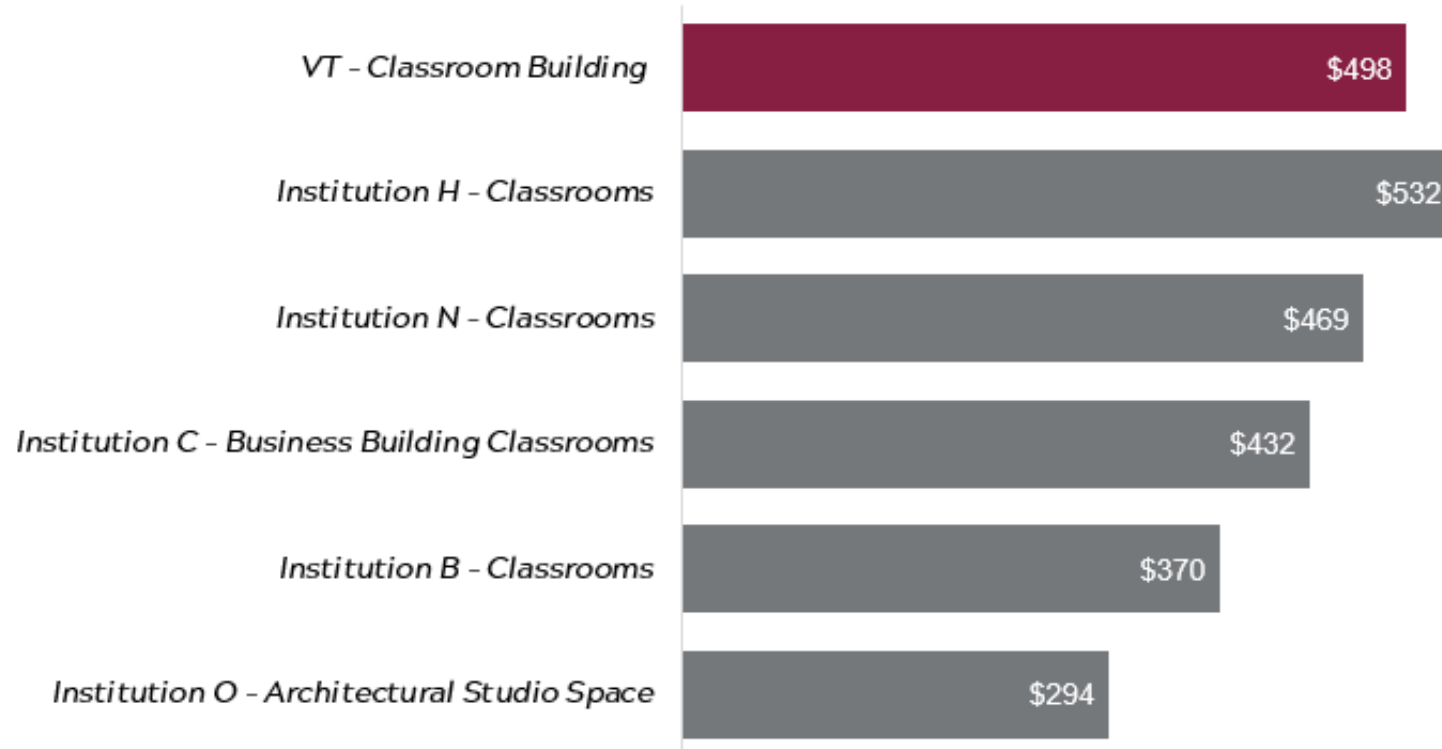


Escalated to 2021 and geographically adjusted

# Classroom Benchmarks: New Construction

Attachment C

## Construction Cost per SF

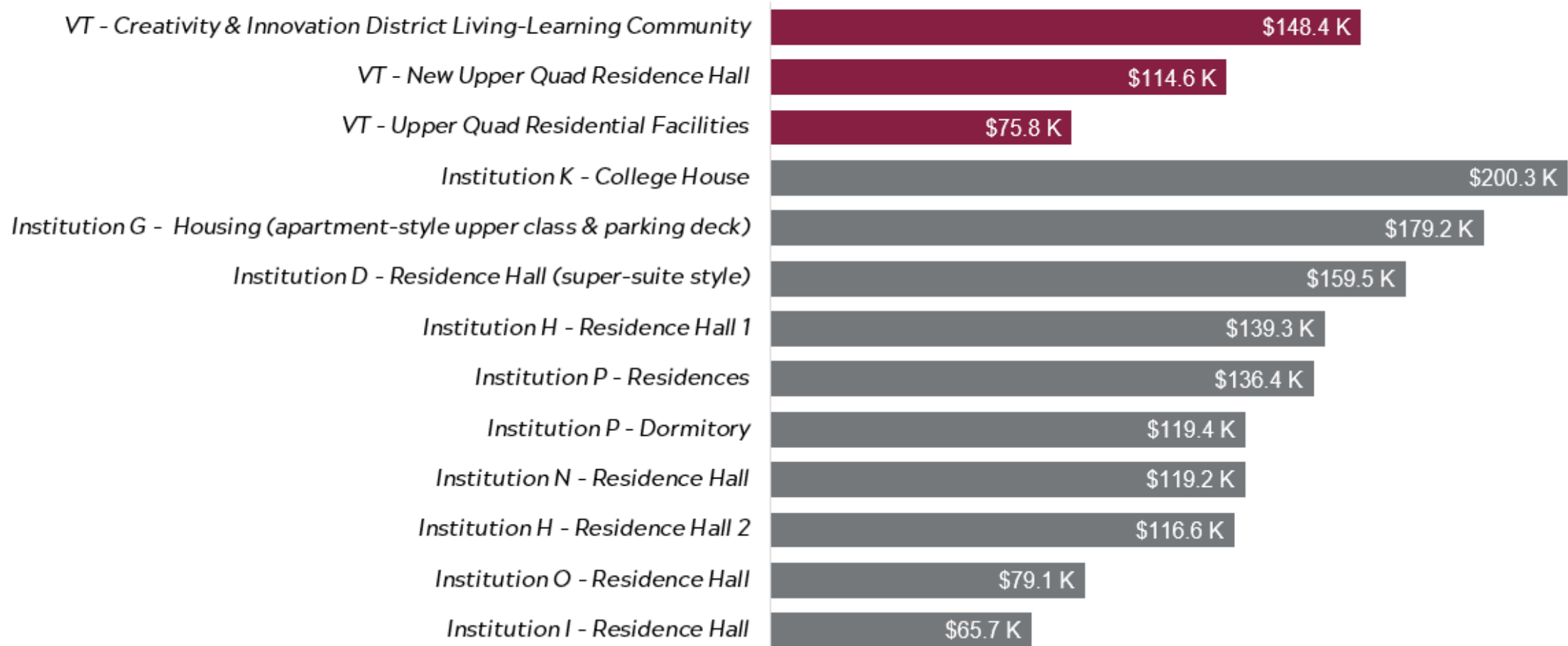


Escalated to 2021 and geographically adjusted

# Residential Benchmarks: New Construction

Attachment C

## Construction Cost per Bed



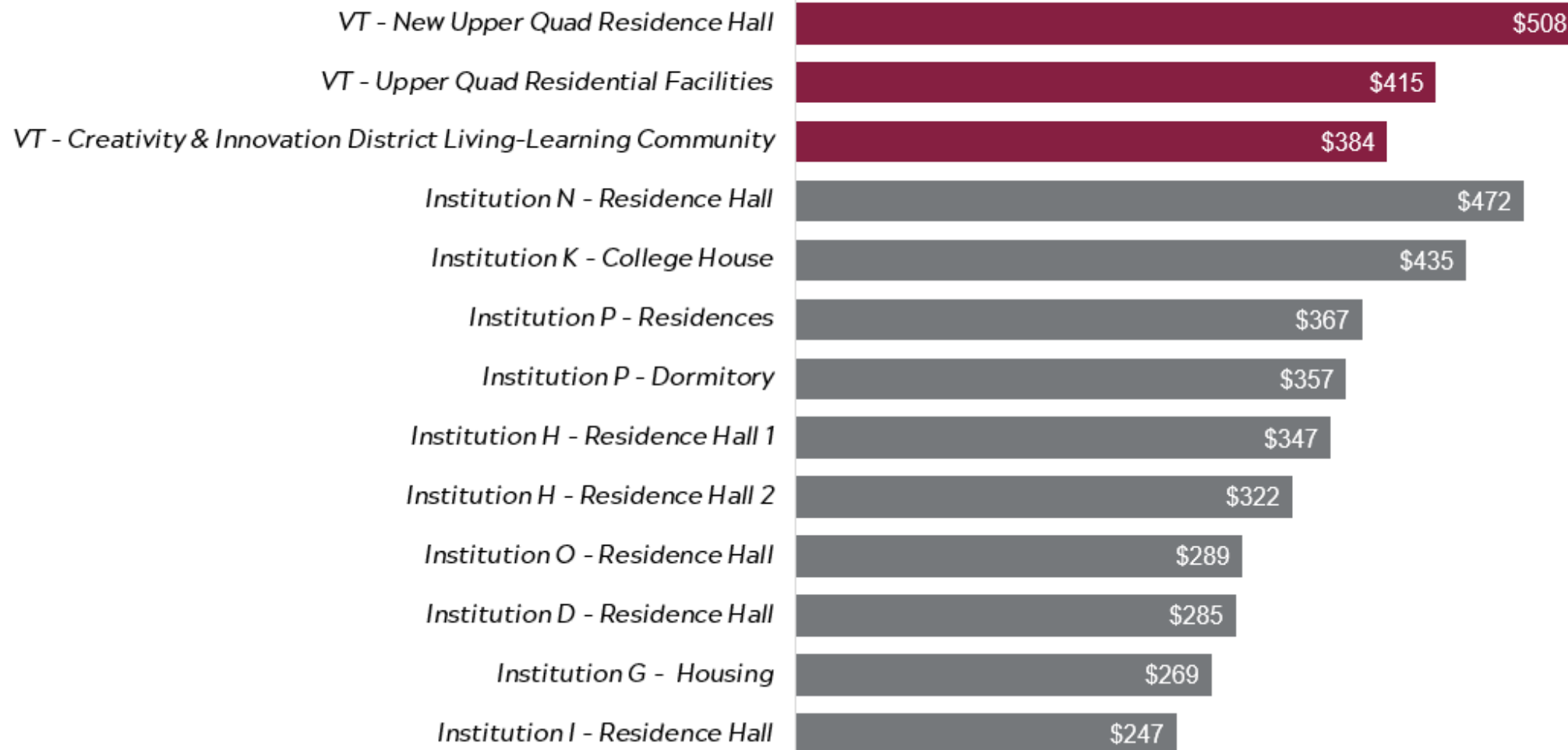
Escalated to 2021 and geographically adjusted



# Residential Benchmarks: New Construction

Attachment C

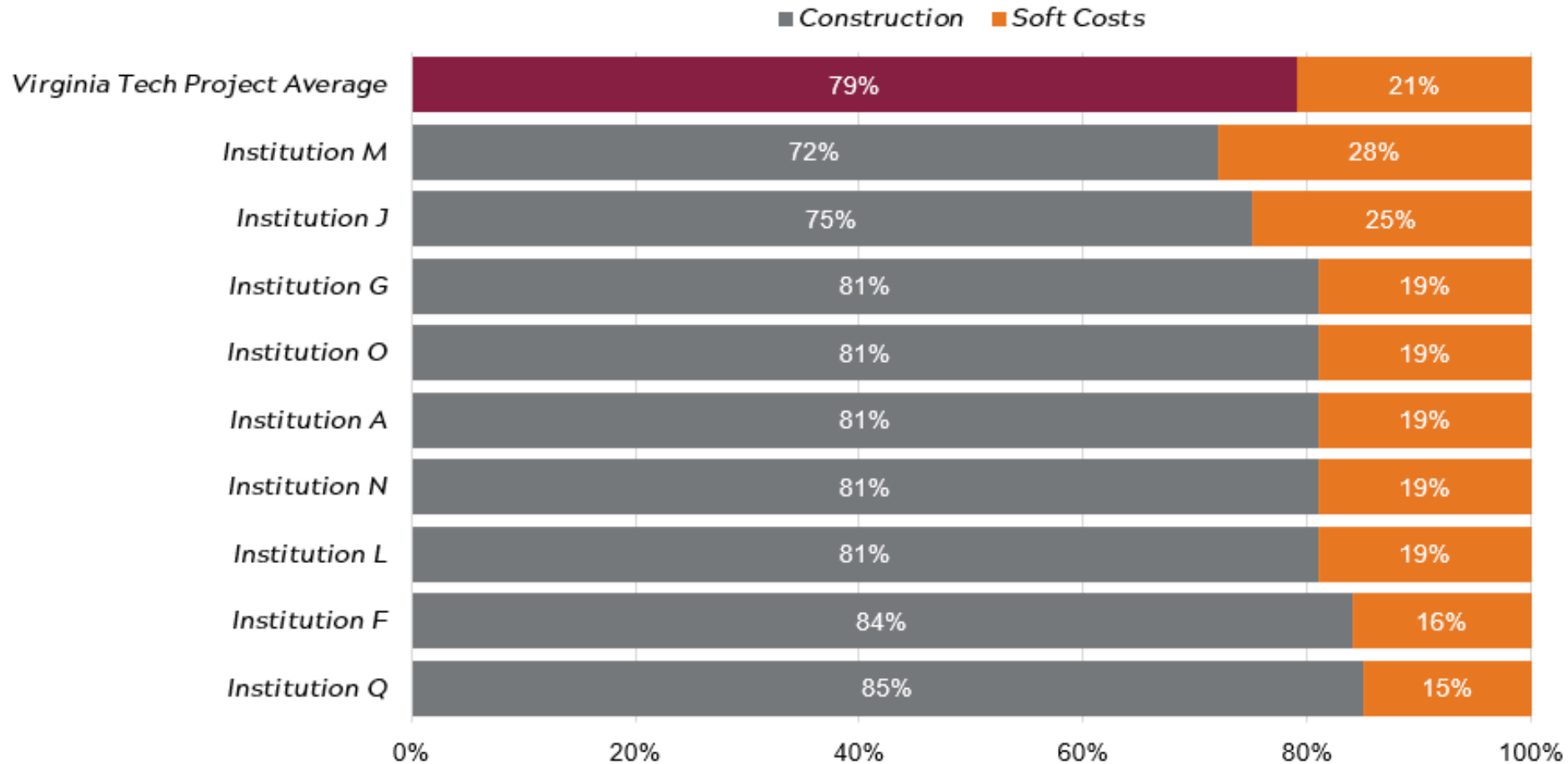
## Construction Cost per SF



Escalated to 2021 and geographically adjusted

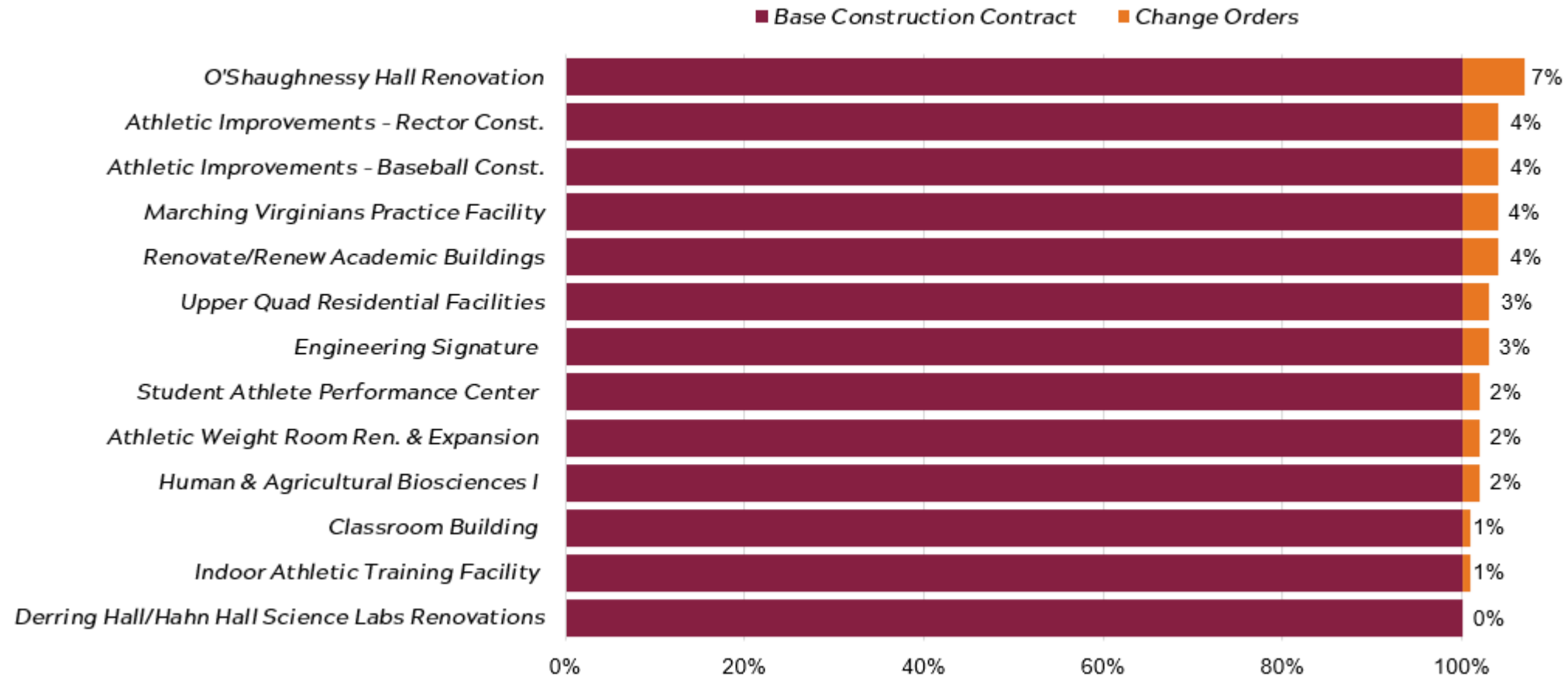
# Comparison of Soft Costs on Completed Projects

Attachment C



# Analysis of Change Orders on Completed Projects:

Industry Average Ranges 6% - 8%



# Illustration of Total Budget Breakdown for Campus Projects

# Undergraduate Science Laboratory Building

Attachment C

Project Budget Item	Cost	Percent of Total	Percent of Construction
Construction	\$ 69,498,056	77%	
Design	6,593,946	7%	10%
Other Soft Costs*	5,619,229	6%	8%
FF&E	5,693,000	6%	8%
Construction contingency	1,390,000	2%	2%
Project Management	753,915	1%	1%
Inspection	864,946	1%	1%
Total	\$ 90,413,092	100%	30%

# \*Breakdown of Other Soft Costs Line Item

Attachment C

Project Budget Item	Cost	Percent of Total	Percent of Construction
Supplemental Equipment	\$ 2,000,000	2%	3%
Data & Voice	820,000	1%	1%
Hokie Stone	703,000	1%	1%
Electric Service	410,000	0.5%	1%
Parking Displacement	405,000	0.4%	1%
Work By Owner	369,445	0.4%	0.5%
Stormwater Nutrient Credit (DEQ Compliance)	322,555	0.4%	0.5%
Miscellaneous Costs	322,000	0.4%	0.5%
Commissioning	184,695	0.2%	0.3%
Signage	75,000	0.1%	0.1%
Dept. Engineering & Building Review (State)	3,821	0%	0%
Printing & Advertisements	3,713	0%	0%
<b>Total</b>	<b>\$ 5,619,229</b>	<b>6%</b>	<b>8%</b>

# State Capital Budget Review and Approval Processes

# State Capital Budget Review and Approval Processes

- Prescribed method for computing total project costs
- Proposed program and computed cost establish “legislative intent”
- Department of General Services (DGS) reviews and provides budget recommendation to administration and General Assembly --- Six-Year Capital Outlay Plan Advisory Committee
- Must negotiate delivery method for all project types, e.g. hard bid vs CM@Risk vs Design-Build
- DGS conducts design reviews and provides cost recommendations at schematic design (20%), preliminary designs (50%) and working drawings (95%)
- Each review phase includes value management list and specific adjustments for construction, sitework, A/E fees, project management, contingency, etc.
- Total project budget set at preliminary designs review and cost recommendation
- If market pricing exceeds budget set at preliminary designs, DGS will review the pricing, and may administratively increase the project
- The university uses the same approach for its nongeneral fund projects



June 6, 2022

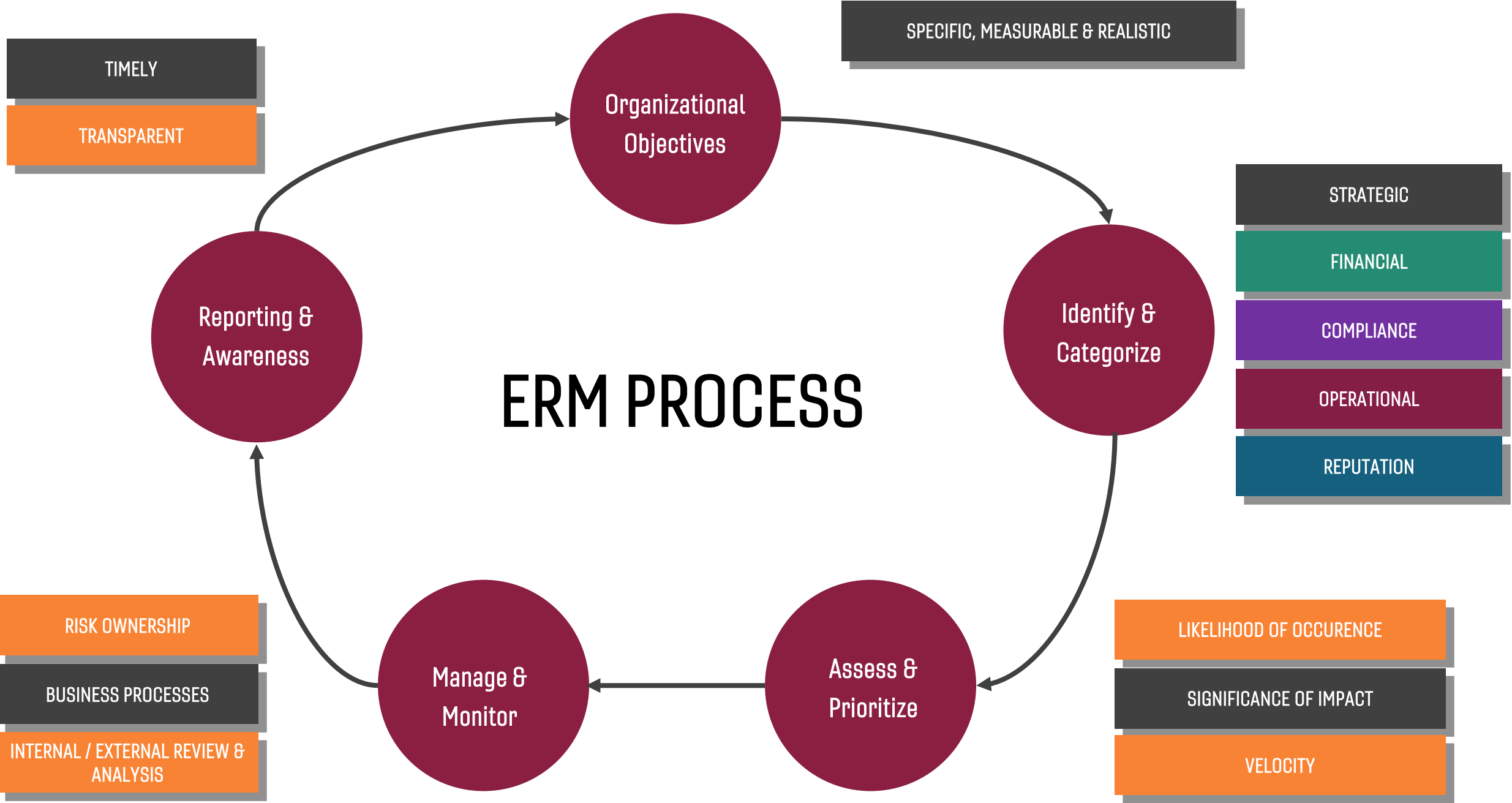
# ***Enterprise Risk Management Update***

*Sharon M. Kurek, CPA, CCEP, CFE, MBA  
Executive Director of Audit, Risk, and Compliance*

## Enterprise Risk Management

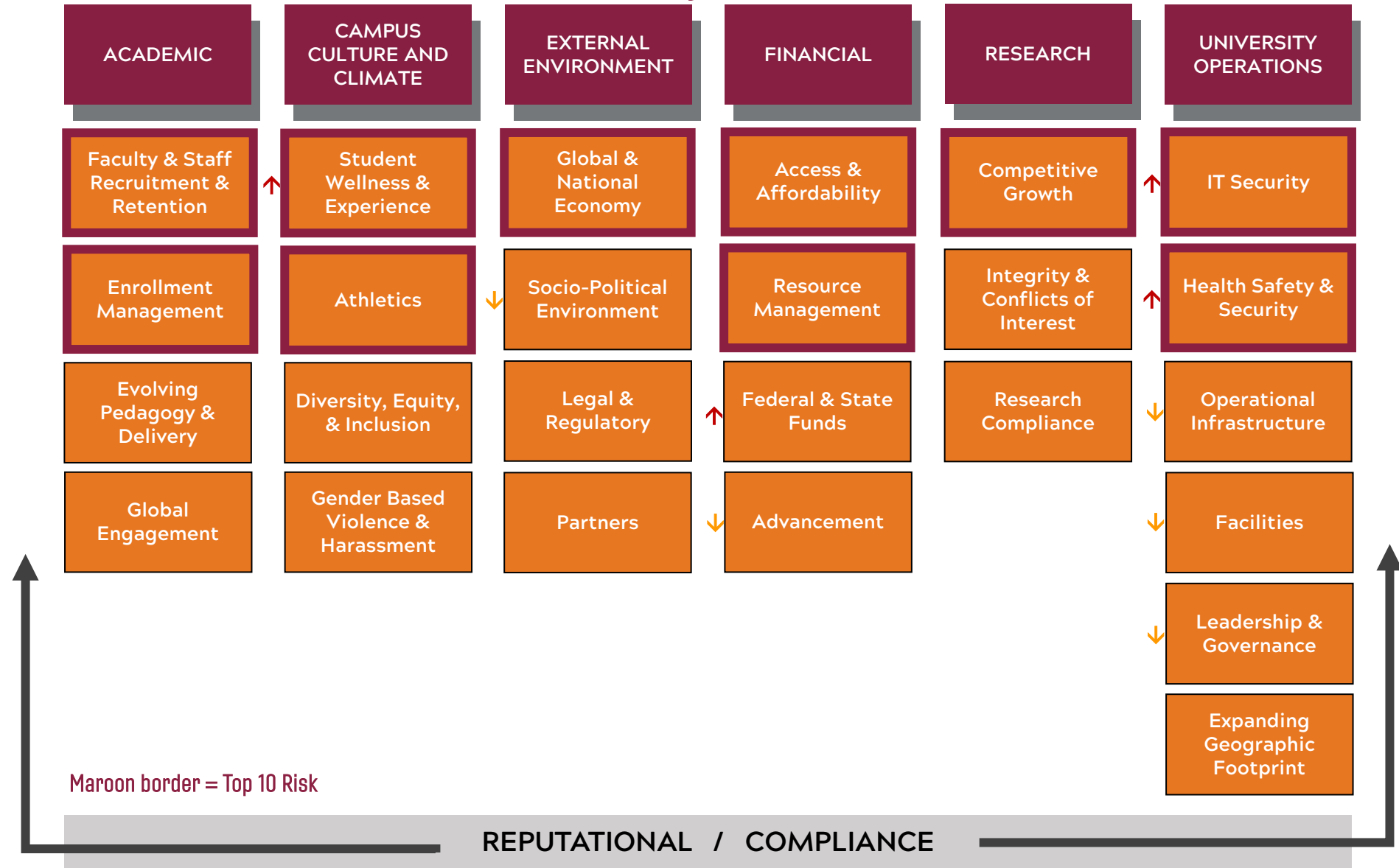
The ERM process, a key tool in setting strategic goals across the enterprise, is designed to:

- **identify potential events** that may affect the university,
- **manage those risks** within the university's risk tolerance,  
and
- **support the achievement of Virginia Tech's mission and objectives.**



# Enterprise Risk Landscape

May 2022



# External Assessment Identified Opportunities

In Fall 2021, OARC conducted a scheduled external quality assurance review which included an assessment of all three programs under OARC's purview: internal audit, enterprise risk management, and institutional compliance. Conducted by Baker Tilly with the assistance of three peer reviewers from Duke and Ohio State, the reviewers provided opportunities for Virginia Tech to enhance its three programs. Specifically, for the enterprise risk management program they stated:

1. Continue to connect risks to University strategy and priorities.
2. Move beyond risk identification and discussion to more robust mitigation.
3. Elevate cross-unit risks.
4. Continually elevate the University's risk profile and approach with a focus on high velocity risks.
5. Ensure ERM program capacity for expanded approach.
6. Implement executive champions.



# QUESTIONS?





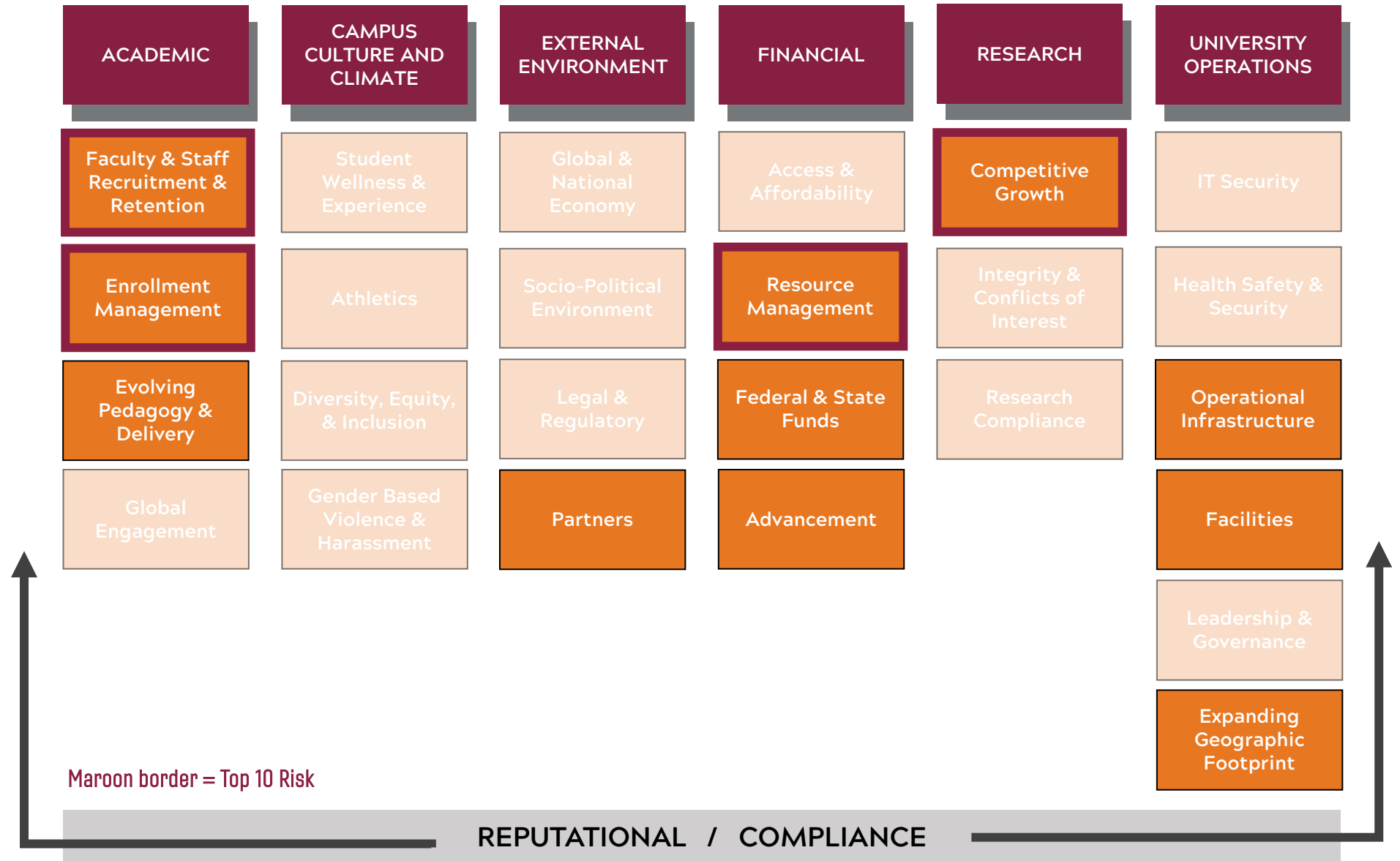
# Appendix

# Mapping of ERM to the 3 Academic Priorities

**Innovation  
Campus**

**Health, Science,  
Technology**

**Integrated  
Security**





# Mapping of ERM to the 5 Strategic Priorities

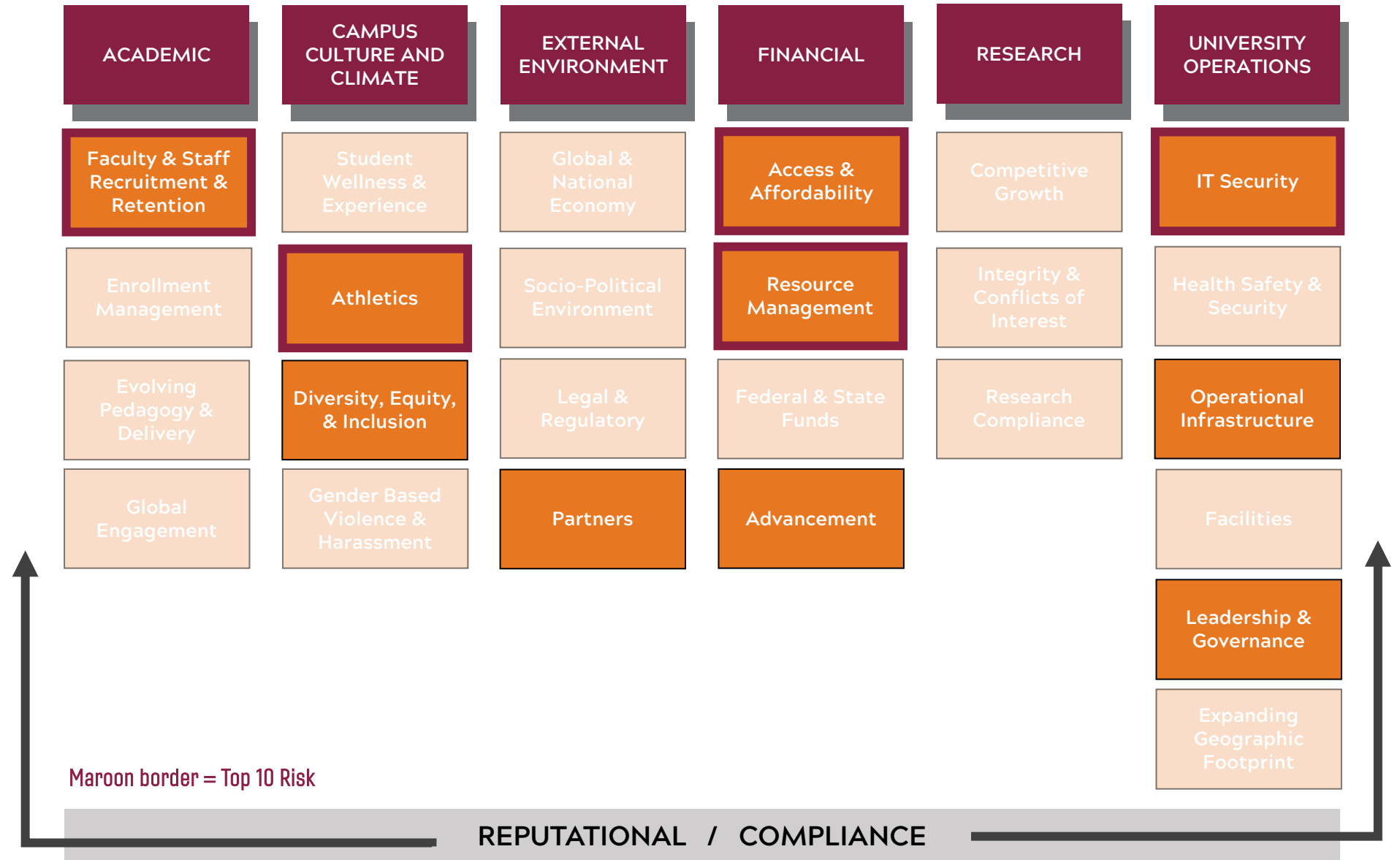
Access & Affordability

Advancement

Athletics

Human Resources

Information Technology



# RISK AREA – COMMITTEE ALIGNMENT

## ***Academic, Research, and Student Affairs***

- Access & Affordability \*
- Competitive Growth \*
- Diversity, Equity & Inclusion
- Enrollment Management \*
- Evolving Pedagogy & Delivery
- Faculty & Staff Recruitment & Retention \*
- Global Engagement
- Integrity & Conflicts of Interest
- Research Compliance
- Student Wellness & Experience \*

## ***Buildings and Grounds***

- Facilities
- Health Safety & Security \*

## ***Board Level***

- Expanding Geographic Footprint
- Leadership & Governance
- Partners

## ***Compliance, Audit, and Risk***

- Gender Based Violence & Harassment
- Health Safety & Security \*
- Legal & Regulatory
- Socio-Political Environment

## ***Finance and Resource Management***

- Access & Affordability \*
- Advancement
- Competitive Growth \*
- Global & National Economy \*
- Federal & State Funds
- Resource Management \*

## ***Governance and Administration***

- Athletics \*
- Faculty & Staff Recruitment & Retention \*
- IT Security \*
- Operational Infrastructure

Note: \* indicates a Top Ten enterprise risk

# ERM Top 10 Risks – Owners & BOV Alignment

Risk Area	Risk Statement	
	Owner(s)	BOV Committee(s)
1 - Access & Affordability	Enhance ongoing resource availability and support for educational access and affordability	
	Kiwus; Miller; Clarke	Academic, Research, and Student Affairs + Finance and Resource Management
2 - Global & National Economy	Guide the university's response to external economic factors impacting its mission	
	Sands; Kiwus	Finance and Resource Management
3 - IT Security & Operations	Address the complexities of operating and securing the hybrid model of centralized and decentralize academic, research, and administrative computing	
	Pinkney; Midkiff	Governance and Administration
4 - Health Safety & Security	The university faces potential risk exposure from internal and/or external threats and hazards to campus health, safety, and security	
	Kiwus; Belshe	Buildings and Grounds + Compliance, Audit, and Risk
5 - Research: Competitive Growth	Grow and diversify the research portfolio by prioritizing strengths and focusing on emerging areas	
	Sui; Clarke	Academic, Research, and Student Affairs + Finance and Resource Management

# ERM Top 10 Risks – Owners & BOV Alignment

Risk Area	Risk Statement	
	Owner(s)	BOV Committee(s)
6 - Faculty & Staff Recruitment & Retention	Recruit, develop, and retain high-performing and diverse talent in support of strategic goals and priorities	
	Garey; Clarke; Finney	Academic, Research, and Student Affairs + Governance and Administration
7 - Resource Management	Effectively allocate available university personnel, finances, and space in alignment with strategic goals	
	Kiwus; Miller; Clarke	Finance and Resource Management
8 - Student Wellness & Experience	Support student wellbeing, including their social, mental, physical, and emotional health, throughout their academic experience	
	Clarke; Keene	Academic, Research, and Student Affairs
9 - Enrollment Management	Develop student recruitment, retention, academic support, and financial aid strategies to achieve growth and diversity goals	
	Clarke; Havens Gerardo	Academic, Research, and Student Affairs
10 - Athletics	Navigate the highly visible and complex environment of intercollegiate athletics	
	Babcock	Governance and Administration