

Committee Meeting Minutes

ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE

Duck Pond Room

Inn at Virginia Tech

November 6, 2017

Committee Members Present

Debbie Petrine, chair, Tish Long, Brett Netto (graduate student representative), Chris Peterson, Hans Robinson (faculty representative), Wayne Robinson.

Board Members Present:

CT Hill, Robert Mills, Seyi Olusina (undergraduate student representative), Mike Quillen, Dennis Treacy.

Guests:

Yolanda Avent, Kris Bush, David Clubb, Karen DePauw, Stefan Duma, Jack Finney, Christopher Flynn, Mike Friedlander, Rachel Gabriele, Luisa Havens Gerardo, Cathy Grimes, Brian Grove, David Guerin, Kay Heidbreder, Amy Hogan, Michael Justice, Francis Keene, Paul Knox, Sharon Kurek, Peggy Layne, Theresa Mayer, Heidi McCoy, Hud McClanahan, Sally Morton, Emma Powers, Menah Pratt-Clarke, Tim Sands, Karen Eley Sanders, Natasha Smith, Robert Sumichrast, Judy Taylor, Tracy Vosburgh, Sherwood Wilson, Paul Winistorfer, Chris Wise, Chris Yianilos.

OPEN SESSION

1. **Welcome.** Debbie Petrine, chair of the committee, welcomed board members and guests and recognized the service of Dr. Thanassis Rikakis, outgoing executive vice president and provost. She introduced Cyril Clarke as the interim executive vice president and provost.
2. **Closed Session report.** Petrine shared action items from the committee's Closed Session. The committee unanimously approved the consent agenda that included six appointments to Emeritus/Emerita status, four appointments to endowed chair, professorship, or fellowship, and one faculty research request. The committee unanimously approved the National Distinction faculty salary adjustments and unanimously ratified the Faculty Personnel Changes Report.
3. **Consent Agenda.** The chair recognized the attendance of faculty engaged in the development of the Bachelor of Science in Public Health degree, and the provost thanked them for their efforts on the development of the degree. The committee considered for approval the items on the Consent Agenda.

- A. Approval of September 10, 2017 Committee Minutes
- B. Resolution and Reports
 - i. Undergraduate Academic Affairs
 - a. Resolution to Approve New Degree, Bachelor of Science in Public Health
 - ii. Pratt Fund Program and Expenditures Report
 - iii. Exclusion of Certain Officers/Directors

The committee unanimously approved the Consent Agenda items.

4. Committee Discussion.

- A. Resolution to Approve Integration of the Virginia Tech Carilion School of Medicine.** All members of the Board of Visitors received information on the Virginia Tech Carilion School of Medicine (VTCSOM) during the full-board Information Session held on November 5, 2017. This resolution was also shared with the Finance and Resource Management Committee of the board.

Petrine recognized work by many to bring VTCSOM to this point of approval and thanked them for all their hard work and a phenomenal collective effort. Quillen echoed her comments. No additional comments from the committee.

The committee unanimously approved the resolution and will take it to the full board for approval.

- B. Student Affairs: Impact of Enrollments.** Patty Perillo, vice president for student affairs, shared information with the committee regarding the impact of enrollments on dining, housing, residence life, health and wellness, and student service centers. Perillo introduced key members of her team, and emphasized that, along with university partners, the Division of Student Affairs is committed to effecting change while working with the resources available during the growth period of enrollment. Perillo provided an overview of the mid-to-long term development of infrastructure to meet enrollment growth needs, while also discussing the challenges and short term actions to address growth. Those challenges include workforce needs for dining facilities, and managing the demand for seating in dining halls. Perillo is working closely with Enrollment Management to help manage ongoing needs and projections for growth to assure students continue to have a positive experience. Perillo also addressed potential effects of enrollment growth in the short term including impacts on living learning communities, health and wellness, and recreational sports. Perillo highlighted the additional facilities and services that will come available in the next 3-5 years to meet many of these concerns.
- C. College Update: College of Liberal Arts and Human Sciences.** Dean Rosemary Blieszner provided the committee with an overview of the college.

She highlighted the core strategic strengths of the college, and cited three specific examples of students and faculty at VT who are integrating and connecting many of the core strengths of the college to the university strengths and priorities. Blieszner described the development of minors or courses by faculty to emphasize/advance creativity and innovation (specifically to the objective of the C&I DA). Blieszner closed by noting that the former performing arts building is under renovation and will become headquarters of college and new Center for Humanities (hopefully by beginning of next academic year).

- D. Research Report.** Theresa Mayer, vice president for research and innovation, shared information with the committee from her presentation in the Finance and Resource Management Committee. Mayer shared with the committee the dramatic growth in extramural funding in the last decade, as well as Virginia Tech's well-diversified portfolio of federal funding sources. Mayer also noted the increase in industry-funded research. She then provided a different perspective on our ranking of research expenditures to illustrate potential growth through the integration with the VTCSOM. She also highlighted the opportunity Virginia Tech has to develop research as we enter into a growth phase.
- E. Partnership for an Incentive-Based Budget (PIBB).** Jeff Earley, associate vice provost for finance, provided an overview of the characteristics of the partnership for incentive-based budget (PIBB) model, describing its elements and process, and the supporting elements (including shared data and potential for modifications) that will make the model successful. Earley talked about how the PIBB model provides more transparency in budgeting process and is intended to be comprehensive and a partnership between Provost Office and colleges. Earley described the model as highly adaptable, allowing for changes in shared goals. The Provost Office will meet with unit heads semi-annually to review progress/goals and determine if modification are needed. PIBB can be adapted to react to changing environment or unit goals/expectations.
- F. Council of College Deans.** Robert Sumichrast, dean of the Pamplin College of Business, and representative to the committee from the Council of College Deans provided an update to the committee from the perspective of the college deans. Sumichrast thanked the committee for including the deans in these discussions and decisions. He expressed confidence in and support for Cyril Clarke as interim EVP and Provost on behalf of the deans. Regarding PIBB, Sumichrast said it's not the only funding factor within the colleges, but includes philanthropy, external grant funding, etc. PIBB creates/supports incentives of both the university and the individual colleges. Complexity and data-heavy qualities of PIBB can make it harder to communicate the benefits of PIBB and create anxiety about funding support in areas that do not fit in the universal PIBB model. It's a new and exciting model and VT can actually become a model for other universities.

- 5. Provost Report.** Interim Provost Clarke described three areas where he plans to dedicate most of his time during his tenure in the role: Destination Areas/Strategic Growth Areas, Partnership for Incentive-Based Budget (PIBB) and promotion and tenure. He will be seeking engagement/feedback from colleagues regarding concerns, complexity, and direction related to these areas. He believes these are the way VT moves forward, but timing and priority of each may need to be re-evaluated for strategic importance and sustainability. He will continue to engage in conversations with faculty senate, department heads, and deans to discuss P&T issues. He also highlighted the fundamental need to include inclusion and diversity in all of these discussions.
- 6. Other Items.** Petrine asked members of the committee for agenda items for the March meeting of the committee and to send those to her promptly to accommodate deadline schedules.

Petrine thanked staff and presenters for being flexible and providing excellent discussion and information.



Strategic Strengths of the College of Liberal Arts and Human Sciences

The Breadth of the Liberal Arts



“Technology alone is not enough. It’s technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing.” –*Steve Jobs*

Humanities

ASPECT · English · Modern and
Classical Languages and Literatures ·
History · Philosophy ·
Religion and Culture

Performing Arts

Music · Theatre · Cinema

Leadership

Air Force ROTC ·
Army ROTC · Naval ROTC

Social and Human Sciences

Apparel, Housing, and Resource
Management · Communication ·
Education · Human Development and
Family Science · Political Science ·
Science, Technology, and Society ·
Sociology

Mission



Recognizing that technology alone is never a solution and that innovation is a fundamentally human achievement, the **College of Liberal Arts and Human Sciences** prepares students to bring perspectives from the arts, humanities, and social sciences to achieve meaningful solutions to complex human problems.

Key Areas of Strategic Strength



- The Individual in Society
- Humanities, Science, and Technology
- Diversity and Social Justice
- Humans and Their Environments
- Policy and People
- Narrating the Human Experience
- Human-Centered Approaches to Security

The Arts



Ariana Wyatt combines
opera and gaming
technology to inspire
undergraduate learning

The Individual in Society

Diversity and Social Justice

Narrating the Human Experience

Humanities

Sylvester Johnson infuses
technology with insights
from the humanities

Policy and People

Humans and Their Environments

Narrating the Human Experience

The Individual in Society

Diversity and Social Justice

Humanities, Science, and Technology

Social Sciences



Sonja Schmid is developing an education program for responders to nuclear disasters

Diversity and Social Justice

Policy and People

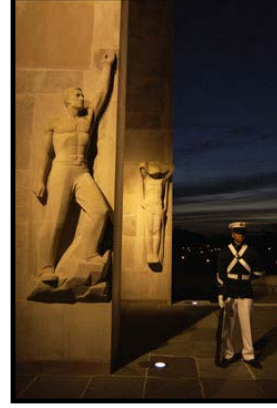
Humanities, Science, and Technology

Humans and Their Environments

Human-Centered Approaches to Security

The Individual in Society

Impact of Increased Enrollment on the Division of Student Affairs



Patty Perillo, Ph.D.
Vice President for Student Affairs

Board of Visitors
November 6, 2017

Division of Student Affairs Departments

- Cook Counseling Center
- Corps of Cadets
- Cranwell International Center
- Cultural and Community Centers
- Dean of Students
- Dining Services
- Family and Alumni Relations
- Fraternity and Sorority Life
- Hokie Wellness
- Housing and

- Leadership Education Collaborative
- Learning Partnerships
- New Student Programs
- Recreational Sports
- Schiffert Health Center
- Services for Students with Disabilities
- Student Conduct
- Student Engagement and Campus Life

ADMINISTRATIVE

- Advancement
- Assessment and Professional Development
- Communications
- Finance
- Human Resources
- Information Technology

Undergraduate Student Enrollments

We have experienced a 15.6% increase in enrollments over the past decade and a 10.7% increase over the past four years.

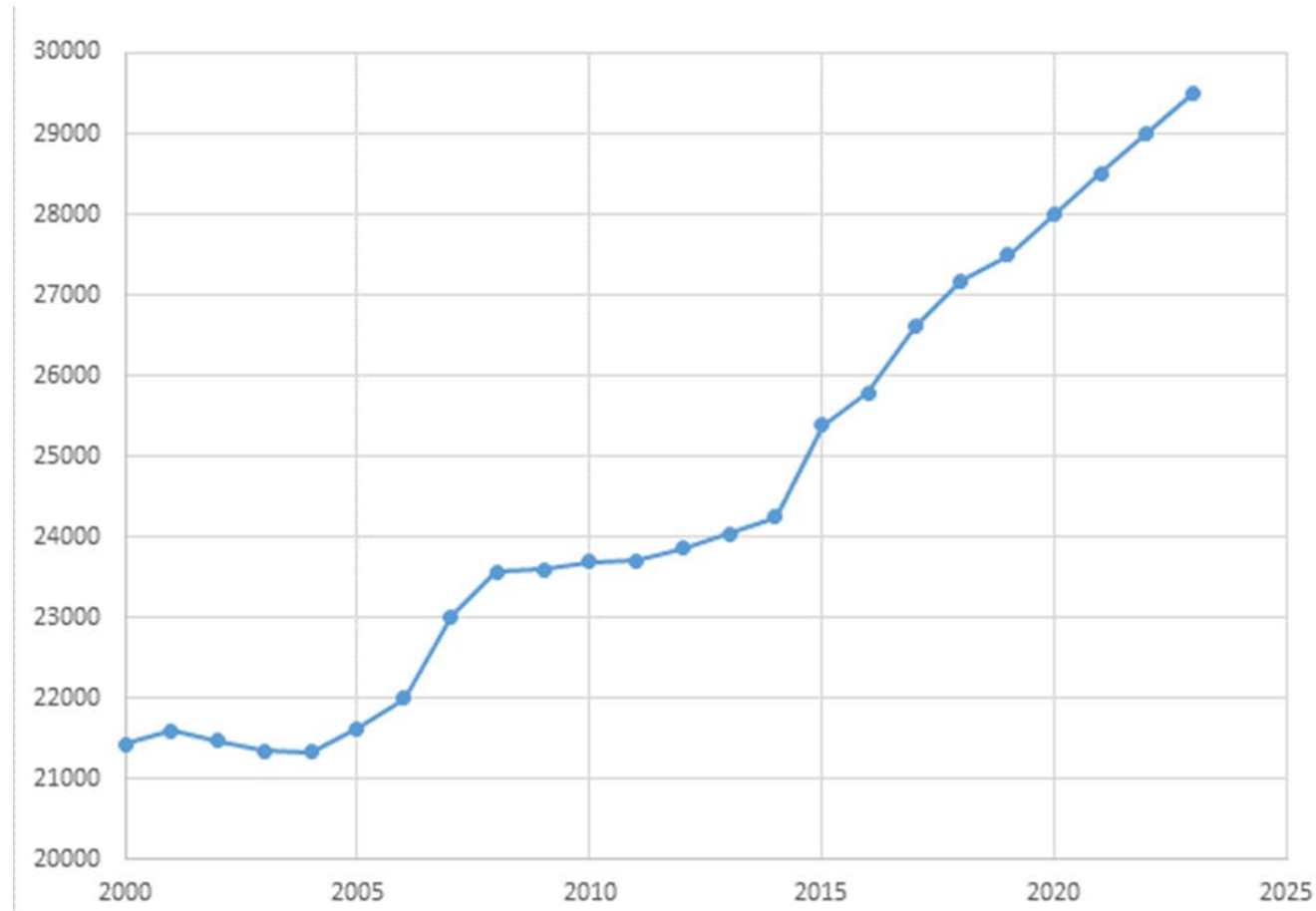
Aspirational Enrollment Projections First-Time Freshmen On-Campus

(presented by Provost Rikakis at September 2017 BOV Meeting)

	2016	2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Total <u>First-Time Freshmen (FTF)</u> (In and Out of State)	Total FTF at census 5,872	Projected: 6265 Actual Post-Census = 6769	6830	6954	7078	7203	7327	7451
Total/ALL Undergrads (+ new transfers, continuing)	Total ALL at census 25,741	27,193	27,500	28,000	28,500	29,000	29,500	30,000

Enrollment History and Future Projections


(source: Virginia Tech Institutional Research, 2017)




Enrollment Planning and Projections – Space

(presented by Provost Rikakis at September 2017 BOV Meeting)

Project	Projected Timeline	Funding Projections
Creativity and Innovation District Living Learning Community	Fall 2020	Capital Project – Auxiliary and Athletics Funded with potential for internal operating lease for School of Visual Arts and School of Performing Arts spaces. Potential location for Student Success Center.
Intelligent Infrastructure for Human-Centered Communities (IIHCC) Complex – Dining Center	Fall 2020	Capital Project – Combination of Private, Auxiliary, and E&G Funded
Global Business and Analytics Complex Living Learning Community	Fall 2022	Capital Project – State and Philanthropy Funded
War Memorial Hall Renovation	Spring 2022	Auxiliary Funded with E&G Lease for School of Education



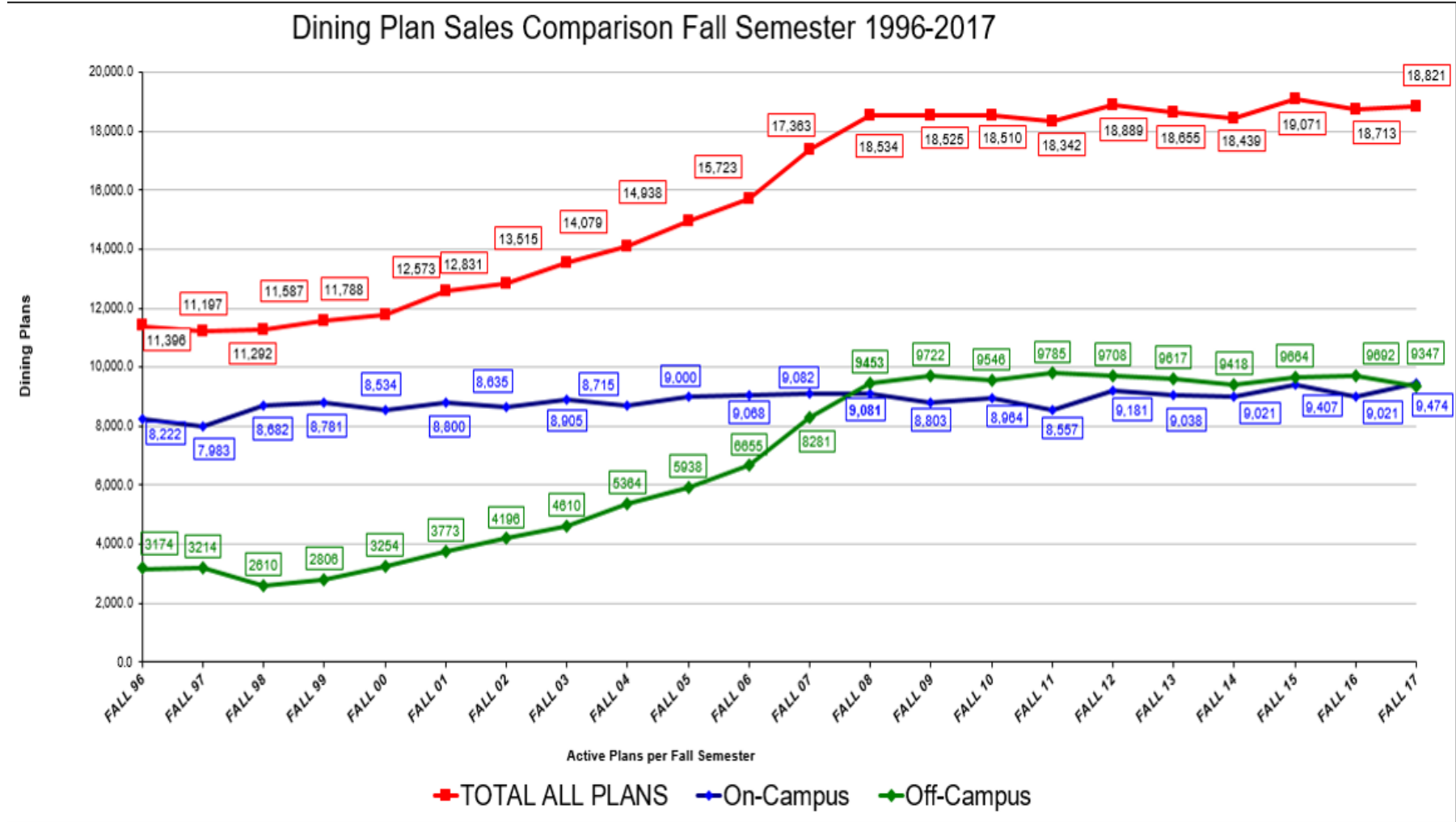
Given increased enrollments over the last decade, and a vision to grow enrollments over the next five years, there is a gap between where we are now and where we will be in five years with new residence halls, dining center, community spaces and health and wellness enhancements. In order to maintain the extraordinary student experience promised to all, we are filling the current gap.



DINING AND HOUSING



Dining Sales Plan 1996-2017



Housing and Residence Life

- First Year Student Residential Population
 - 2012-2013: 57.9%
 - 2017-2018: 71.3%
- Slow Down Renovations

HEALTH AND WELLNESS



Cook Counseling Center

Approximately 12% of the student body utilizes counseling; hence, an increase in enrollments means more students seen. And, currently, there is a 2 – 3 week wait for new appointments; students in crisis will be seen immediately.



Schiffert Health Center

Increased needs in:

- Allergy care
- Immunizations
- Cardiology care

Recreational Sports

- Space limitations
- Growth in sports clubs program halted

Services for Students with Disabilities

- Turnaround time of intake to accommodation set up increased from 3 to 10 days
- Increased requests for:
 - Special housing accommodations
 - Legal / illegal Service Animals or Emotional Support Animals

STUDENT CENTERS



Squires Student Center

Squires Traffic for entire year

FY16

FY17

1,028,219

1,125,117

96,898 +

Cultural and Community Centers

Increased diversity means a greater need for social and academic support for students. These programs include mentoring opportunities, networking, cultural programs, and academic support. There is a need for more space for current and future centers, as well as increased staffing needs.

QUESTIONS, COMMENTS?



The Virginia Tech Research Enterprise: a Financial Perspective

Board of Visitors
November 6, 2017

Why does research support matter?



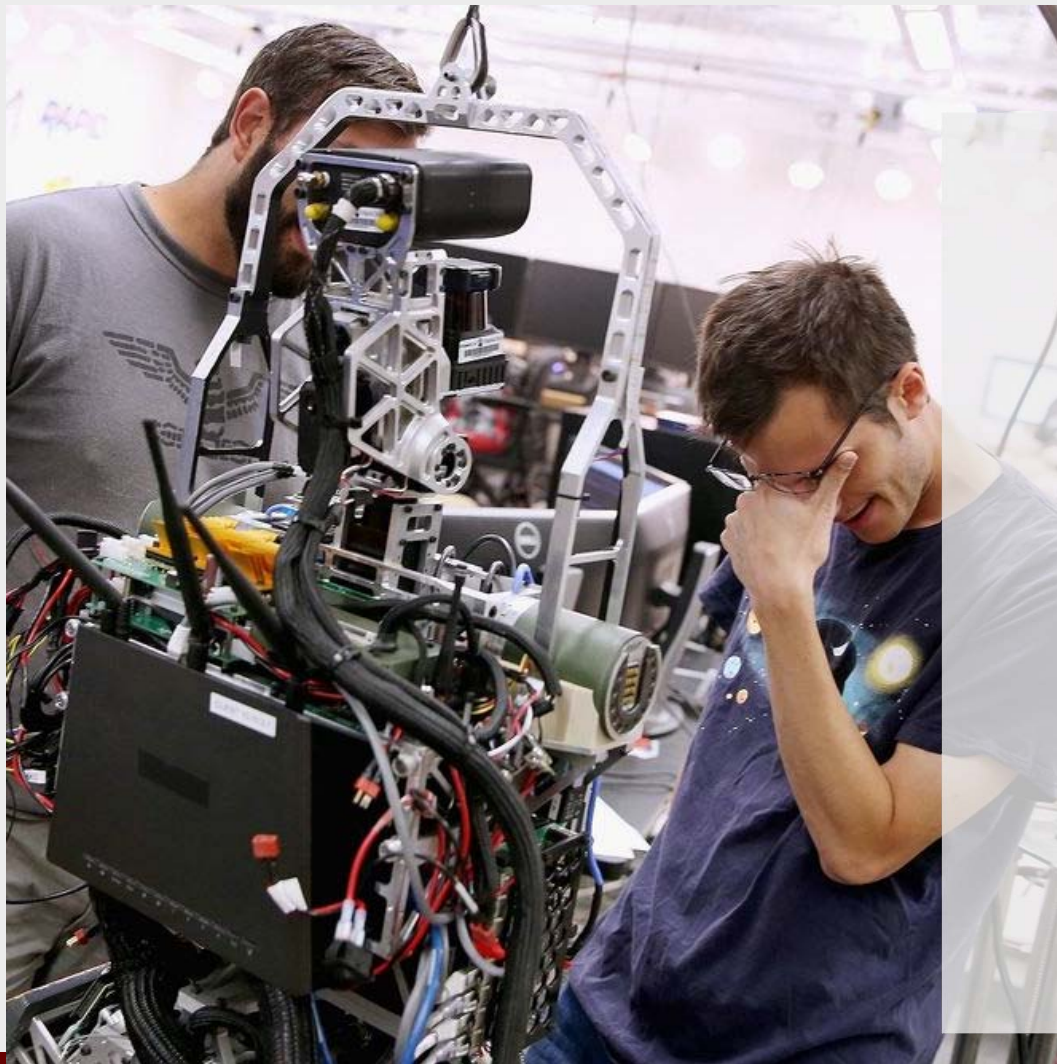
- Explore topics of human, market, social relevance
- Advance knowledge creation
- Stay on the cutting edge
- Serve national and global interests



- Collaborate as a community
- Work alongside faculty, undergrads, and graduates
- Serve private and public sector partners
- Create experiential learning



- Deliver solutions to greatest challenges
- Disseminate knowledge
- Support the community
- Promote informed culture and policy change
- Commercialize discoveries
- Build the brand



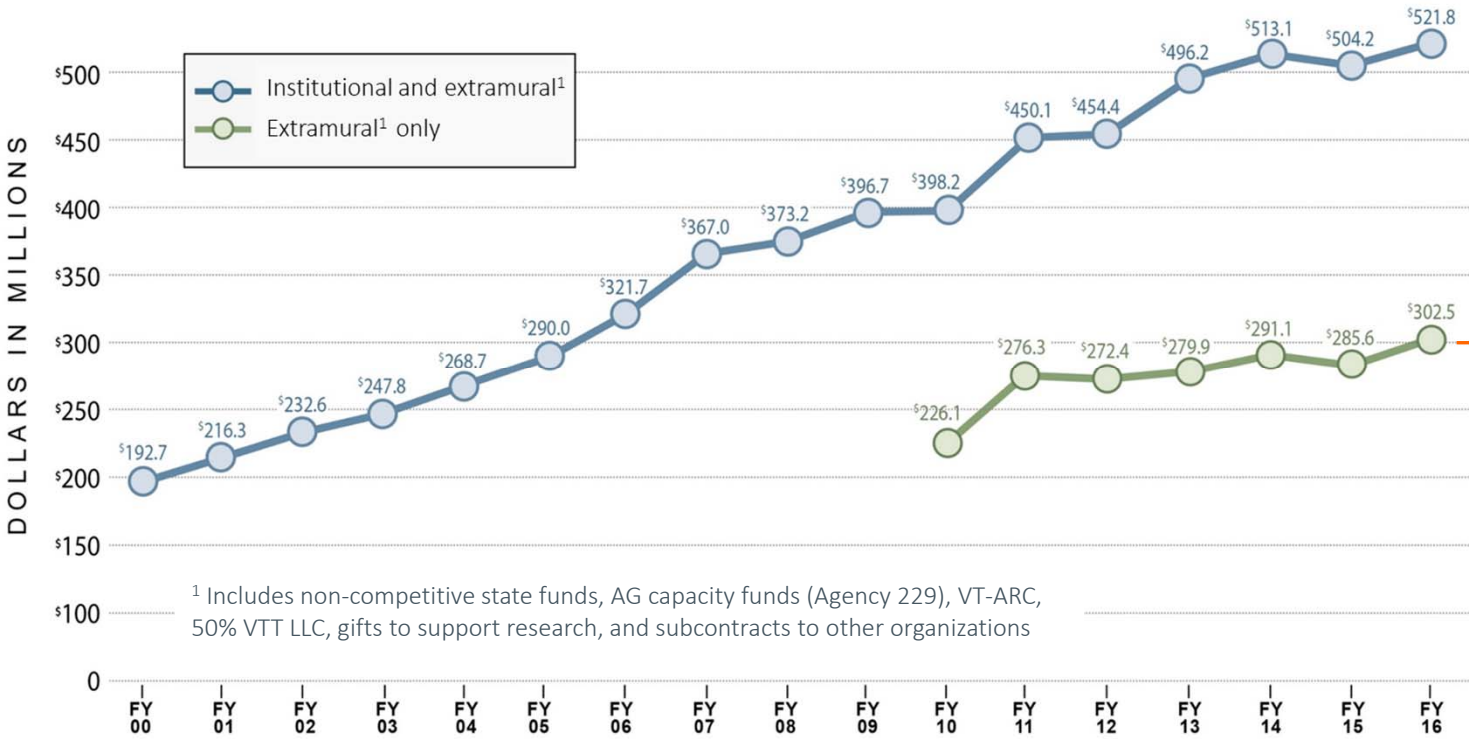
Virginia Tech's contributions to science and technology are a critical and prominent element of our culture. They support the very fabric of who we are and where we hope to go.

In STEM-H disciplines, a strong correlation exists between competitive external funding and other measures of success, including:

- scholarly journal articles
- advisory boards
- relevance to society
- fundamental discoveries
- transformative change in industry

Where we are: NSF-reported research expenditures

Over the last 10 years, Virginia Tech has sustained strong growth in total R&D expenditures as reported in the NSF Higher Education R&D (NSF HERD) survey, allowing us to deliver game-changing ideas and technologies.

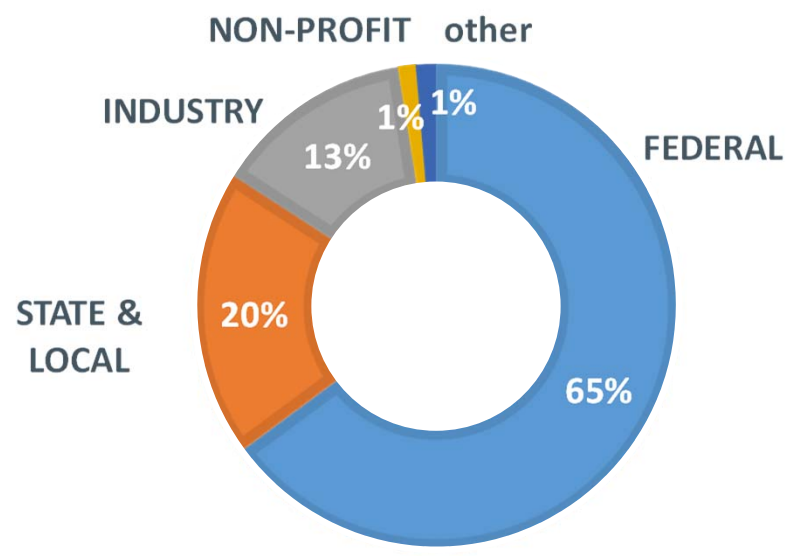


¹ Includes non-competitive state funds, AG capacity funds (Agency 229), VT-ARC, 50% VTT LLC, gifts to support research, and subcontracts to other organizations

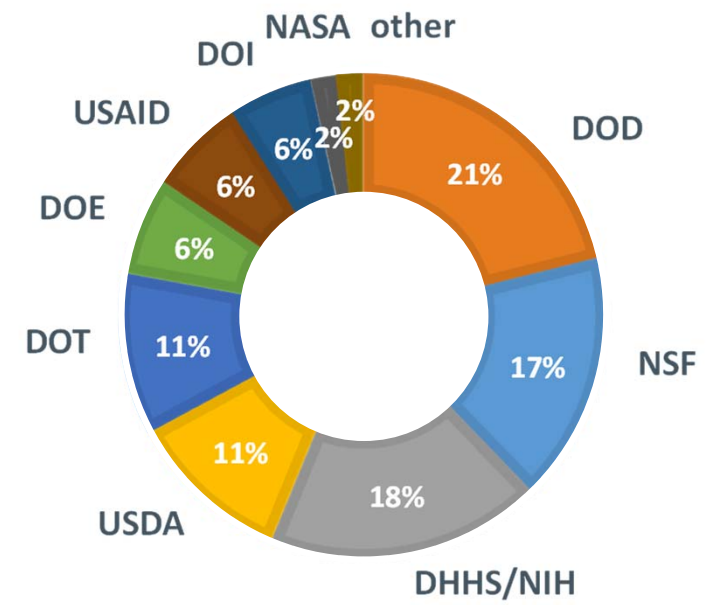
FY 16

FY 16

● Extramural total*: \$302.5M



Federal only*: \$195.6M



*Includes non-competitive state funds, AG capacity funds (Agency 229), VT-ARC, 50% VTT LLC, gifts to support research, and subcontracts to other organizations

What does external funding support?

For every*

\$1.00

in Modified Total Direct Costs (MTDC) spent at Virginia Tech

Virginia Tech is reimbursed up to

\$0.61

in Facilities and Administrative (F&A) costs

In FY 16, externally sponsored research expenditures totaled \$249.1 M – excluding non-competitive state funds, Agency 229, VT-ARC, and VTT LLC:

\$194.5 M

Total Direct Costs

\$54.6 M

F&A Costs

= \$ 151.2 M (MTDC) + \$ 43.3 M (excluded DC's)

*not all grants carry the full capped F&A rate of 61% (e.g., USDA); the uncapped F&A rate on DOD contracts is 65%

The university research enterprise

The NSF Higher Education Research & Development (HERD) survey displays 30+ data sets to account for differences in university research portfolios. The university research enterprise is often viewed by expenditures in three common pillars: non-medical academic colleges, academic medical college/school, and affiliated thematic research units. Research-intensive universities typically have at least two of the three.



Academic Colleges
(Non-Medical)



Academic Medical
Schools



Affiliated Thematic
Research Units



FY 15*

NSF HERD: a different view

Virginia Tech is #22 when ranked by all non-medical school R&D expenditures for FY 2015.

The total R&D expenditures in this table include all external funding (competitive and non-competitive) and institutional support.

Rank	Institution	Non-Medical	Medical	Total
1	Johns Hopkins U. ^a	1,679,859	625,820	2,305,679
2	Massachusetts Institute of Technology	930,719	0	930,719
3	U. Texas, M. D. Anderson Cancer Center	833,406	0	833,406
4	Texas A&M, Health Science Center	814,620	52,058	866,678
5	U. Michigan, Ann Arbor	805,834	563,444	1,369,278
6	U. California, Berkeley	788,505	0	788,505
7	Harvard U.	776,420	237,333	1,013,753
8	Georgia Institute of Technology	765,370	0	765,370
9	U. Wisconsin-Madison	763,051	306,026	1,069,077
10	Penn State, Hershey Medical Center	698,465	92,566	791,031
11	U. Texas, Austin	646,273	4,335	650,608
12	U. Washington, Seattle	645,304	535,259	1,180,563
13	U. Illinois, Urbana-Champaign	639,817	0	639,817
14	U. Minnesota, Twin Cities	635,400	245,218	880,618
15	Cornell U.	599,566	354,846	954,412
16	U. California, San Diego	561,519	539,947	1,101,466
17	Purdue U., West Lafayette	558,611	0	558,611
18	U. California, Davis	554,564	166,513	721,077
19	Rutgers, New Jersey, New Brunswick	509,678	118,935	628,613
20	U. Maryland, College Park	505,699	0	505,699
21	Michigan State U.	505,654	52,594	558,248
22	Virginia Tech	504,282	0	504,282
23	Ohio State U.	479,769	338,112	817,881
24	U. California, Los Angeles	472,843	548,384	1,021,227
25	North Carolina State U.	468,293	0	468,293

*FY 16 HERD will be released in Nov 17

What are affiliated thematic research units?

def • i • ni • tion

Affiliated Thematic Research Units are research institutes or centers in a university that conduct focused research and development in areas of strategic importance to the state and the nation. These units maintain essential "core" capabilities; support long-term strategic relationships with critical sponsors; operate in the public interest, free from real or perceived conflicts of interest; and drive economic development. Integration with the academic colleges expands the resources available to both, resulting in a stronger university research enterprise.

FY 15*

NSF HERD: a different view

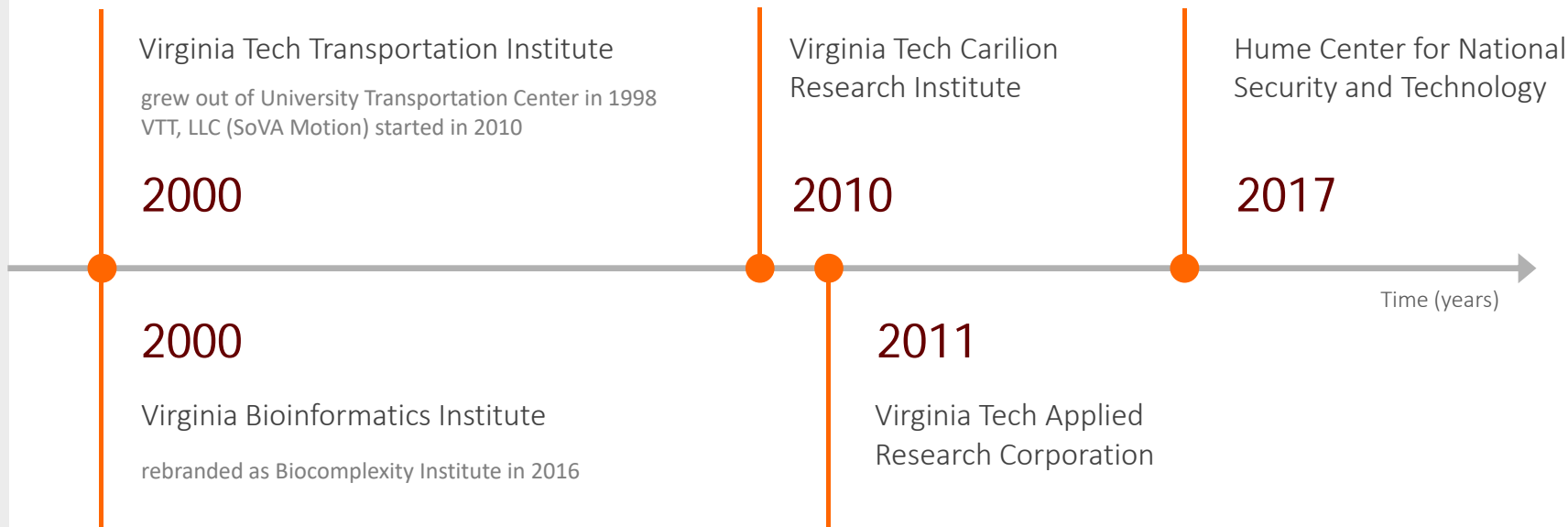
Universities with affiliated research units receive sole source funding, which positions them for larger competitive S&T funding.

- Hopkins: Applied Physics Lab
- MIT: Institute for Soldier Nanotechnologies
- Georgia Tech: GT Research Institute
- UT Austin: Applied Research Lab
- Penn State: Applied Research Lab
- U Michigan: UM Transportation Research Institute

Rank	Institution	Non-Medical	Medical	Total
1	Johns Hopkins U. - \$1.38B	1,679,859	625,820	2,305,679
2	Massachusetts Institute of Technology	930,719	0	930,719
3	U. Texas, M. D. Anderson Cancer Center	833,406	0	833,406
4	Texas A&M, Health Science Center	814,620	52,058	866,678
5	U. Michigan, Ann Arbor	805,834	563,444	1,369,278
6	U. California, Berkeley	788,505	0	788,505
7	Harvard U.	776,420	237,333	1,013,753
8	Georgia Institute of Technology - \$367M	765,370	0	765,370
9	U. Wisconsin-Madison	763,051	306,026	1,069,077
10	Penn State, Hershey Medical - \$198M	698,465	92,566	791,031
11	U. Texas, Austin	646,273	4,335	650,608
12	U. Washington, Seattle	645,304	535,259	1,180,563
13	U. Illinois, Urbana-Champaign	639,817	0	639,817
14	U. Minnesota, Twin Cities	635,400	245,218	880,618
15	Cornell U.	599,566	354,846	954,412
16	U. California, San Diego	561,519	539,947	1,101,466
17	Purdue U., West Lafayette	558,611	0	558,611
18	U. California, Davis	554,564	166,513	721,077
19	Rutgers, New Jersey, New Brunswick	509,678	118,935	628,613
20	U. Maryland, College Park	505,699	0	505,699
21	Michigan State U.	505,654	52,594	558,248
22	Virginia Tech	504,282	0	504,282
23	Ohio State U.	479,769	338,112	817,881
24	U. California, Los Angeles	472,843	548,384	1,021,227
25	North Carolina State U.	468,293	0	468,293

Changing landscape: thematic research institutes

The **Affiliated Thematic Research Institutes and Centers** provide a framework to maintain essential research, development and engineering “core” capabilities and long-term strategic relationships with critical sponsors. Institute researchers are largely funded through competitive external grants and contracts. College faculty and students participate on many of the external research programs managed by these institutes and centers.



*VTCRI director reports to the Provost



Exemplar

Not by accident:

VTTI is now the largest transportation research institute in the country

“It’s been more than 25 years since VTTI was founded. Then, ... 15 employees. Today, we stand at more than 475 employees, house the largest group of driving safety researchers in the world, sponsored research expenditures of more than \$36 million annually, have an infrastructure of more than \$110M, and support 140 students who are gaining a leading research experience.”

Virginia Tech's changing landscape

Over the past 15 years, changes in our organizational design has resulted in an evolving assembly of research capabilities, strengths, and opportunities

2003

College of Arts and Sciences is splits

College of Liberal Arts and Human Sciences

ASPECT - alliance for social, political, ethical, and cultural thought*
apparel, housing, resource management
communications
english
history
human development and family science*
philosophy

political science
religion and culture
science, technology and society
sociology
education
performing arts
ROTC

College of Science

academy of integrated science
biochemistry
biological sciences*
chemistry*
computational modeling and data analytics
economics*
geosciences*
mathematics*

microbiology
nanoscience
neuroscience
physics*
psychology*
statistics*
systems biology

+ participation in 15 Interdisciplinary Graduate Education Programs (IGEP's)

*offers Ph.D. degree



9th college to open in 2018:

The Virginia Tech Carilion School of Medicine will become a college within Virginia Tech a decade after its creation by a private-public partnership

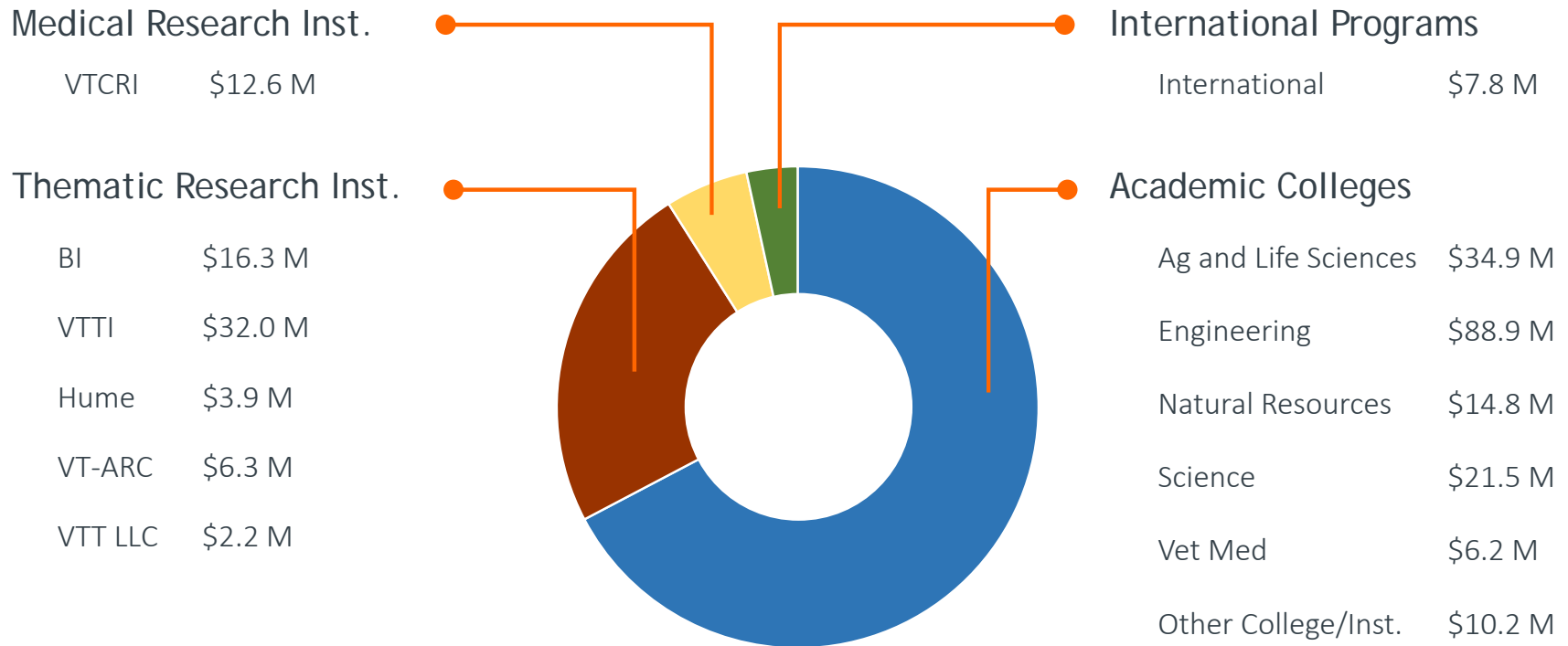
Changing landscape: academic research institutes

The **Interdisciplinary Academic Research Institutes** provide institutional support to faculty to organize and focus strategic research, education, and outreach efforts around cross-cutting societal problems rather than traditional disciplines. The institutes provide a framework to support interdisciplinary faculty collaboration and communication, which ranges from funding to seed new interdisciplinary research initiatives to managing state-of-the-art facilities and laboratories.



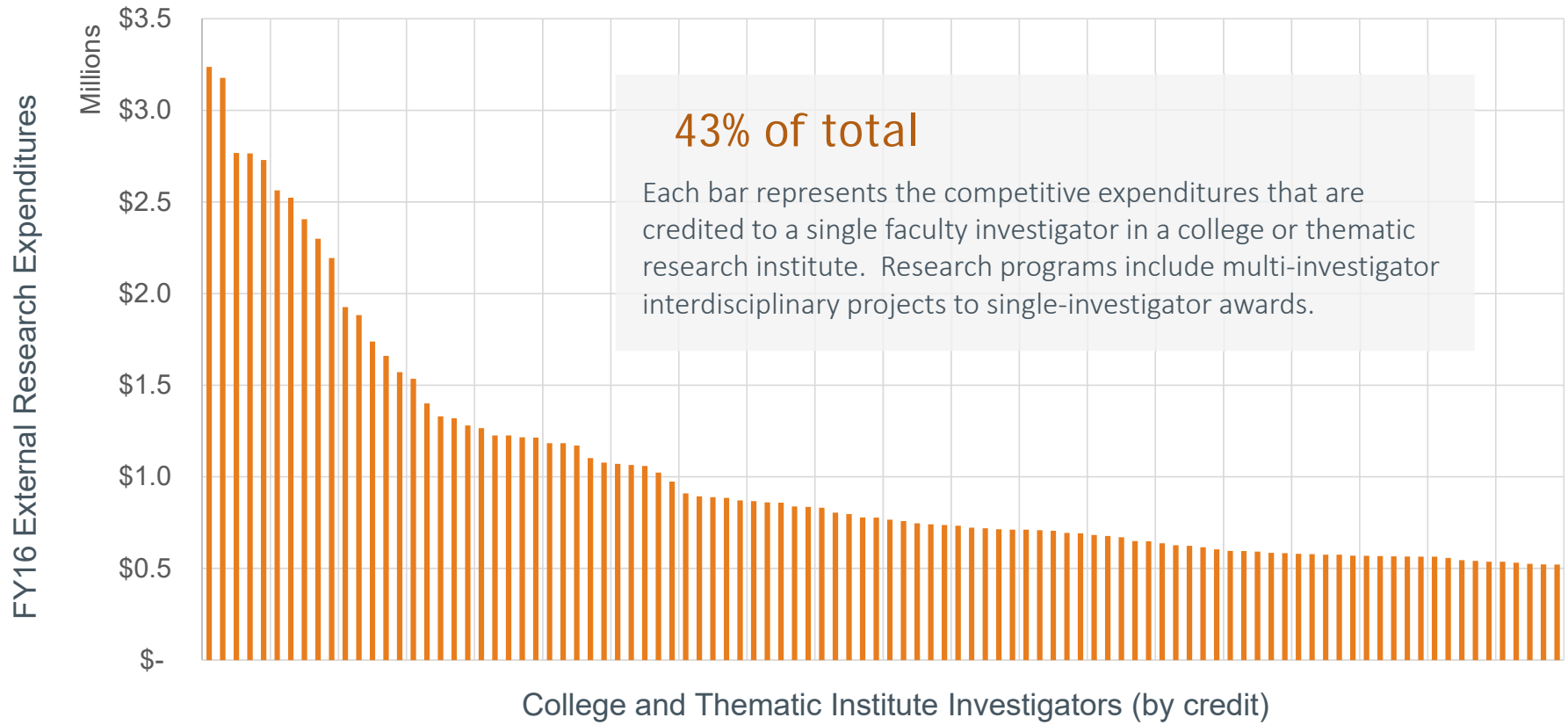
*ICTAS director reports to the Dean of College of Engineering; ICAT director reports to the Provost

External Research Expenditures by Performing Unit



FY 16: excludes non-competitive state funds and Agency 229; includes gifts to support research and subcontracts to other organizations

Planned faculty hires provide excellent opportunity for strategic research growth



Destination Areas

Virginia Tech's approach to addressing complex, multi-disciplinary challenges through Destination Areas provides organizing principles, collaboration models, and investments to uniquely prepare our graduates to succeed.



Virginia Tech is changing the way we respond to complex, global challenges. In the form of Destination Areas, Virginia Tech is addressing technological, market, and societal needs through a multi-disciplinary, systems-of-systems approach designed to overcome traditional boundaries that separate science, technology, engineering, and mathematical fields from the liberal arts. These Destination Areas are providing Virginia Tech students of today the cross-disciplinary classes, experiences, and insights they need to ensure that they are well-positioned to tackle society's biggest challenges of tomorrow.

DESTINATION AREAS

- Adaptive Brain
- Data Analytics and Decision Sciences
- Global Systems Science
- Integrated Security
- Intelligent Infrastructure
for Human Centered Communities





"We are what we repeatedly do.
Excellence, then, is not an act, but a habit."
- Aristotle

Partnership for an Incentive-Based Budget (PIBB)

Jeff Earley
Associate Vice Provost for Finance

Virginia Tech Board of Visitors Meeting
November 6, 2017



Characteristics of PIBB Model

Results-Based

- Budgeting connects to planning
- Budget provides transparent performance incentives

Comprehensive

- Quantity is connected to quality
- Supports diversified outcomes

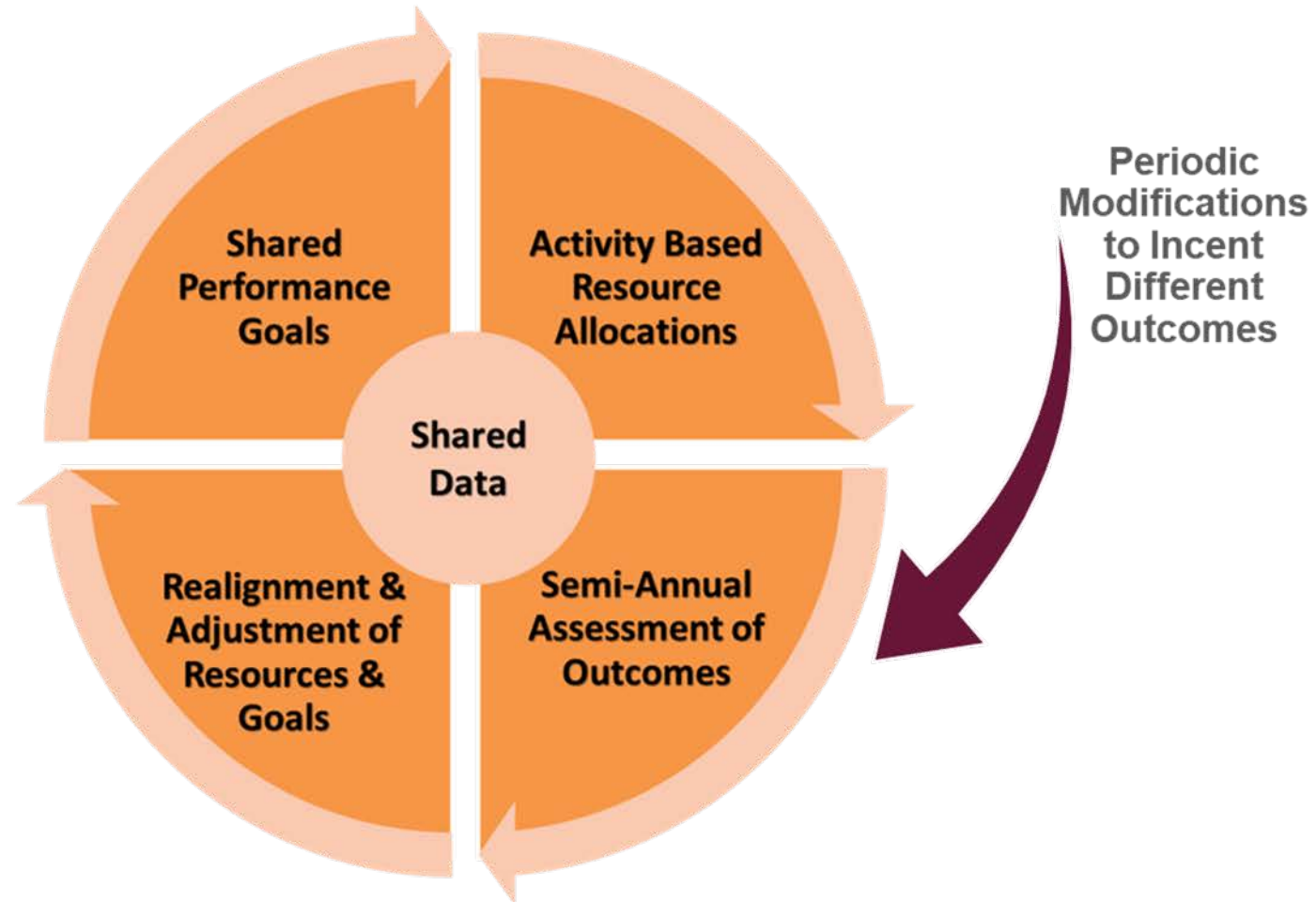
Data-Driven and Informed

- Utilizes extensive and shared decision support system

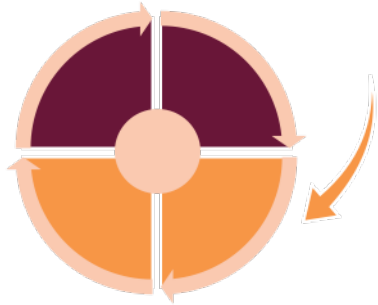
Adaptable

- Allows for continuous calibration and changes to shared goals

PIBB Budget Process



PIBB Budget Development



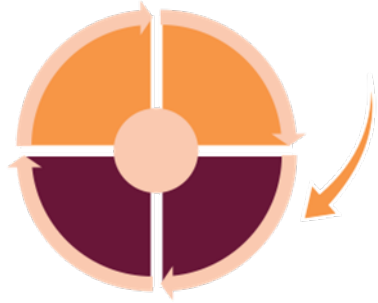
Shared Performance Goals

- Collaborative metrics and goals
- Output-based, quantity metrics
- Outcome-based, quality metrics

Activity-Based Resource Allocations

- Dollar values assigned to metrics
- Allocations based on goal setting

PIBB Budget Implementation



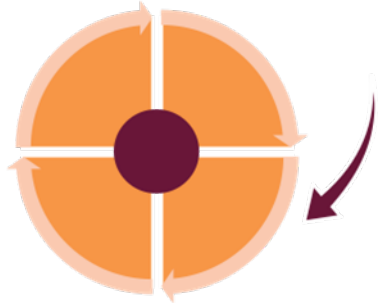
Semi-Annual Assessment of Outcomes

- Student Success Reviews – Fall Summit
- Faculty Success Reviews – Spring Summit

Adjustment of Resources and Goals

- Resource adjustments made during academic year based on performance
- Goal adjustments made during budget development based on revised expectations

PIBB Supporting Elements



Shared Data Environment

- Fosters common understanding of performance
- Supports effective decision-making at all levels of the institution

Periodic Modifications to Incent Different Outcomes

- Countering unproductive behavior
- Addressing “sticky” problems with more precision
- Turning focus towards new directions

THANK YOU

Jeff Earley
Associate Vice Provost for Finance

Virginia Tech Board of Visitors Meeting
November 6, 2017

