

# Virginia Tech Board of Visitors Meeting

## May 31 - June 1, 2015

### Information Session

### Minutes

- A. **Minutes:** Academic Affairs Committee
- B. **Resolution:** Adoption of a New Honor Code for Doctor of Veterinary Medicine Students at the Virginia-Maryland Regional College of Veterinary Medicine
- C. **Resolution:** Approval of the Master of Arts Degree in Data Analysis and Applied Statistics
- D. **Resolution:** Revise Definitions of Sexual Violence and Related Terms in University Policies to Comply with State Legislation and Federal Title IX Regulations
- E. **Minutes:** Buildings and Grounds
- F. **Resolution:** Appointment to the Virginia Tech/Montgomery Regional Airport Authority
- G. **Resolution:** Appointment to the New River Valley Emergency Communications Regional Authority
- H. **Resolution:** Granting an Easement to ATMOS Energy Corporation for Natural Gas Distribution Line
- I. **Resolution:** Approval of the Demolition of University Building 433E
- J. **Minutes:** Finance and Audit Committee
- K. **Resolution:** Approval of the 2015-2016 Faculty Compensation Plan
- L. **Resolution:** Approval of the Year-to-Date Financial Performance Report (July 1, 2014 - March 31, 2015)
- M. **Resolution:** Approval of the 2015-2016 University Budgets: Operating and Capital, Hotel Roanoke Conference Center Commission, and Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences
- N. **Resolution:** Approval of the 2015-2016 Auxiliary Systems Budgets: Dormitory and Dining Hall System, Electric Service System, University Services System, and Intercollegiate Athletics System
- O. **Resolution:** Approval of the 2015-2016 Pratt Fund Budgets Proposal
- P. **Resolution:** Approval to Reappoint University Commissioner to the Hotel Roanoke Conference Center Commission
- Q. **Resolution:** Compliance with Tuition Residency Requirements of the Veteran's Access, Choice, and Accountability Act of 2014
- R. **Resolution:** Approval for Lane Electric Substation Expansion
- S. **Resolution:** Approval to Construct the Health Center Improvements
- T. **Minutes:** Research Committee
- U. **Resolution:** Revision of Policy No. 13000: Policy on Intellectual Properties

V. [Resolution](#): Revision of Policy No. 13015: Policy on Ownership and Control of Research Results

W. [Minutes](#): Student Affairs and Athletics Committee

X. [Report](#): Research and Development Disclosures

Y. [Resolutions](#): Approval of Emeritus Status (5)

Z. [Resolutions](#): Approval of Endowed Chairs, Professorships, and Fellowships (7)

AA. [Resolution](#): Ratification of the 2015-2015 Promotion, Tenure, and Continued Appointment Program

BB. [Resolution](#): Ratification of Personnel Changes

CC: [Reports](#): Constituent Remarks

# Virginia Tech Board of Visitors Meeting

## Information Session

Sunday, May 31, 2015

1:30 - 3:40 p.m.

The Inn—Solitude Room  
Virginia Tech Campus

### 1:30 – 1:50 p.m. Visioning Initiative

- Dr. Timothy D. Sands, President
- Dr. Kate Preston Keeney, Project Director, Office of Senior Fellow for Resource Development
- Mr. Minnis Ridenour, Senior Fellow for Resource Development, Office of Senior Fellow for Resource Development

### 1:50 – 2:20 p.m. Growth Management Plan

- Dr. Timothy D. Sands, President
- Dr. Ken Smith, Vice Provost, Resource Management and Institutional Effectiveness
- Ms. Wanda Dean, Vice Provost, Enrollment and Degree Management

### 2:20 – 2:40 p.m. Preview of Six-Year Plan

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

### 2:40 – 3:10 p.m. Preliminary Gallup Project Results

- Dr. Patty Perillo, Vice President for Student Affairs
- Dr. Rachel Holloway, Vice Provost, Undergraduate Academic Affairs

### 3:10 – 3:40 p.m. Constituent Reports

- Mr. Austin Larrowe, Undergraduate Student Representative to the Board
- Ms. Ashley Francis, Graduate Student Representative to the Board
- Mr. Dan Cook, President of Staff Senate
- Dr. Bernice Hausman, President of Faculty Senate



## **Visioning Initiative**

May 31, 2015

# Goal 1

## ***Advance as a global land-grant institution that is internationally recognized.***

- Prepare students to solve complex problems in an interconnected world
- Increase our international profile that emphasizes high quality academic programs
- Become a global land-grant university leader to discover new opportunities in funding, research, and how we learn, live, and work as an academic community

## Goal 2

***Strategically address the challenges and opportunities presented by the changing landscape of higher education.***

- Respond to declining public higher education funding and its impact on affordability and accessibility
- Understand the increasingly important role technology plays in teaching and learning and all aspects of university administration
- Address increasing enrollment in postsecondary institutions and demand from geographically-diverse student populations

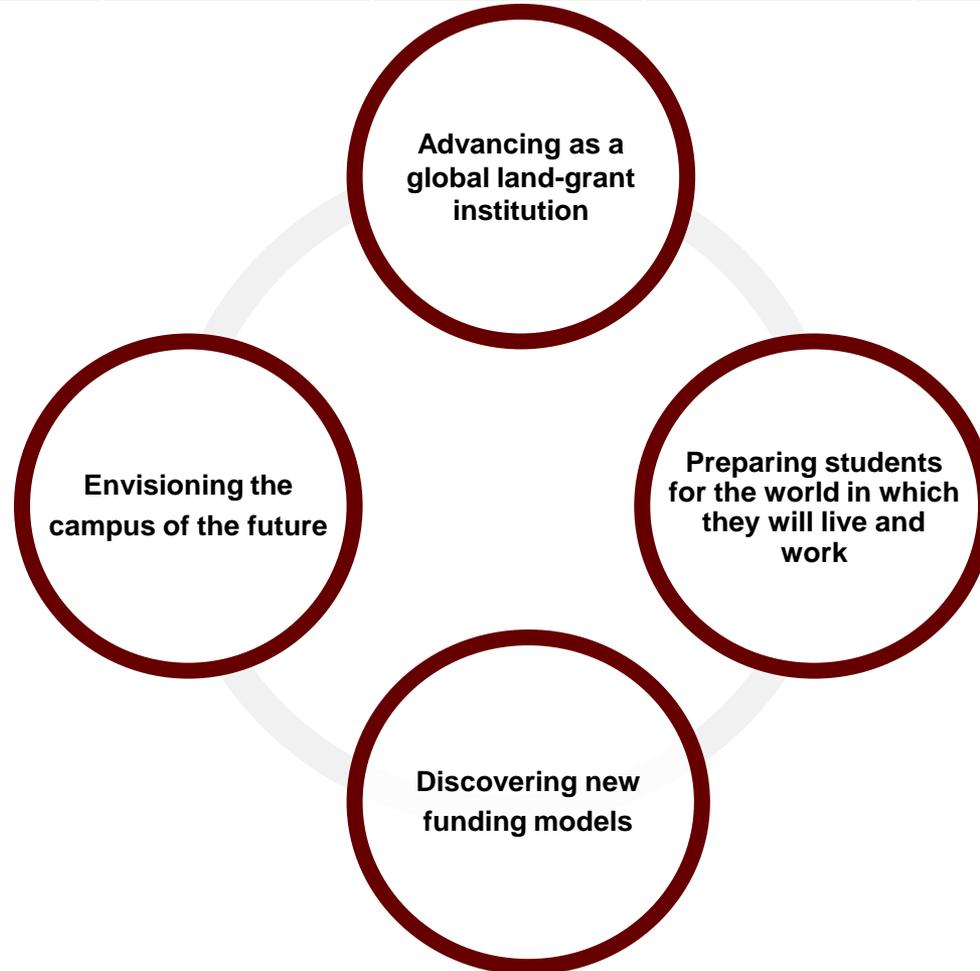
## In 2047, what if...

- ...operating support from the commonwealth disappears
- ...almost everything that can be automated or virtualized, is.
- ...wealth disparities continue to diminish between countries, but grow within the U.S.
- ...the planet cannot support 9B people
- ...

# Thematic Areas of Inquiry

## Elements of the Changing Landscape of Higher Education

Campus Setting	Funding and Cost	International Focus	Scholarship and Research	Service	Teaching and Learning	Technology
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## Co-Chairs

- **Rosemary Blieszner**, Alumni Distinguished Professor, Human Development, and Associate Dean of the Graduate School
- **Alan Grant**, Dean, College of Agriculture and Life Sciences
- **Thanassis Rikakis**, Provost (starting August 2015)

Support from **Dr. Kate Preston Keeney** and graduate students in the Office of the Senior Fellow for Resource Development (**Minnis Ridenour**) and **Larry Hincker**, University Relations

# Virginia Tech Visioning Initiative

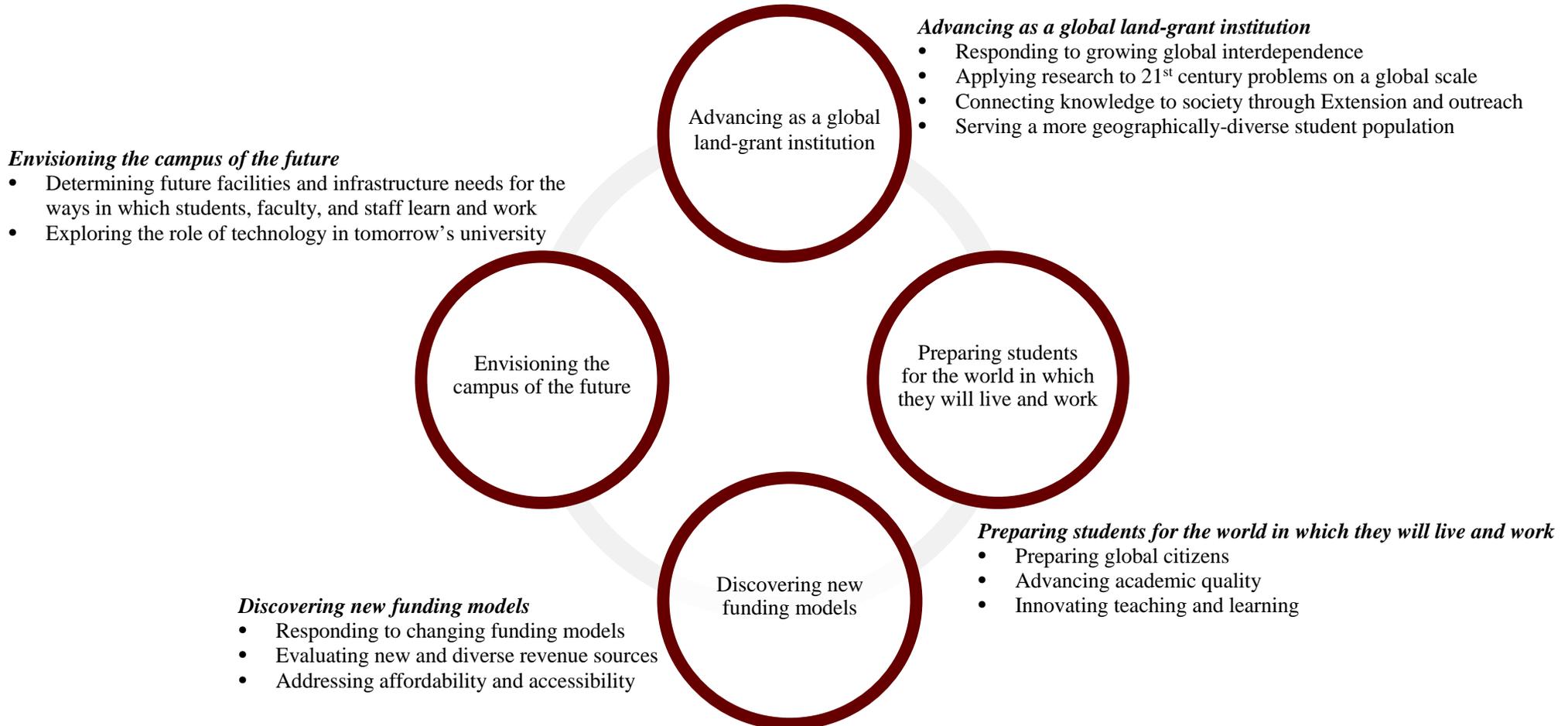
## Goal 1. Advance as a global land-grant institution that is internationally recognized

- Prepare students to solve complex problems in an interconnected world
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## Goal 2. Strategically address the challenges and opportunities presented by the changing landscape of higher education

- Respond to declining public higher education funding and its impact on affordability and accessibility
- Understand the increasingly important role technology plays in teaching and learning and all aspects of university administration
- Address increasing enrollment in postsecondary institutions and demand from geographically-diverse student populations

## Thematic Areas of Inquiry



# Planning for Undergraduate Enrollment Growth



Draft – June 2015 Board of Visitors Information Session

# Overview

- *Undergraduate Enrollment Growth as a Strategic Goal* – Tim Sands, President
- *Historic Context of Growth* – Ken Smith, VP Resource Management and Institutional Effectiveness
- *Achieving Growth* – Wanda Dean, VP Enrollment and Degree Management



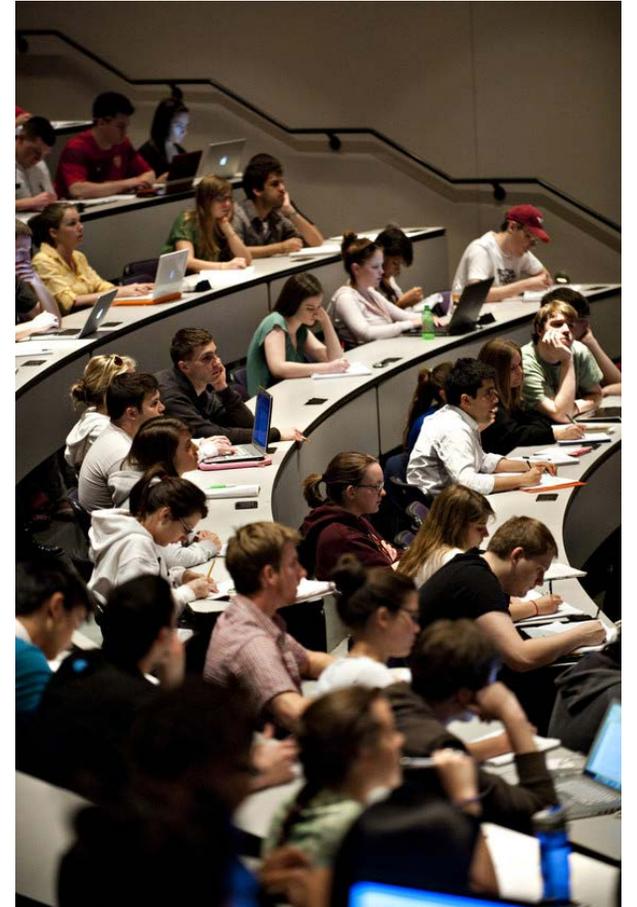
# Why Increase Undergraduate Enrollment?

- Provide more access to Virginia Tech for Virginia residents
- Provide more access to the Virginia Tech experience for all
- Increase the diversity of the student body for campus enrichment
- Generate resources to not only sustain but also to improve the quality of Virginia Tech

# Sustaining and Improving Quality

Use data driven decision making to:

- Identify enrollment growth goals and project impacts of growth
- Monitor campus level metrics and quality benchmarks
- Use existing capacity to provide net resources for maintaining quality and investing in new initiatives
- Maintain affordability for students



# Undergraduate Growth Scenarios

- 500 Additional Entering First-Year Students Fall 2015
- Resulting in Net Growth of about 2,000 over Four Years
- Possible growth beyond 2,000 over an eight year period to approximately 29,000 undergraduates by Fall 2022.

# Resource Planning Areas

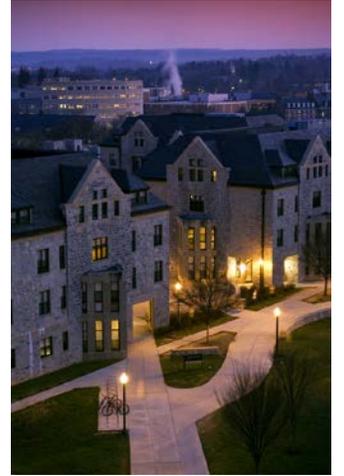


- Educational Programs

- Student Life

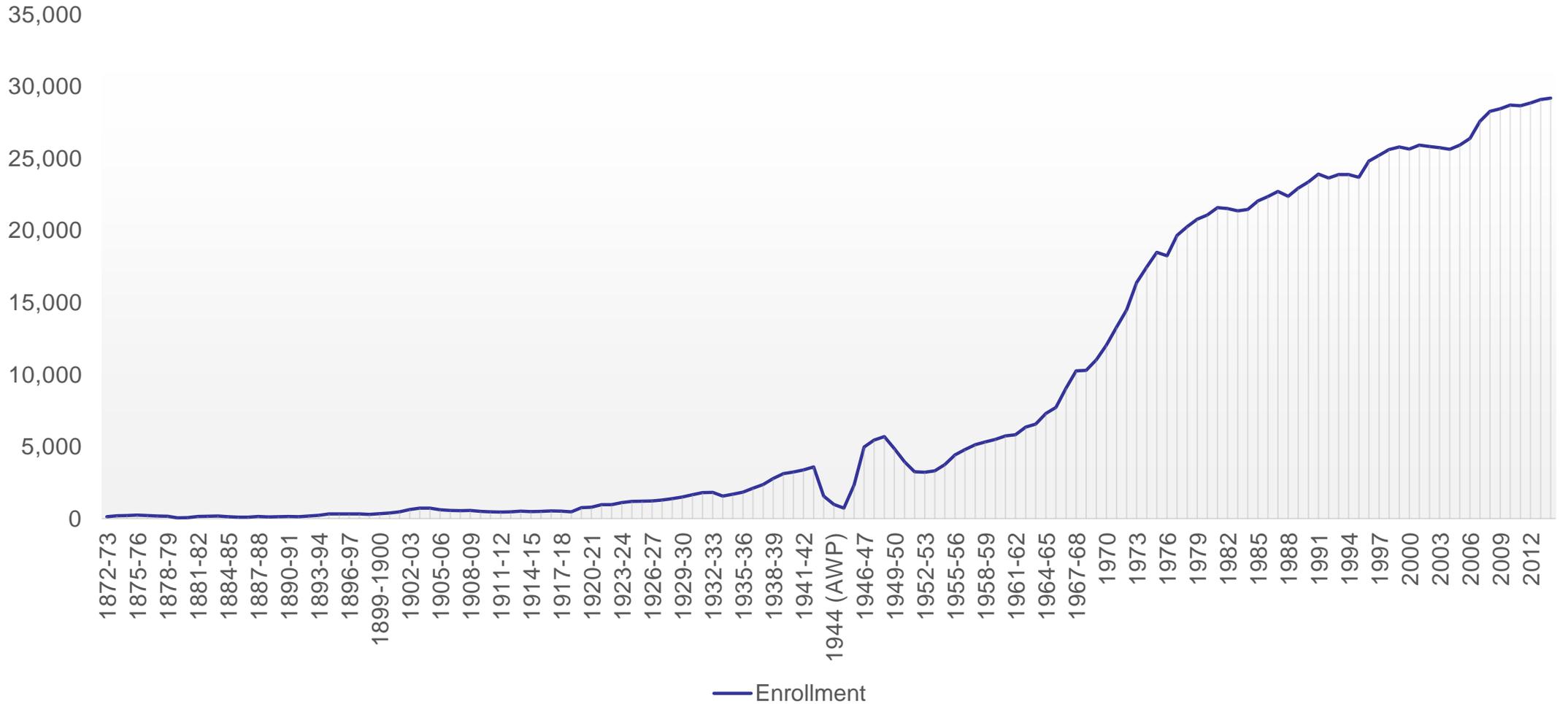
- Academic Support Services

- Campus Infrastructure and Support Services

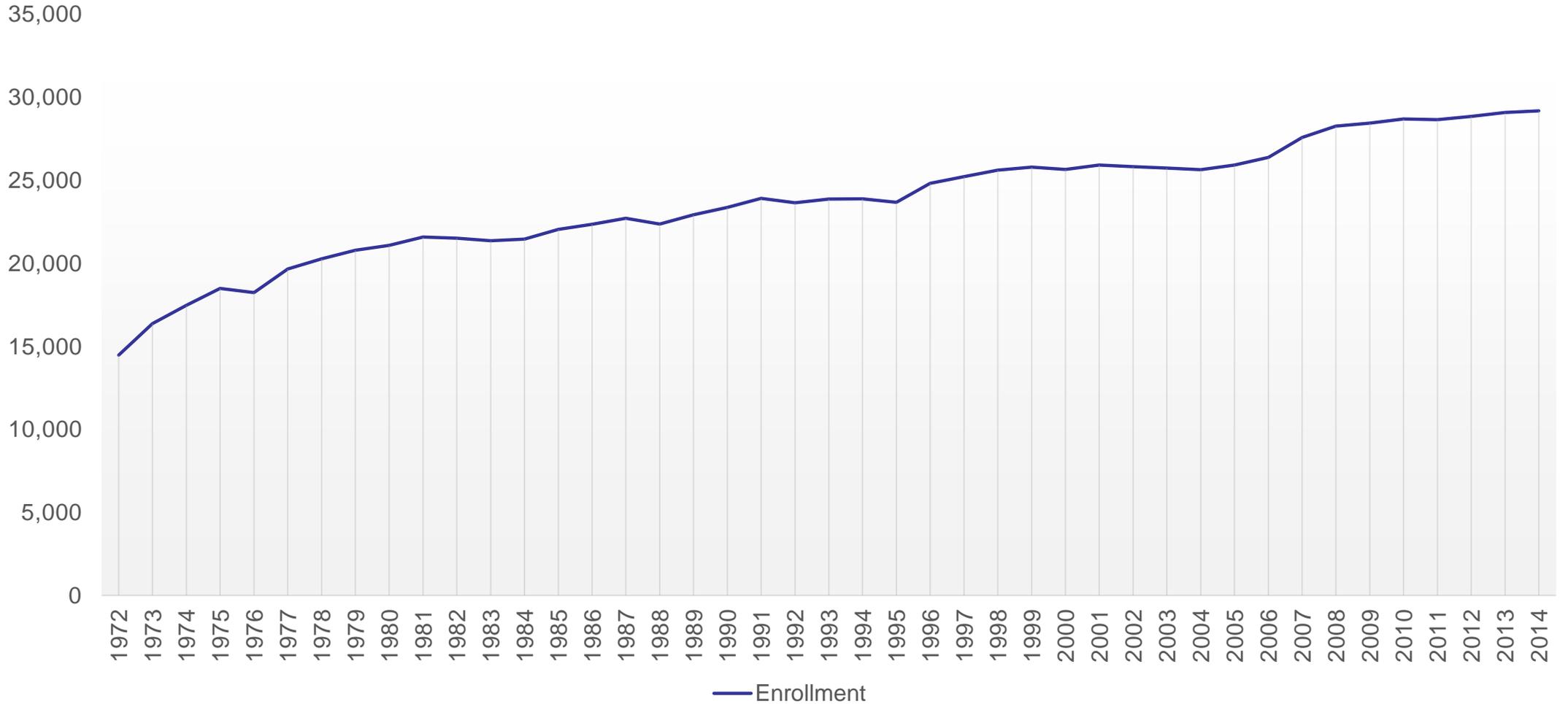


# HISTORIC CONTEXT

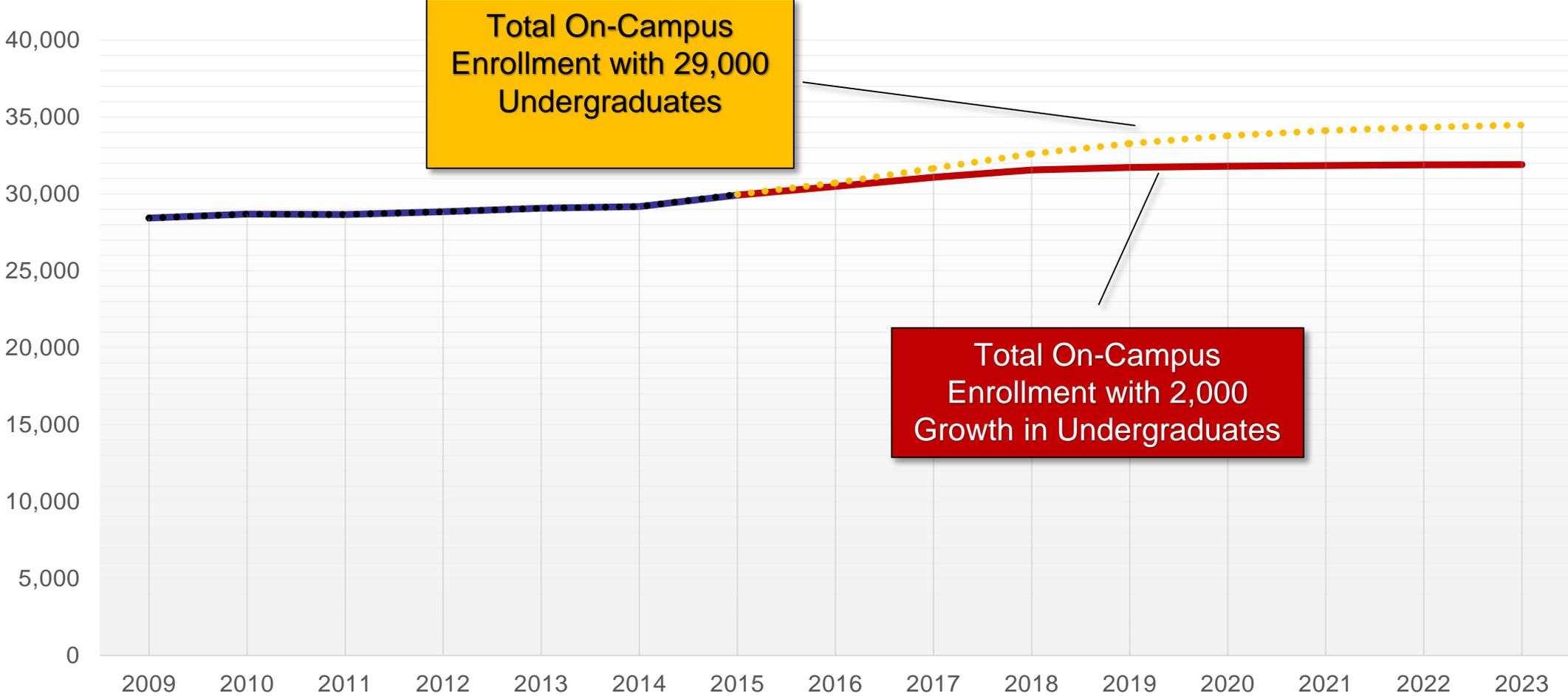
# On-Campus Enrollment Since 1872



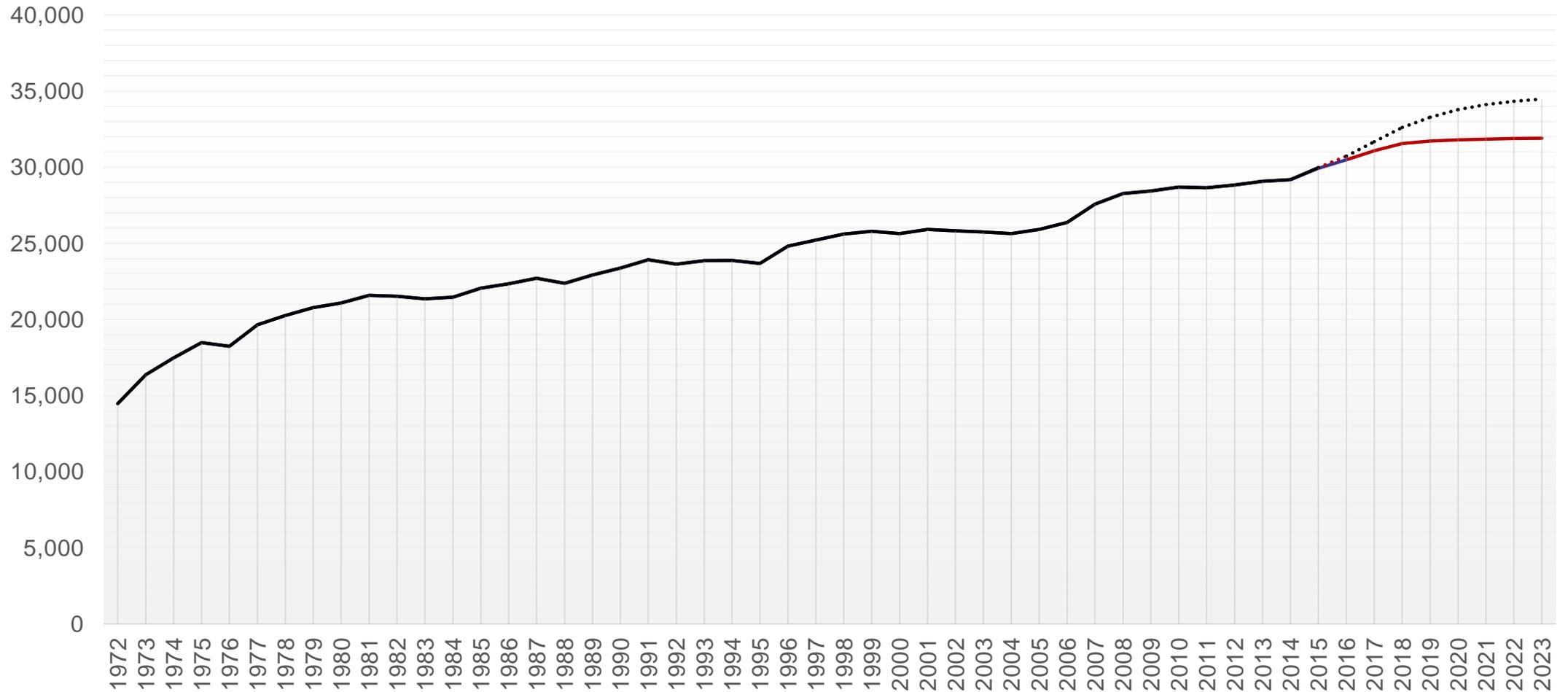
# On-Campus Enrollment Since 1972



# Impact of Planned and Possible Growth



# In the 50-Year Context (1972 to 2022)



# ACHIEVING GROWTH

# Achieving Growth - Populations

- Targeted Populations for Achieving Enrollment Growth Goals
  - Virginia High School Graduates
  - Out-of-State Populations
  - International Students
  - Non-Traditional Populations
  - Continuing Student Cohorts (Retention)
- Diversification of Demand to Expand Applications and Matriculation
  - New Undergraduate Degrees
  - Reimagined and Repackaged Existing Degrees in STEM and non-STEM programs



# Achieving Growth – Annual Assessment and Alignment of Plans

- Undergraduate enrollment growth goals incorporated into updated strategic plan.
- Enrollment growth funding incorporated into annual budget development cycle.
- Annual process of reviewing and adjusting financial plans in accordance with accomplishment of enrollment growth goals.





## **Development of 2016-2022 Six-Year Plan**

May 31, 2015

**M. Dwight Shelton, Jr., VP for Finance and  
Chief Financial Officer**

# Background

- **Six-Year Plan is a requirement of the Higher Education Opportunity Act of 2011 (HEOA)**
- **Based on the Commonwealth's goals and objectives for higher education**
- **Focuses on four key areas:**
  - Financial Aid for low and middle-income families
  - Optimal year-round use of facilities
  - Instructional resource sharing program with other institutions of higher education in Virginia
  - Enrollment growth and degree completion

# Components of Six-Year Plan

## 1. Academic plan

- Contains strategies that advance the university's strategic plan
- Provides support for the state's objectives in the HEOA

## 2. Financial Plan

- Estimated costs of academic strategies and other institutional cost drivers
- Identifies potential revenues and reallocations to resource the plan

## 3. Enrollment Plan

- SCHEV "2B" 6-year enrollment plan

# Six-Year Planning Process

- **Six-Year plans aid state officials in understanding institutional resource needs**
  - Board update on planning assumptions at June meeting
  - Due to the State on July 1<sup>st</sup> of every odd year, revision in even year
  - Serves as starting point for Executive Budget development
- **July/August review with:**
  - Secretaries of Education and Finance
  - Directors of Department of Planning and Budget (DPB) and SCHEV
  - Staff of House Appropriations and Senate Finance Committees
- **September/October:**
  - Suggestions from state and opportunity for university response
- **November:**
  - Board of Visitors approval of final plan

# Six-Year Planning Process

- **Plans are to be approved by the Boards of Visitors**

- Requirement in Code of Virginia, § 23-38.87:17:

*A. The governing board of each public institution of higher education shall develop and adopt biennially and amend or affirm annually a six-year plan for the institution and shall submit that plan to the Council, the Governor, and the Chairs of the House Committee on Appropriations and the Senate Committee on Finance no later than July 1 of each odd-numbered year, and shall submit amendments to or an affirmation of that plan no later than July 1 of each even-numbered year or at any other time permitted by the Governor or General Assembly.”*

*B. The Secretary of Finance, Secretary of Education, Director of the Department of Planning and Budget, Executive Director of the Council, Staff Director of the House Committee on Appropriations, and Staff Director of the Senate Committee on Finance, or their designees, shall review each institution’s plan or amendments and provide comments to the institution on that plan by September 1 of the relevant year. Each institution shall respond to any such comments by October 1 of that year.*

- SCHEV has provided guidance that Board approval of plans can be done at the earliest possible Fall meeting

# Basis of University Submission

- Continues previous plan initiatives
- Adds new strategies
- Reflects current enrollment growth plan
- Continues the state's traditional salary competitiveness program
- Plans for increased affordability through additional student financial aid
- Operating Budgets: projections of state cost assignments, unavoidable cost increases, and fringe benefits

# Plan Development Strategy

- Prior Year Submissions:
  - University submitted a comprehensive list of strategies in response to each area enumerated within the HEOA
  - Approach results in requests that are beyond the state's capacity to fully address in the current fiscal environment
  
- Current Year Submission Strategy:
  - Plan will be more focused
  - Designed to advance institutional priorities and areas in which we understand there to be specific state interest

# Academic Plan Strategies

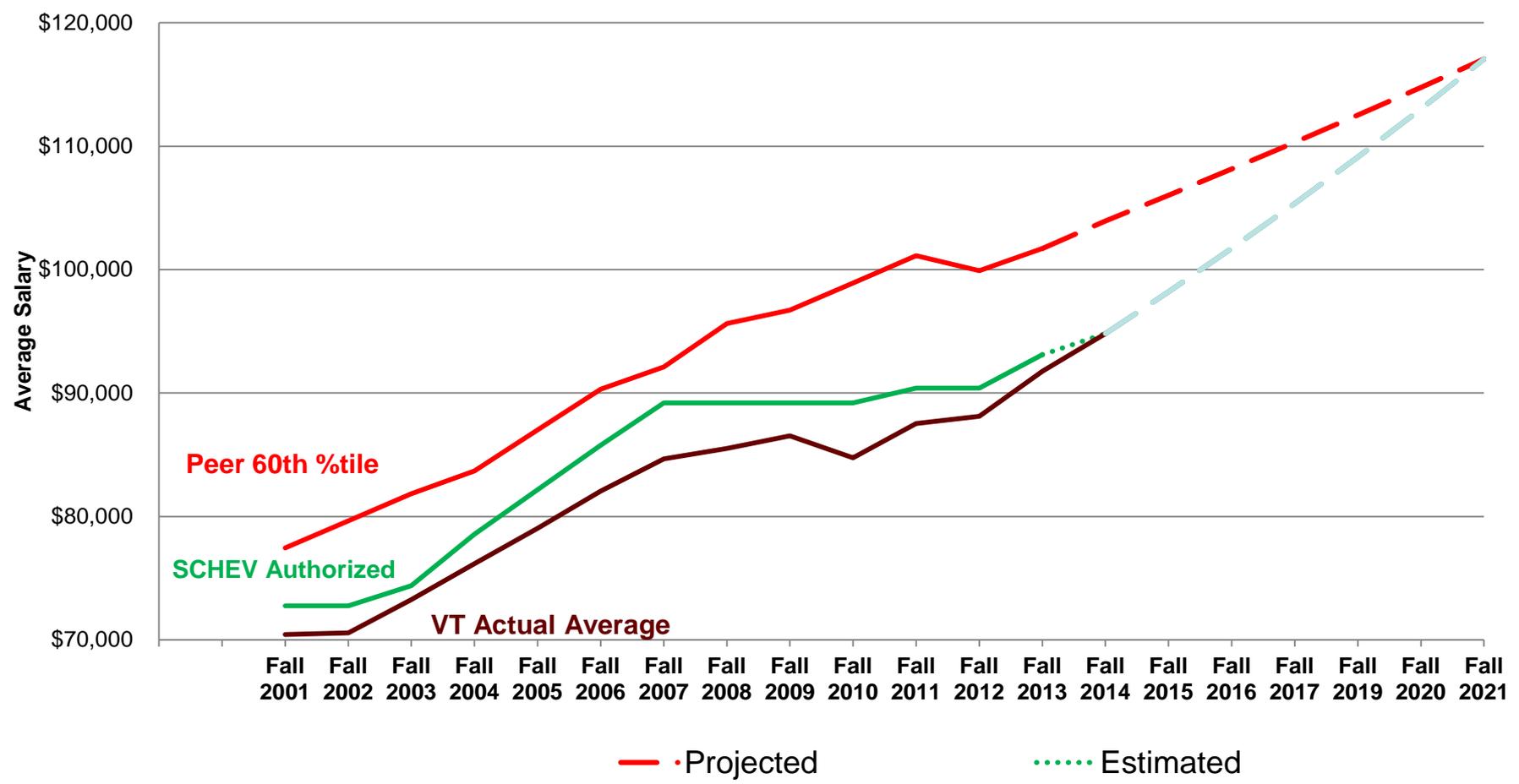
- Examples of initiatives to be included using this approach include:
  - Increasing Virginia Undergraduate Enrollment
  - Advancing Strategic Research Opportunities
  - Expanding and Enhance STEM-H Degree Production
  - Ensuring Access for Low and Middle-Income Families by Continuing to Expand Need-based Financial Aid to Undergraduate Students

# Financial and Operating Costs

- Ensure Competitive Faculty and Staff Salaries
- Library Services and Collections Enhancement
- Operations & Maintenance of New Facilities
- Fixed Cost Increases
- Fringe Benefit Rate Increases

# University Initiatives

- Ensuring faculty salary competitiveness is key to recruiting and retaining world class faculty



# Revenue Planning

- Plan envisions partnering with the commonwealth to support strategic shared objectives
- Plan will serve as the basis for General Fund requests in the Fall
- Key components of self-generated revenue are tuition and fee revenue estimates by degree level and residency for first biennium

# Revenue Planning

- VT Plan is not expected to be balanced – projected incremental self-generated revenue will not be enough to satisfy the additional expenses of the plan
- State General Fund support will be necessary to fully implement all proposed strategies
- If state support is not available, strategies will be adjusted to fit within resource constraints

# Revenue Planning

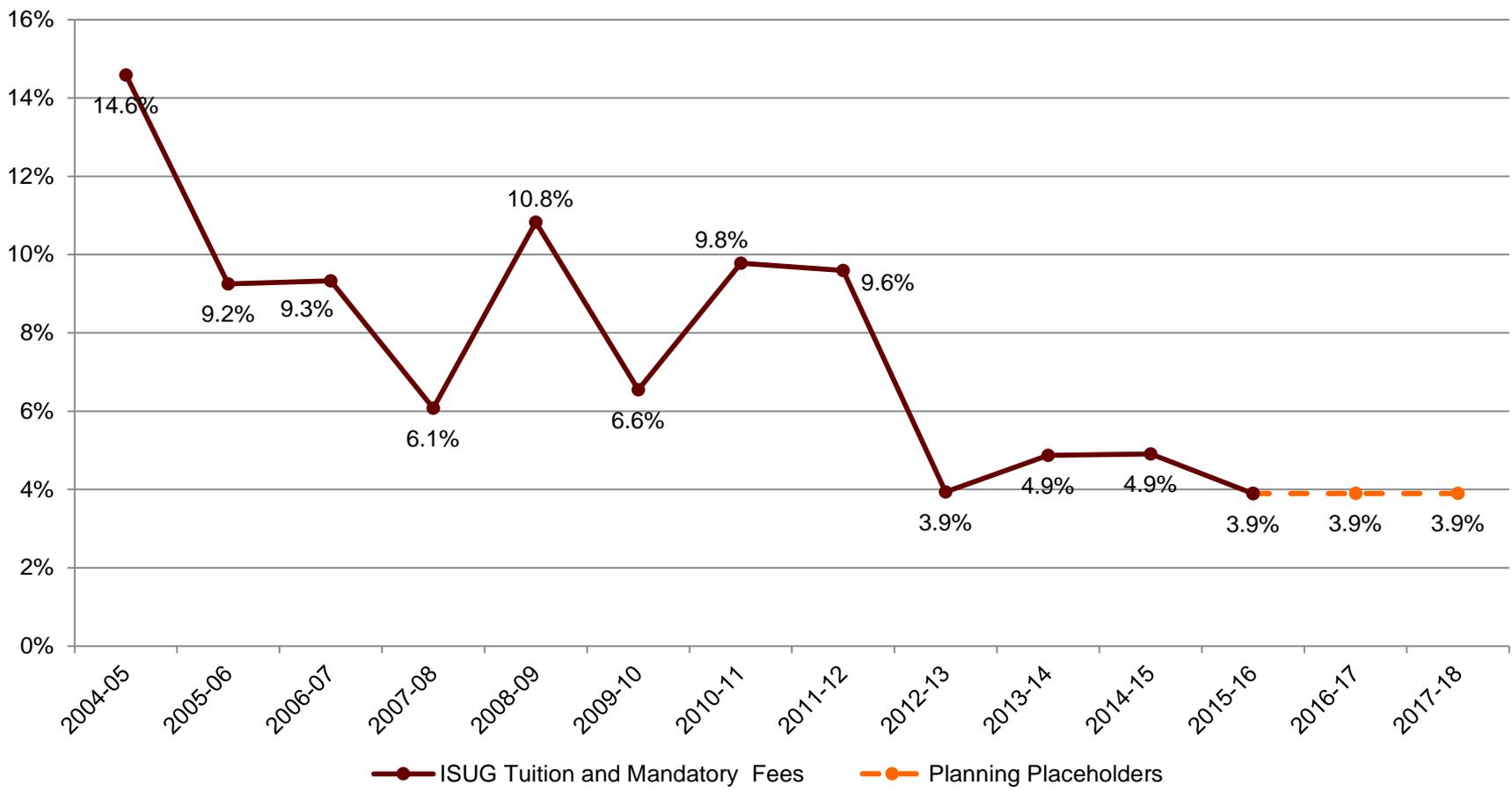
- Six-Year plan **does not recommend or commit** to specific set of rates. Tuition and fee rates remain authority of Board of Visitors. Board will consider tuition and fee rates in spring of 2016
- Tuition and Fee figures are planning placeholders that begin a discussion about how the university and commonwealth can partner to advance goals
- University continues to plan for modest tuition increases

# Nongeneral Fund Revenue Estimate Planning Assumptions

2016-17 & 2017-18	Tuition and Mandatory Fees	
	Resident	Non-resident
Undergraduate	3.9%	3.9%
Graduate	3.9%	3.9%
Vet Med	2.9%	2.9%

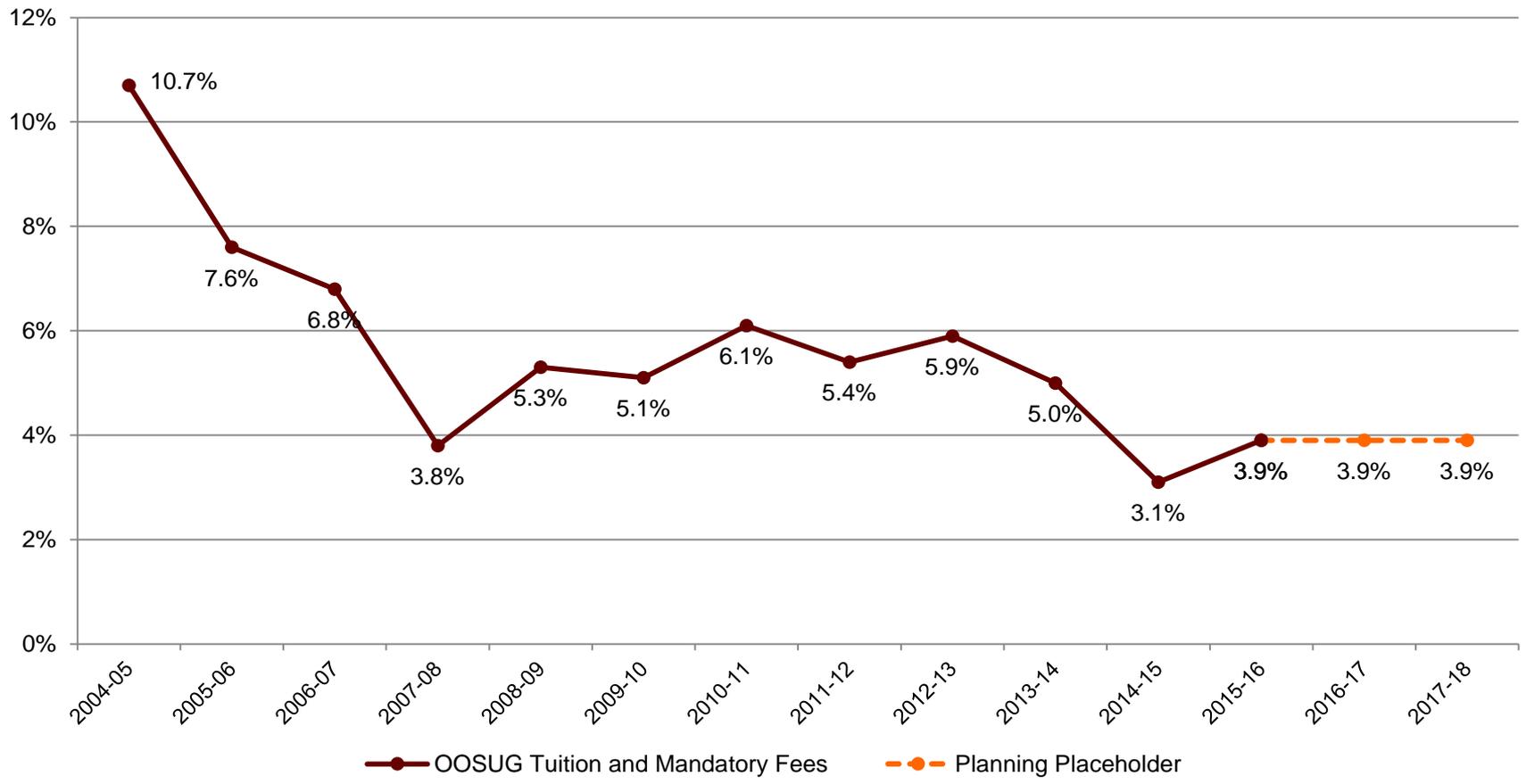
# Financial Plan

- In-state Undergraduate Tuition and Mandatory Fee placeholders** continue the trend of modest increases in recent years.



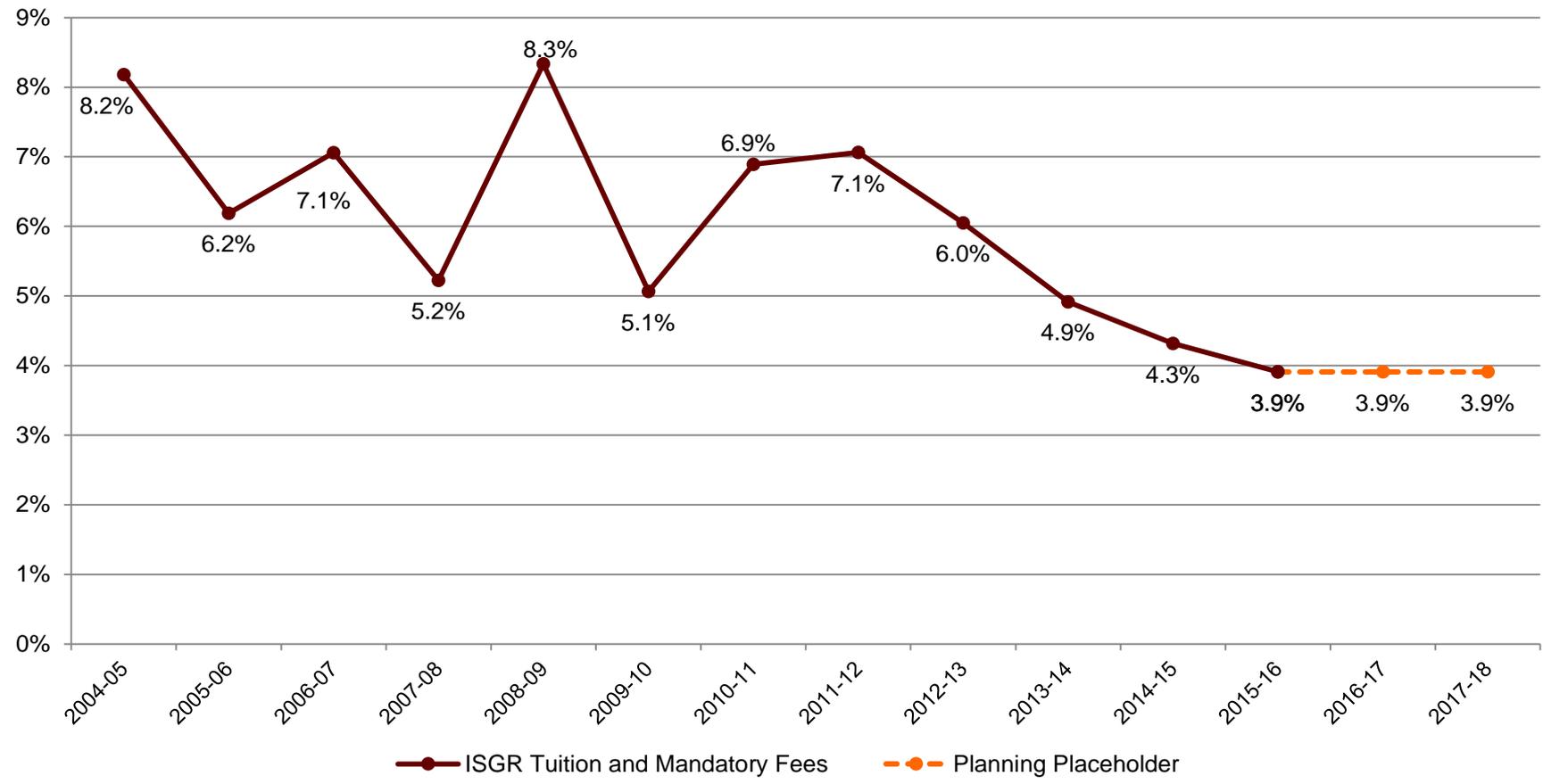
# Financial Plan

- Out-of-state Undergraduate Tuition and Mandatory Fees** are constrained by market competitiveness.



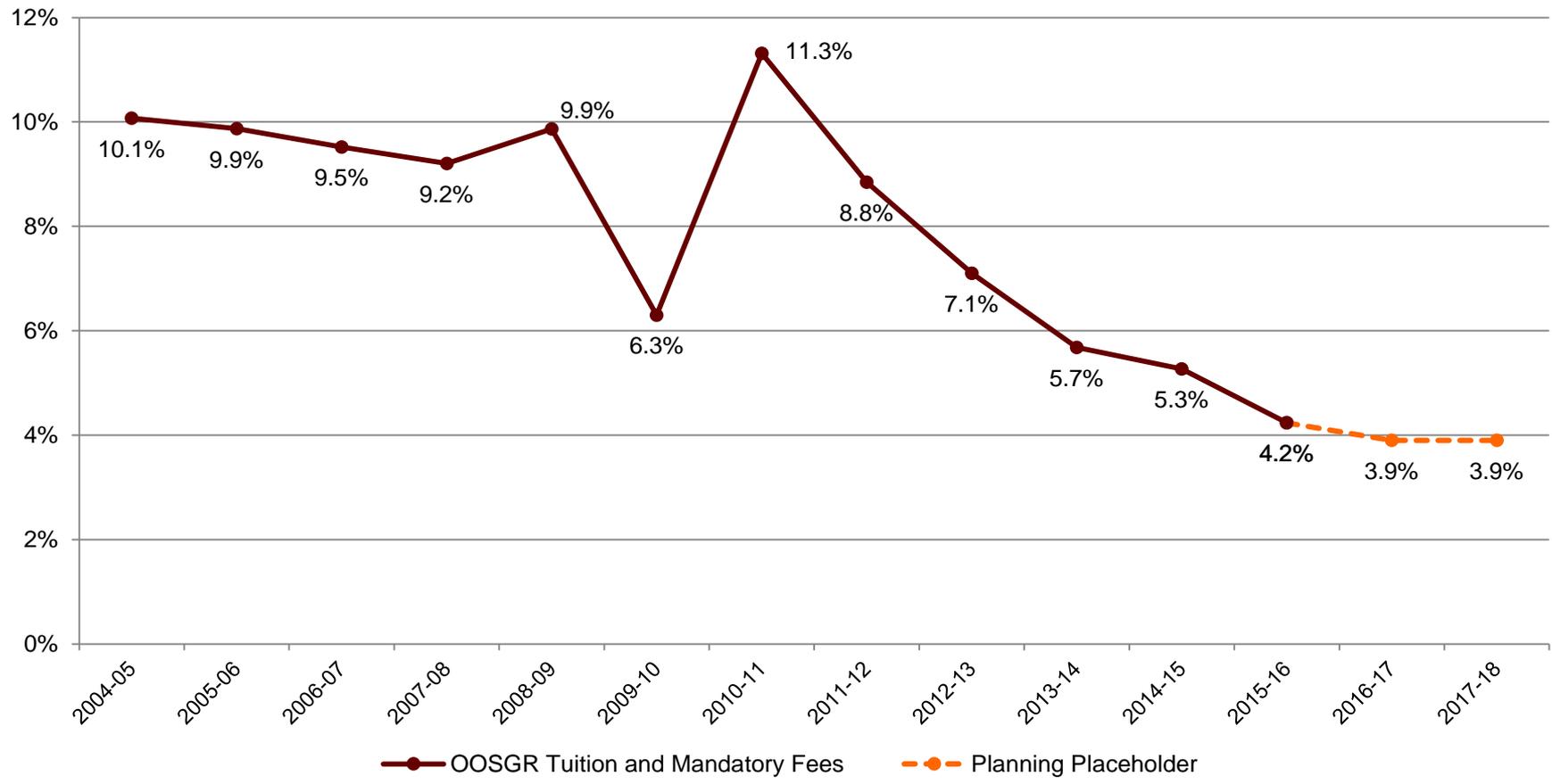
# Financial Plan

- In-state Graduate Tuition and Mandatory Fee** placeholders reflect a more modest rate increase.



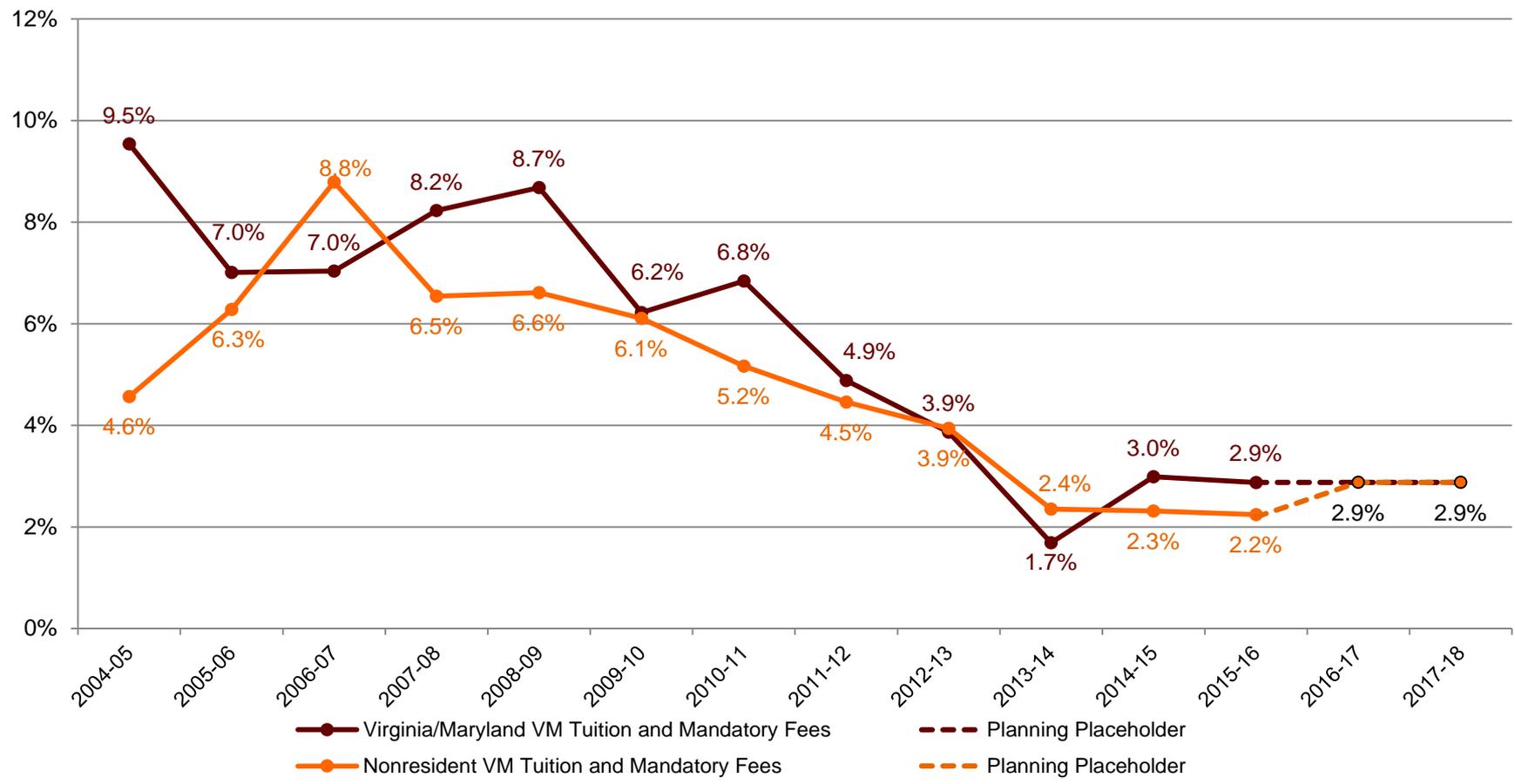
# Financial Plan

- Out-of-state Graduate Tuition and Mandatory Fee** placeholders reflect a shift to more modest rate increases.



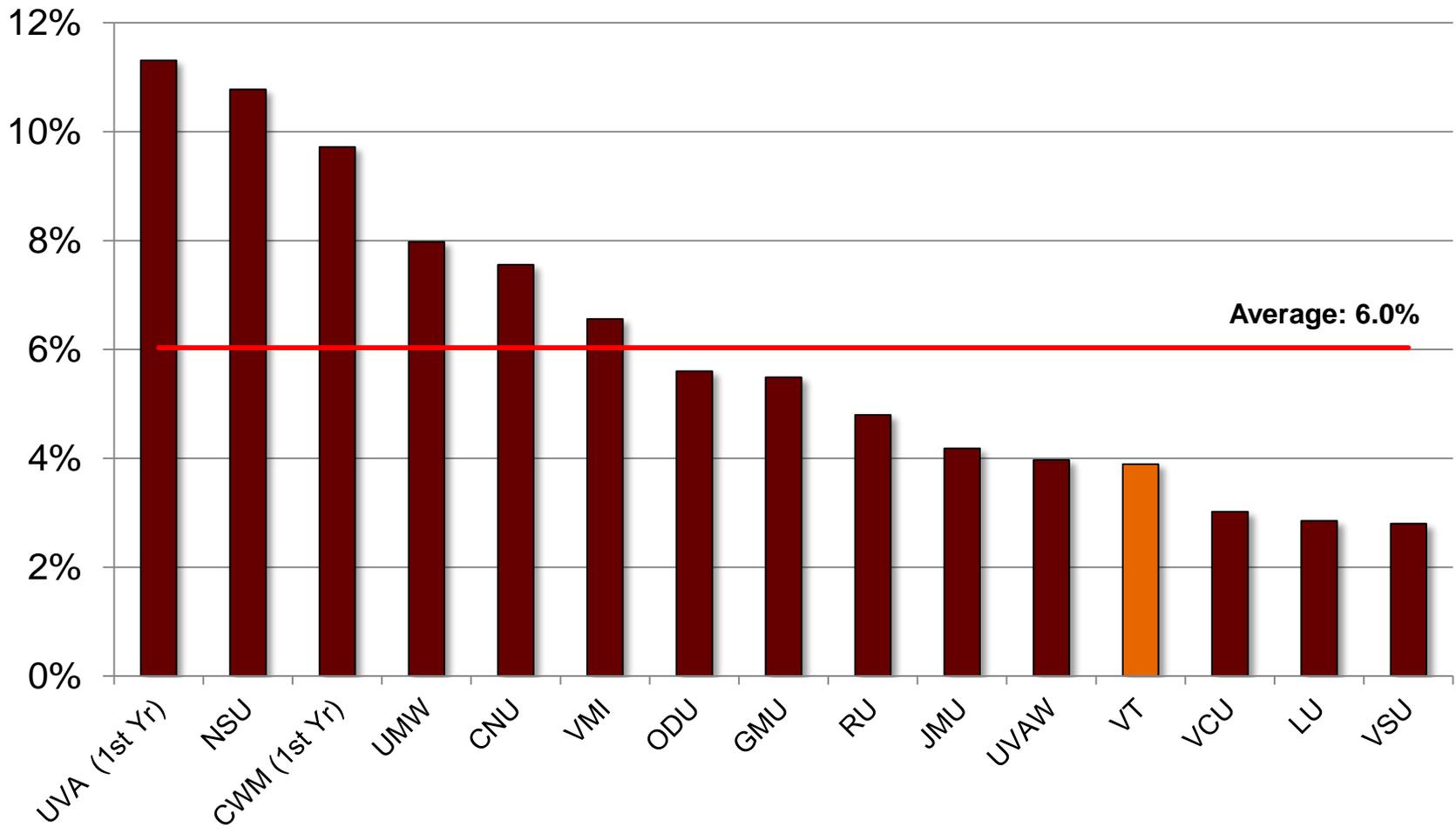
# Financial Plan

- Veterinary Medicine** Tuition and Mandatory Fee placeholders are historically low.



# Benchmarking

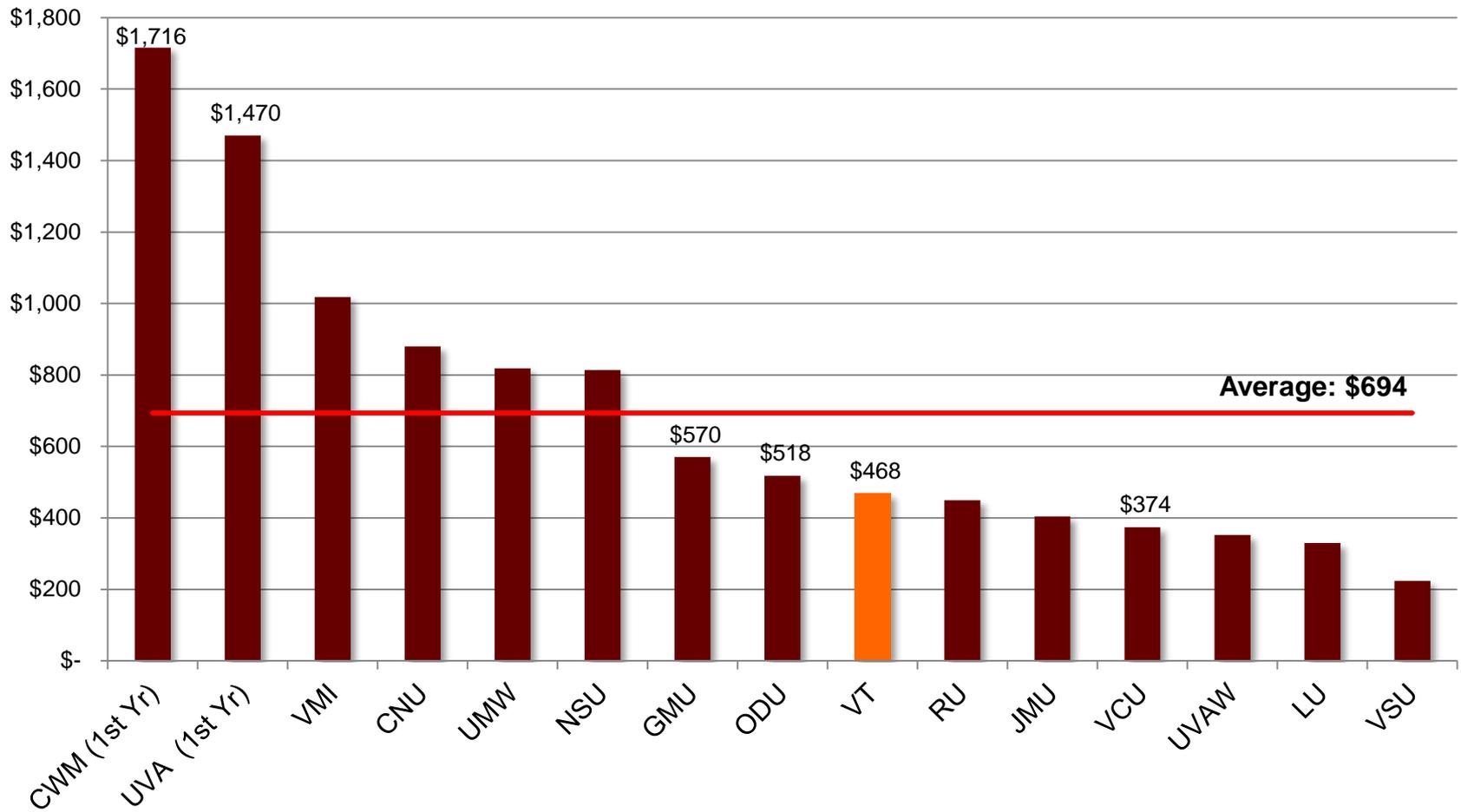
## Percent Increase in Resident Undergraduate Tuition & Mandatory Fees for 2015-16



Average: 6.0%

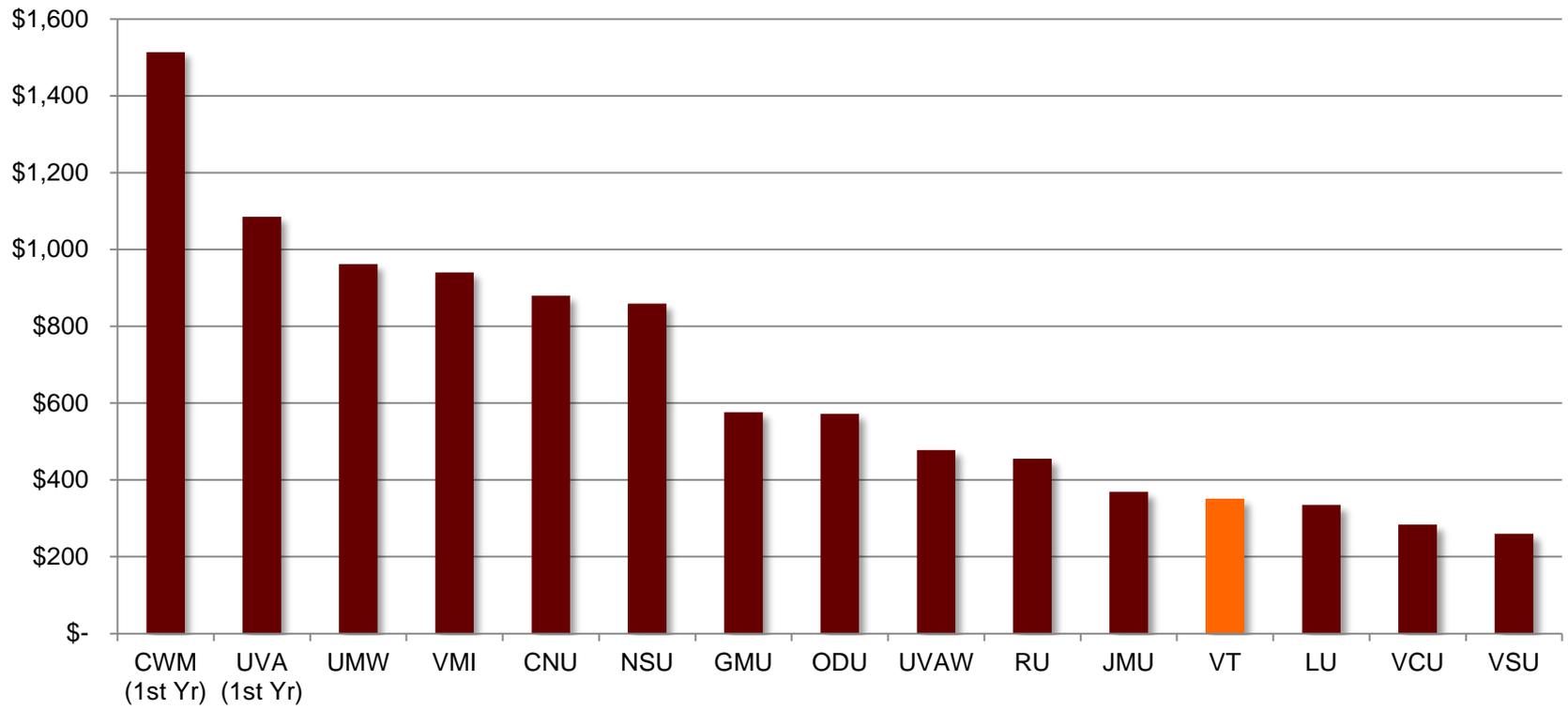
# Benchmarking

## Dollar Increase in Resident Undergraduate Tuition & Mandatory Fees for 2015-16



# Benchmarking

## Incremental Tuition & Mandatory Fees and General Fund per In-state Undergraduate Student 2015-16



T&MF/ student	\$1,716	\$1,470	\$818	\$1018	\$880	\$814	\$570	\$518	\$352	\$449	\$404	\$468	\$330	\$374	\$224
Direct GF/ student	(202)	(385)	144	(78)	-	45	6	54	126	6	(35)	(118)	5	(90)	36
<b>Total</b>	<b>\$1,514</b>	<b>\$1,085</b>	<b>\$962</b>	<b>\$940</b>	<b>\$880</b>	<b>\$859</b>	<b>\$576</b>	<b>\$572</b>	<b>\$478</b>	<b>\$455</b>	<b>\$269</b>	<b>\$350</b>	<b>\$335</b>	<b>\$284</b>	<b>\$260</b>

# Summary

- **Growing enrollment**, research, and STEM-H opportunities are the primary academic goals of the university.
- In order to accomplish these goals, the university will:
  - **Attract and retain the best and brightest faculty**, requiring competitive compensation that rewards performance
  - **Work with state officials to increase support for research** that enhances the economic opportunities of Virginia and leverages the capabilities of the university
  - **Identify reallocation and cost containment opportunities and operating support** to address increasing costs and academic plan implementation
  - **Enhance access and affordability**, especially for lower income Virginians

# Next Steps

## June

- Board update on planning assumptions

## July 1

- Plans due to the state

## July/August

- University will meet with state officials to discuss plans

## September/October

- Receive feedback from state
- University responds to state suggestions

## November

- Board approval of final plan

**Questions/Input ?**

# ALUMNI TOP LEVEL OUTCOMES

VIRGINIA TECH

May 2015



# Gallup's “Big Six”

## Emotional Support Measures

- At least one professor who made me excited about learning
- Professor who cared about me as a person
- A mentor who encouraged my hopes and dreams

## Experiential and Deep Learning Measures

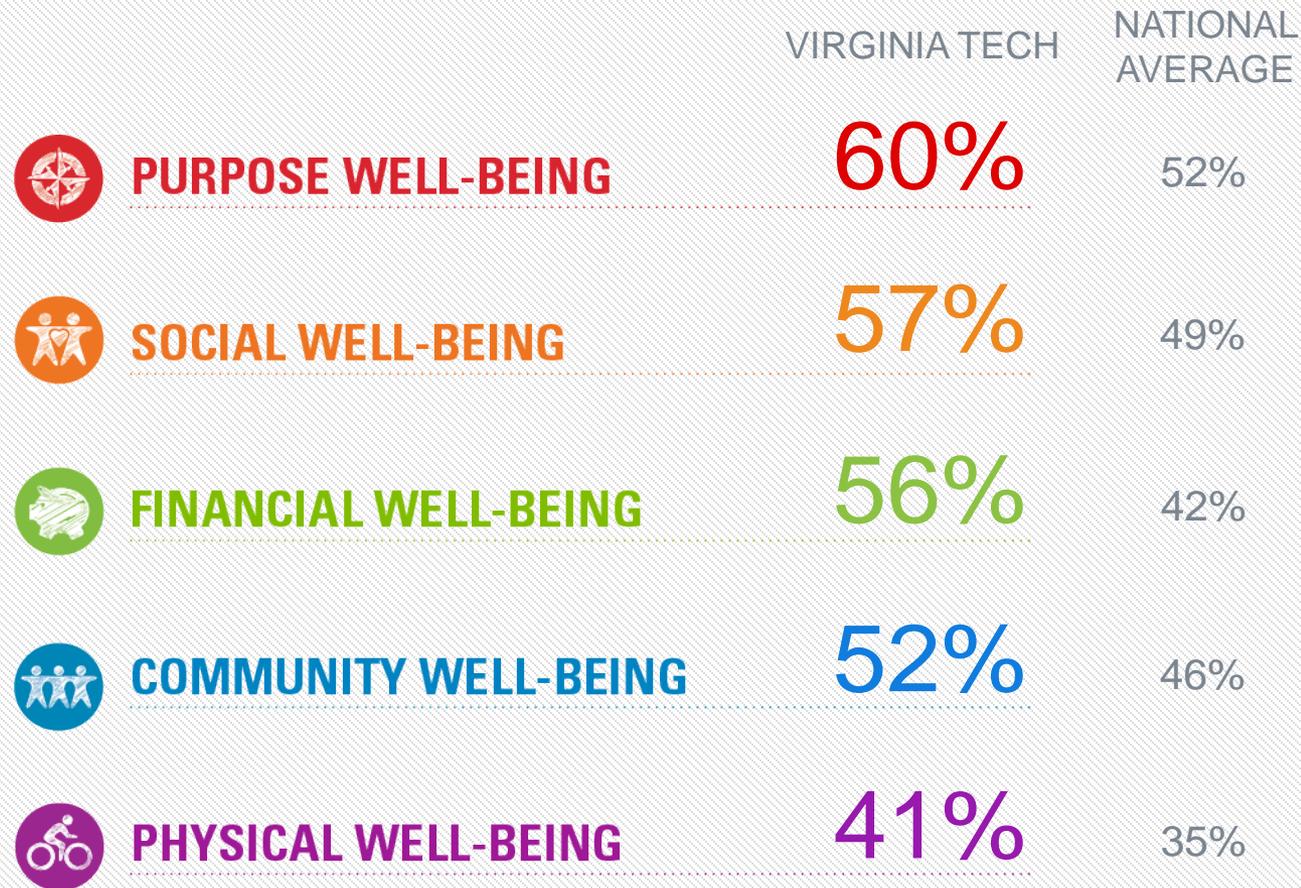
- Long term project taking a semester or longer to complete
- Internship or job where I applied the learning
- Extremely involved in extracurricular activities and organizations

# GALLUP WELLBEING ELEMENTS



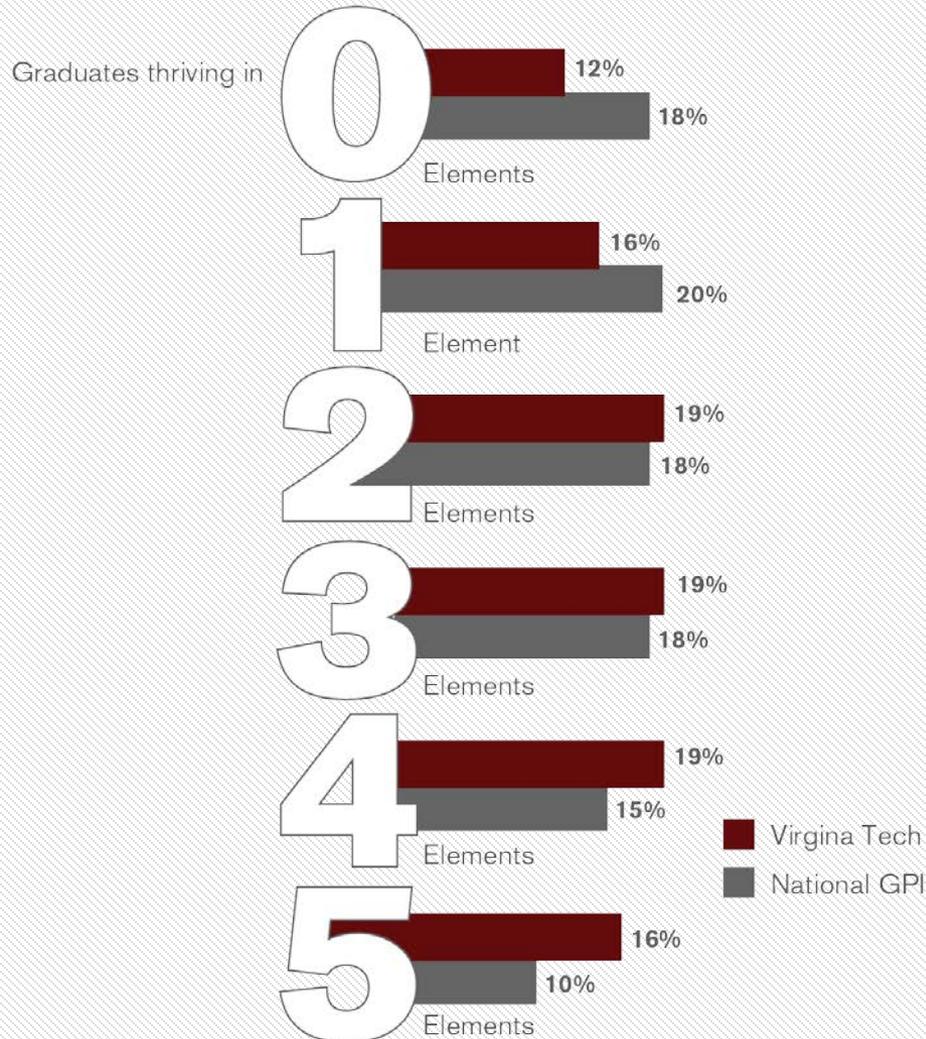
- **Purpose:** Liking what you do each day and being motivated to achieve goals
- **Social:** Having supportive relationships and love in your life
- **Financial:** Managing your economic life to reduce stress and increase security
- **Community:** Liking where you live, feeling safe, and having pride in your community
- **Physical:** Having good health and enough energy to get things done daily

# VIRGINIA TECH THRIVING AT HIGHER LEVELS ACROSS ALL ELEMENTS OF WELLBEING



16% of Virginia Tech alumni are thriving in all five elements of wellbeing. (National Average = 10%)

# ALUMNI THRIVING IN WELLBEING ELEMENTS



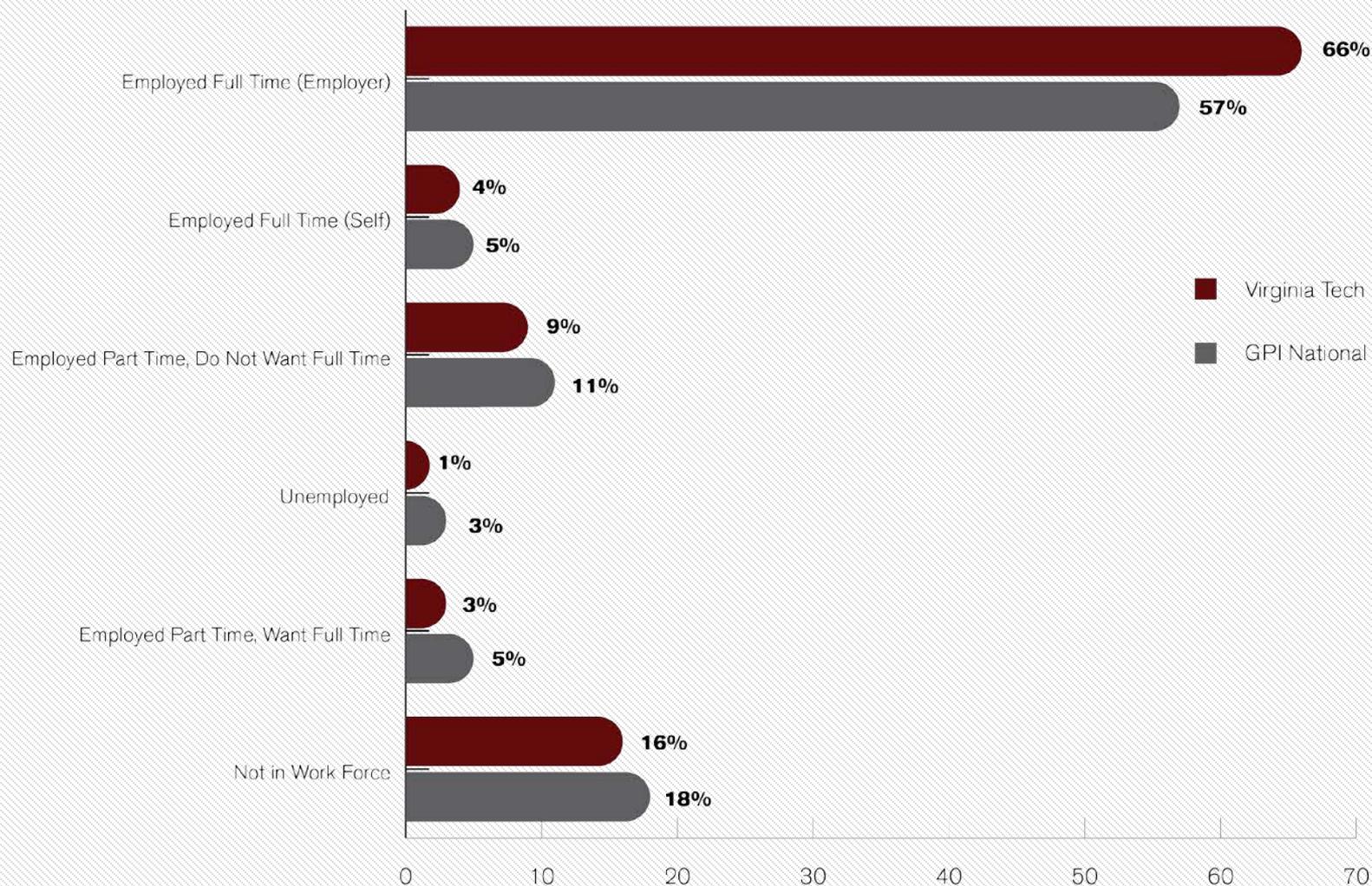
**28%**

Of cadets thriving in all five areas

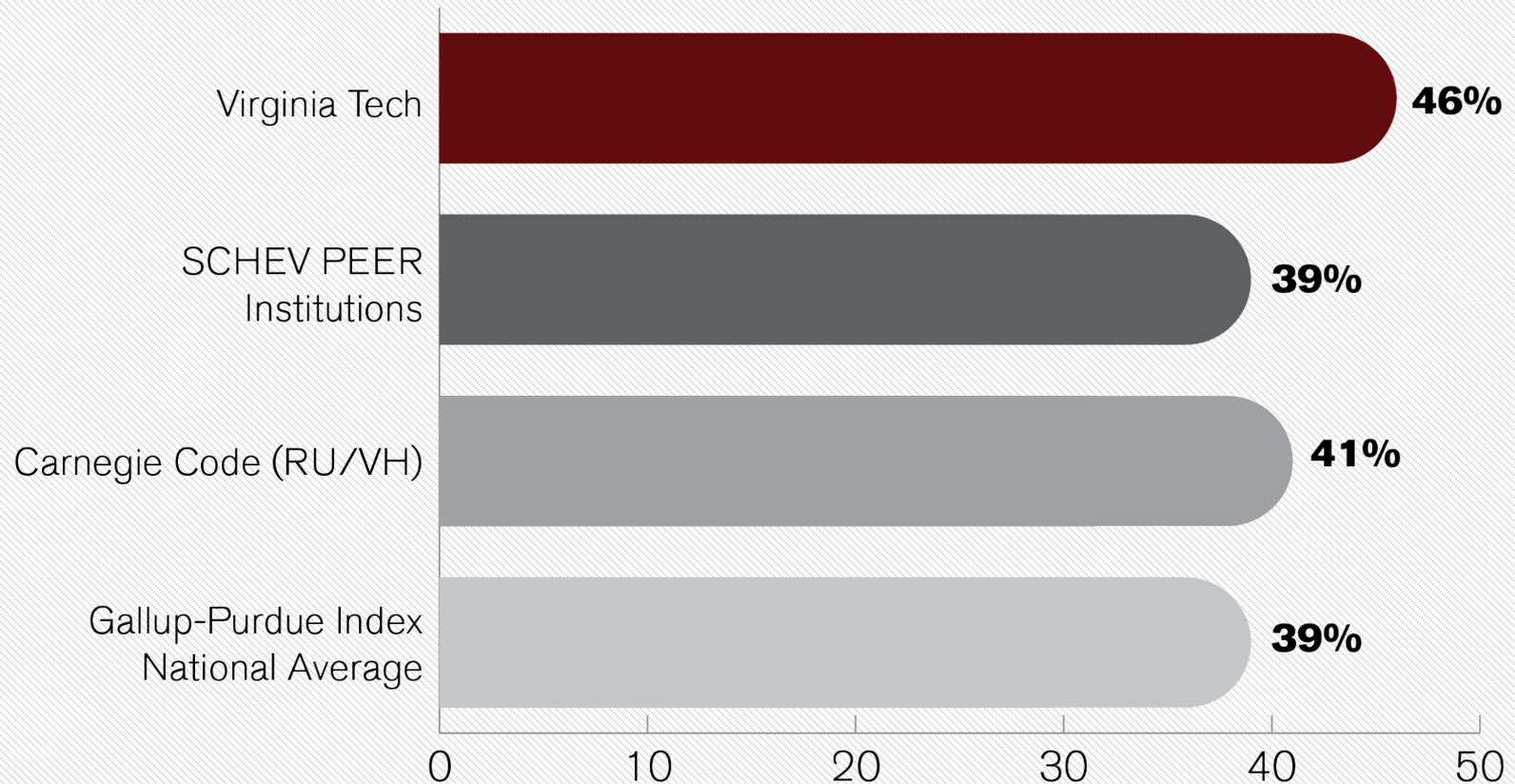
**19%**

Of NCAA participants thriving in all five areas

# VIRGINIA TECH GRADUATES EMPLOYED AT HIGHER LEVELS THAN THE NATIONAL AVERAGE



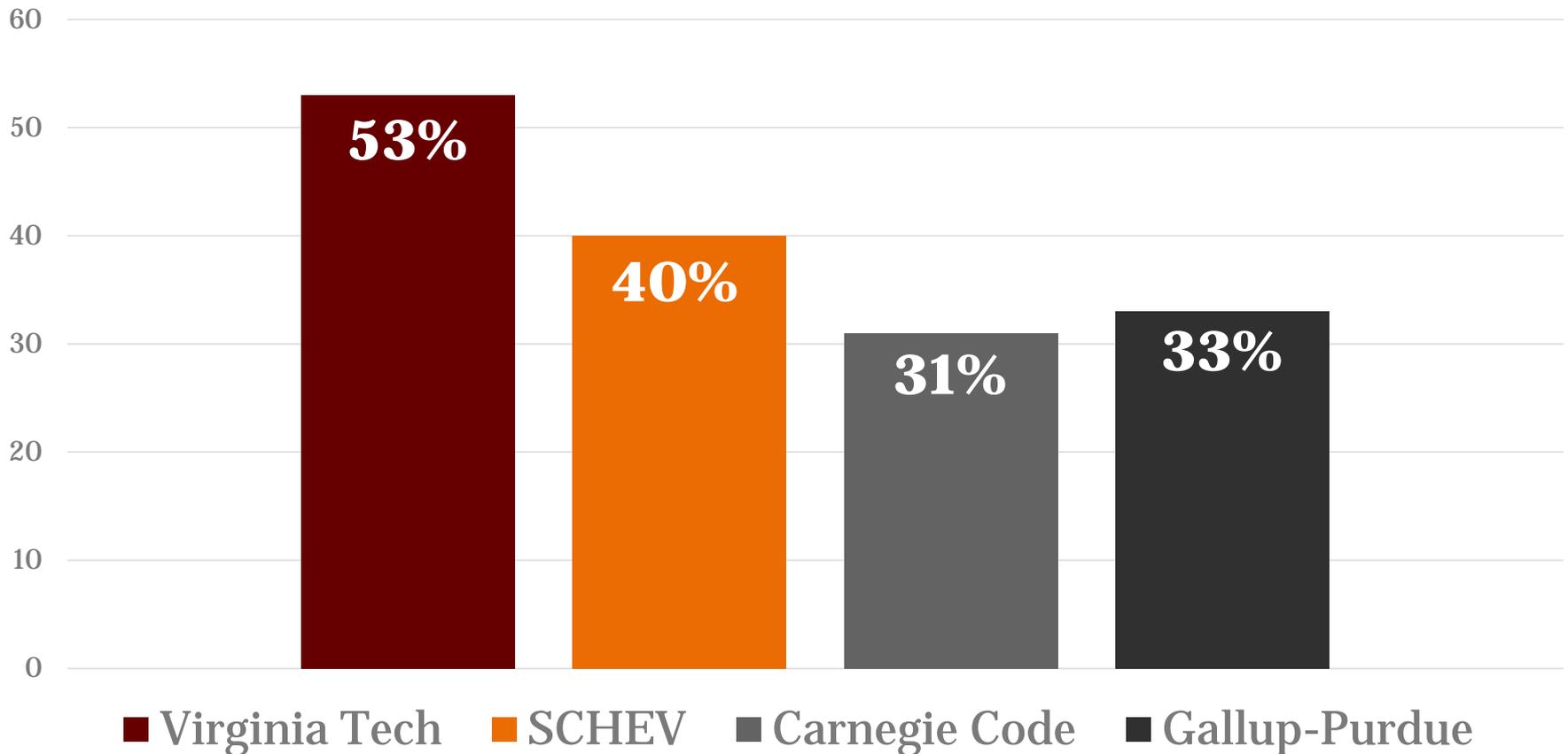
# VIRGINIA TECH GRADUATES MORE ENGAGED AT WORK



Among 1950-2014 graduates that are employed

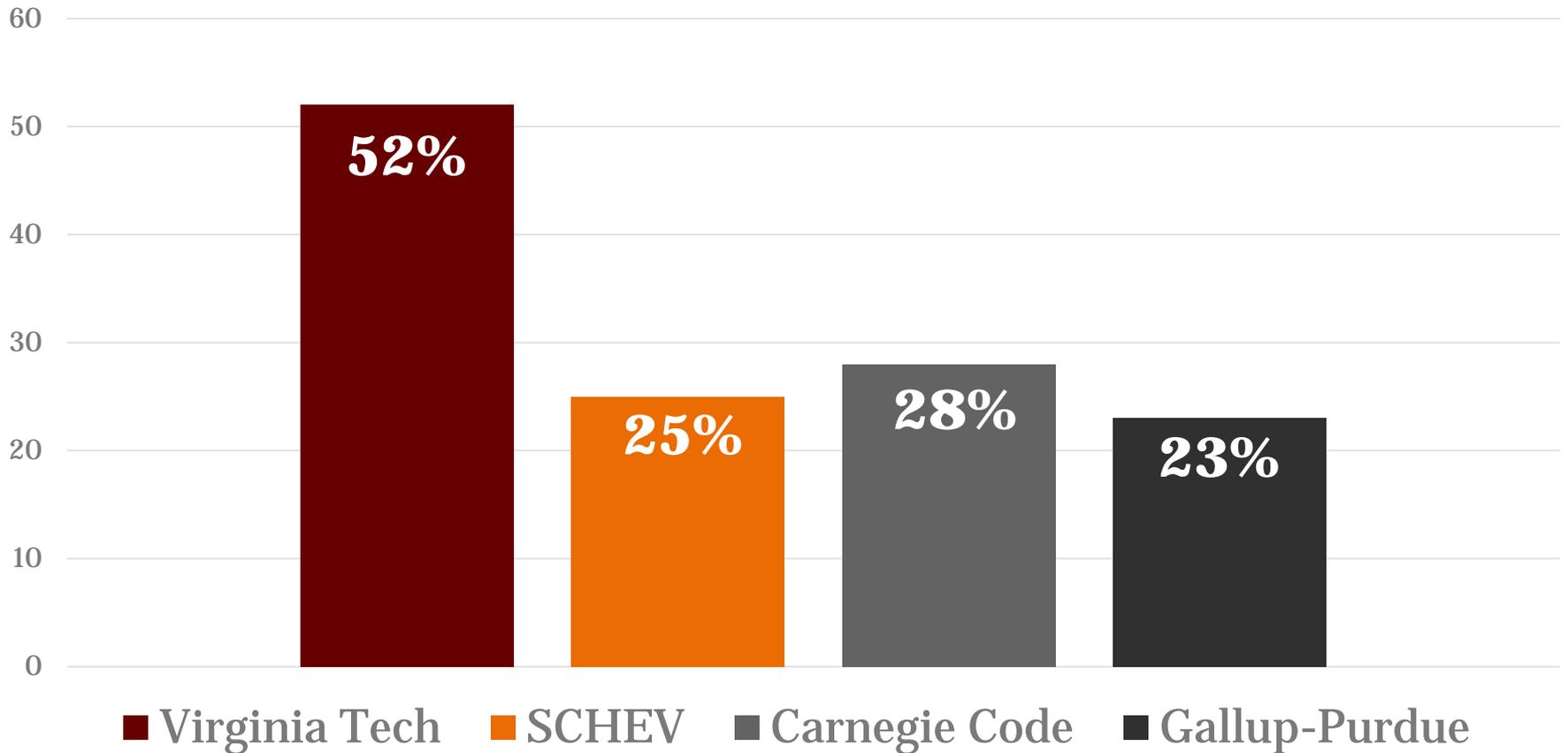
# VIRGINIA TECH WAS THE PERFECT SCHOOL FOR PEOPLE LIKE ME.

Strongly Agree

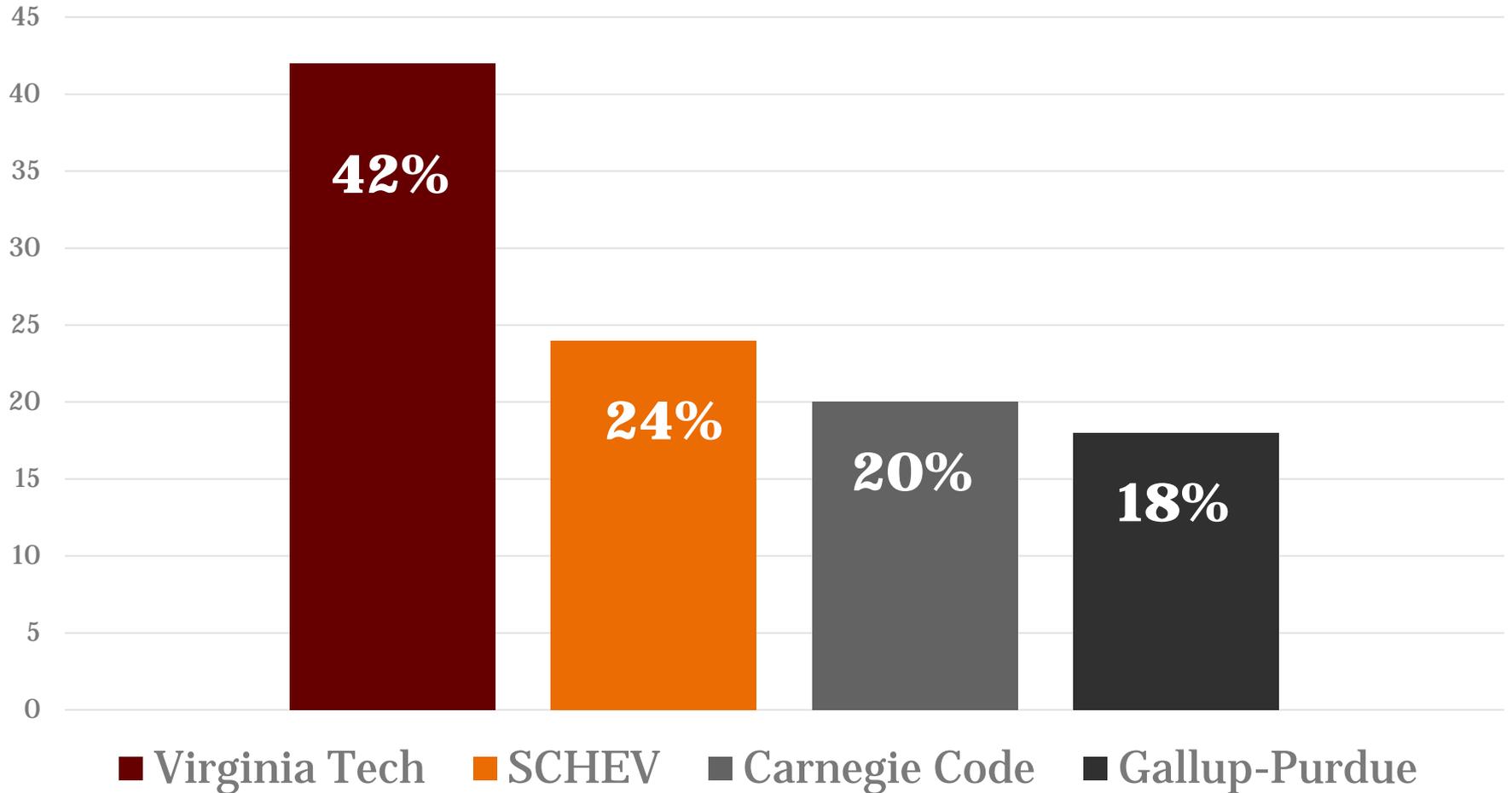


# I CAN'T IMAGINE A WORLD WITHOUT VIRGINIA TECH.

Strongly Agree



# SCHOOL ENGAGEMENT/ ALUMNI ATTACHMENT



# IF SUPPORTED, THE ODDS OF VIRGINIA TECH ALUMNI BEING ENGAGED AT WORK ARE:

## VIRGINIA TECH OVERALL

2.0x

higher if ... my professors at Virginia Tech cared about me as a person

1.9x

= *National Average*

2.1x

higher if ... I had at least one professor at Virginia Tech who made me excited about learning

2.0x

= *National Average*

2.3x

higher if I had a mentor who encouraged me to pursue my goals and dreams

2.2x

= *National Average*

2.6x

higher if Virginia Tech graduates experienced all three support items

2.3x

= *National Average*

# WITH EXPERIENTIAL LEARNING, THE ODDS OF VIRGINIA TECH ALUMNI BEING ENGAGED AT WORK ARE...

## VIRGINIA TECH OVERALL

1.9x

higher if ... I had an internship or job that allowed me to apply what I was learning in the classroom

2.2x

= *National Average*

1.7x

higher if ... I worked on a project that took a semester or more to complete

1.8x

= *National Average*

1.7x

higher if ... I was extremely active in extracurricular activities and organizations while attending Virginia Tech

1.9x

= *National Average*

2.6x

higher if Virginia Tech graduates experienced all three experiential learning items

2.4x

= *National Average*

# ONLY 2% OF VIRGINIA TECH **STRONGLY AGREED** TO ALL SIX EXPERIENTIAL AND SUPPORT ITEMS

## 10% Experienced Support

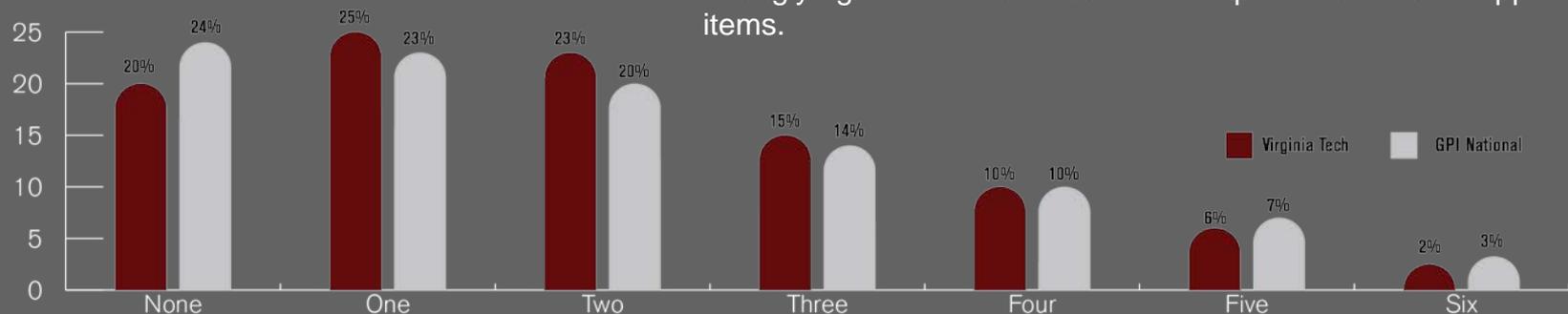
- Mentor who encouraged &
- Professor who made excited about learning &
- Professor who cared about me as a person.

## 7% Had Experiential Learning

- Project that took semester or more to complete &
- Internship or job applying what was learned in classroom &
- Extremely active in extracurricular activities and organizations.

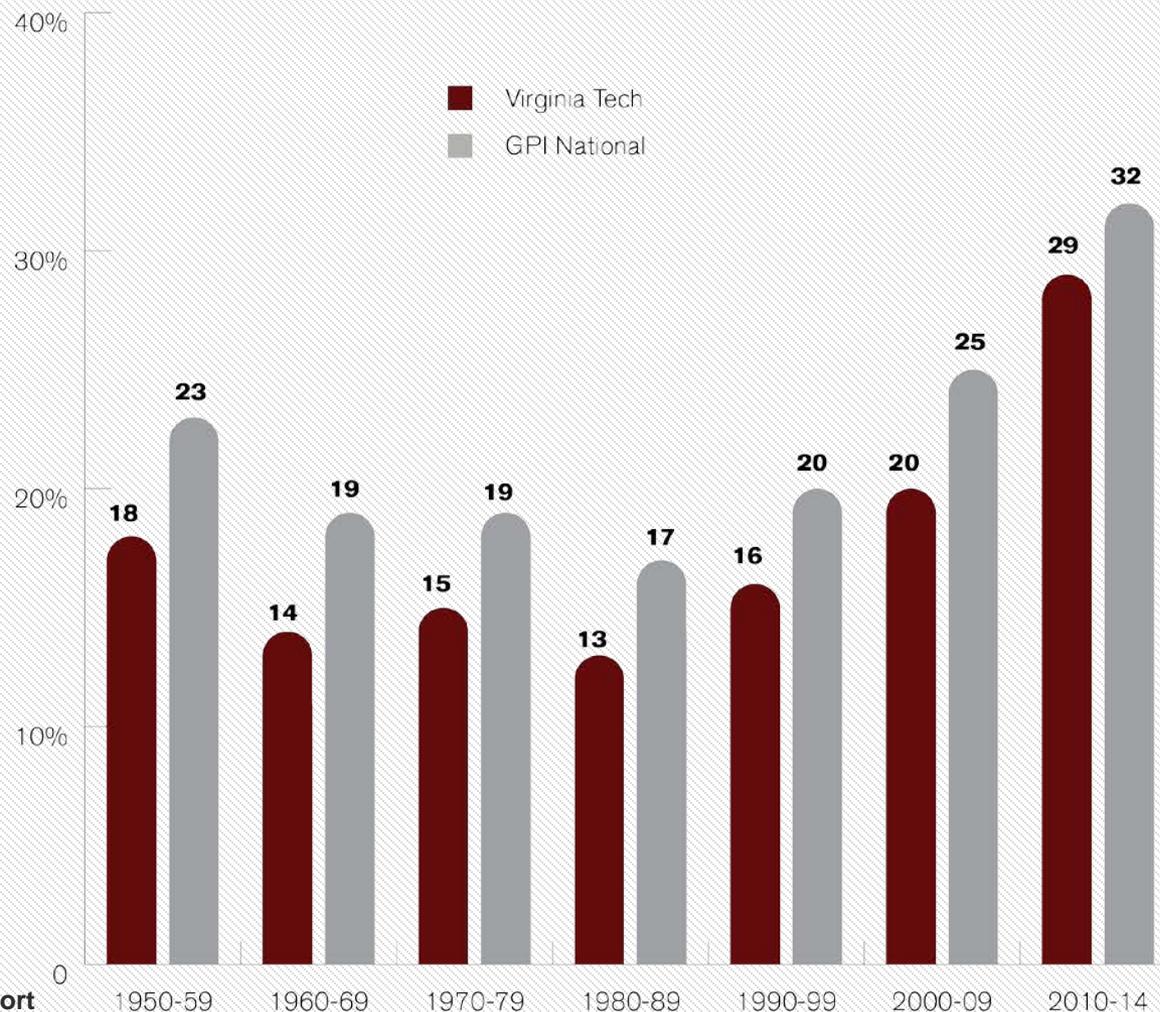
## Experiential and Support Items

Two-thirds (68%) of the Virginia Tech respondents could only strongly agree to two or fewer of the experiential and/or support items.



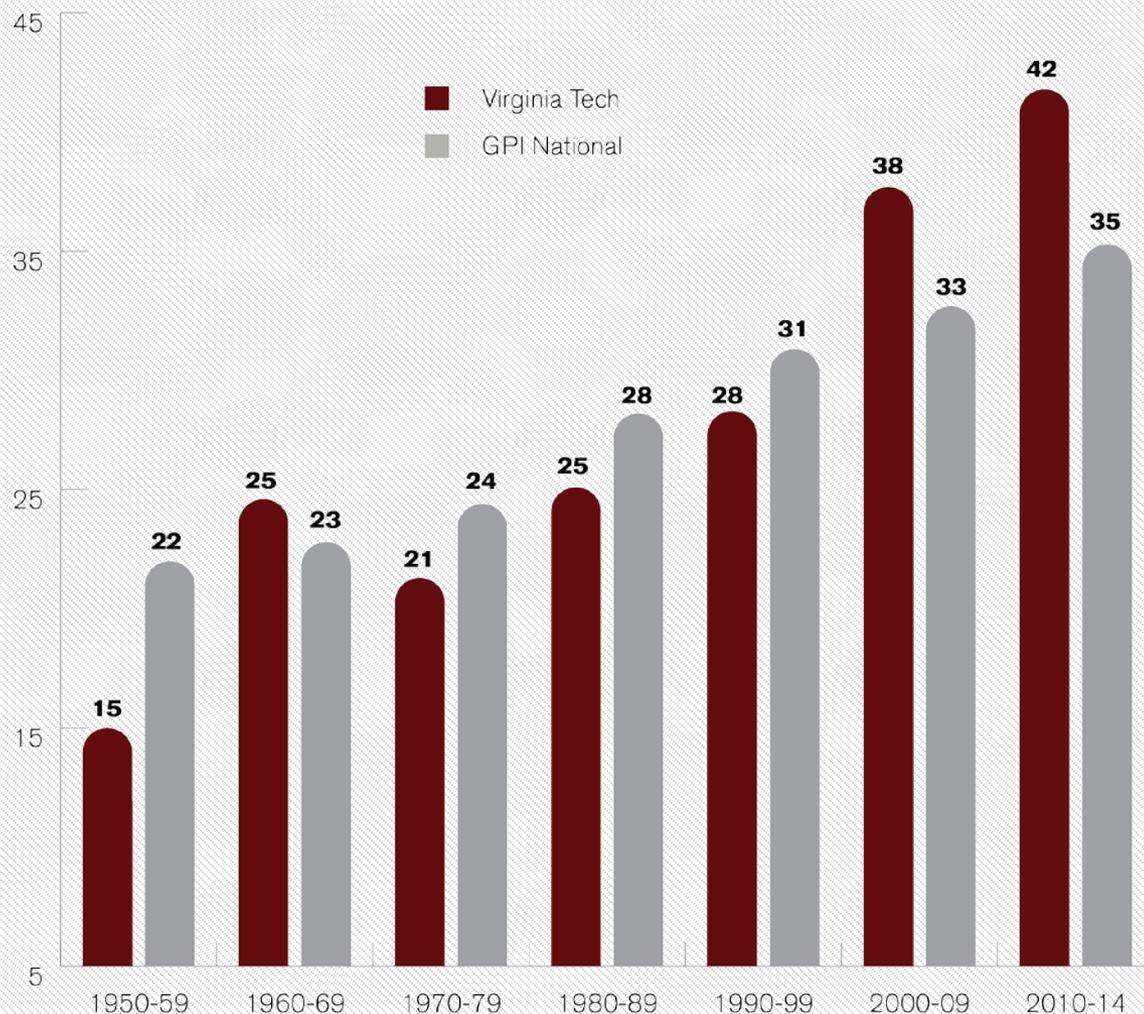
*% Strongly Agree for each of the Experiential and Support Questions*

# VIRGINIA TECH TRENDING POSITIVELY, BUT TRAILS NATIONAL AVERAGE FOR HAVING A MENTOR



While attending Virginia Tech, I had a mentor who encouraged me to pursue my goals and dreams.

# VIRGINIA TECH TRENDING POSITIVELY AND HAS OUTPACED NATIONAL AVERAGE ON INTERNSHIPS



**HANDS-ON,  
MINDS-ON!**

While attending Virginia Tech, I had an internship or job that allowed me to apply what I was learning in the classroom.

# STUDENT TOP LEVEL OUTCOMES

VIRGINIA TECH

May 2015



# VIRGINIA TECH UNDERGRADUATE STUDENTS – Overall Results (*strongly agree*) for the “Big Six”

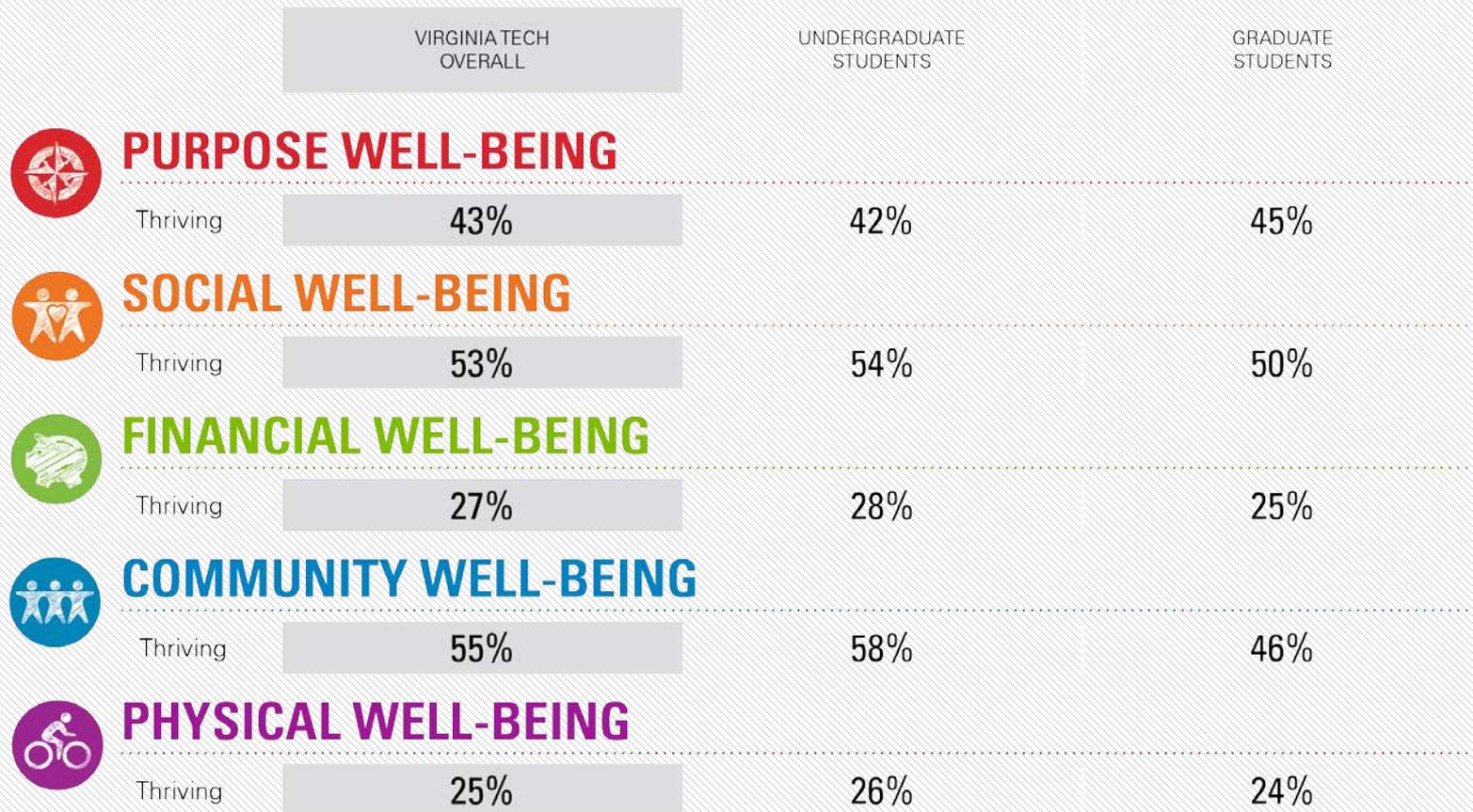
## Experienced Emotional Support

- Mentor who encouraged me - **25%**
- Professor who made me excited about learning – **57%**
- Professor who cared about me as a person – **25%**

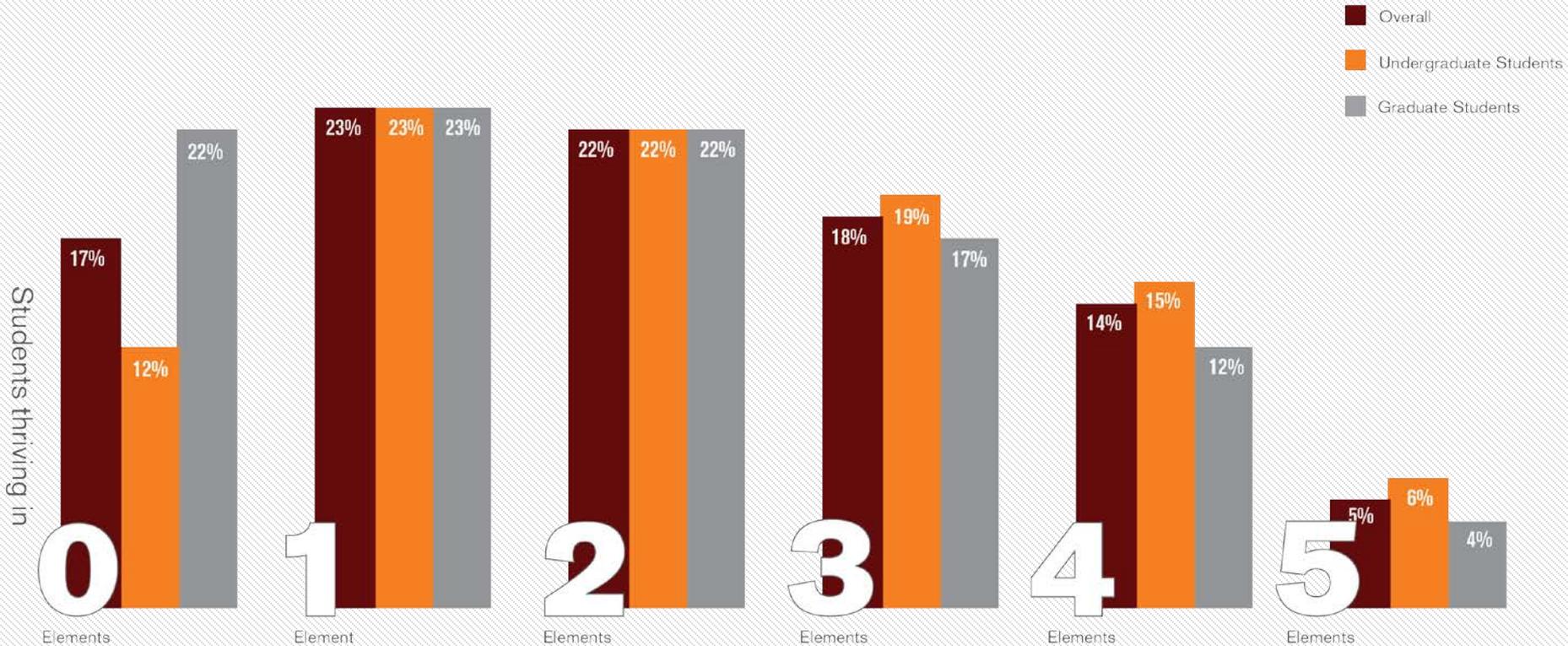
## Experiential & Deep Learning

- Project that took a semester or more to complete – **37%**
- Internship or job applying what was learned in the classroom – **28%**
- Extremely active in extracurricular activities and organizations – **26%**

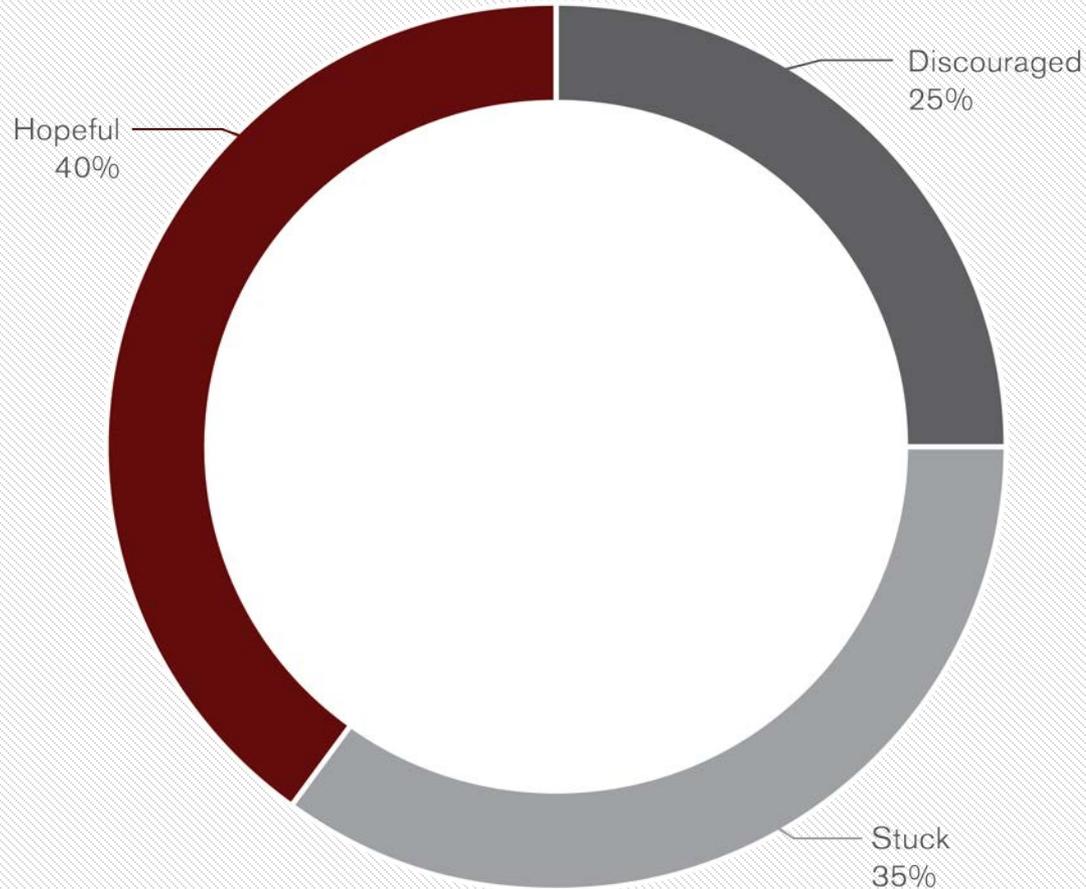
# HIGH WELLBEING MEANS A LIFE WELL LIVED



# STUDENTS THRIVING IN WELLBEING ELEMENTS



# HOPE: IDEAS AND ENERGY FOR THE FUTURE



**35%**  
Of Freshmen  
are Hopeful

**44%**  
Of Seniors  
are Hopeful

# VIRGINIA TECH UNDERGRADUATE STUDENTS OVERALL: HOPE

**85%** I know I will graduate from college.

**42%** There is a faculty or staff member who cares about my future.

**42%** I can think of many ways to get good grades.

**35%** I energetically pursue my goals.

**26%** I can find lots of ways around any problem.

**35%** I know I will find a good job after I graduate.

# VIRGINIA TECH UNDERGRADUATE STUDENTS OVERALL: ADVOCACY

**72%** Likely to recommend Virginia Tech to a friend

**72%** I feel proud to be a student at Virginia Tech

**49%** Virginia Tech is the perfect school for people like me

**47%** I can't imagine a world without Virginia Tech

# VIRGINIA TECH UNDERGRADUATE STUDENTS OVERALL: STRENGTHS

**41%** I know my strengths.

**37%** I use my strengths in many situations.

**33%** I accomplish a lot by using my strengths.

**23%** I know how to build on my current strengths.

# VIRGINIA TECH UNDERGRADUATE STUDENTS OVERALL: ADVISING

**32%** I receive the academic advising I need at Virginia Tech.

**43%** Someone has talked to me about my path to graduation.

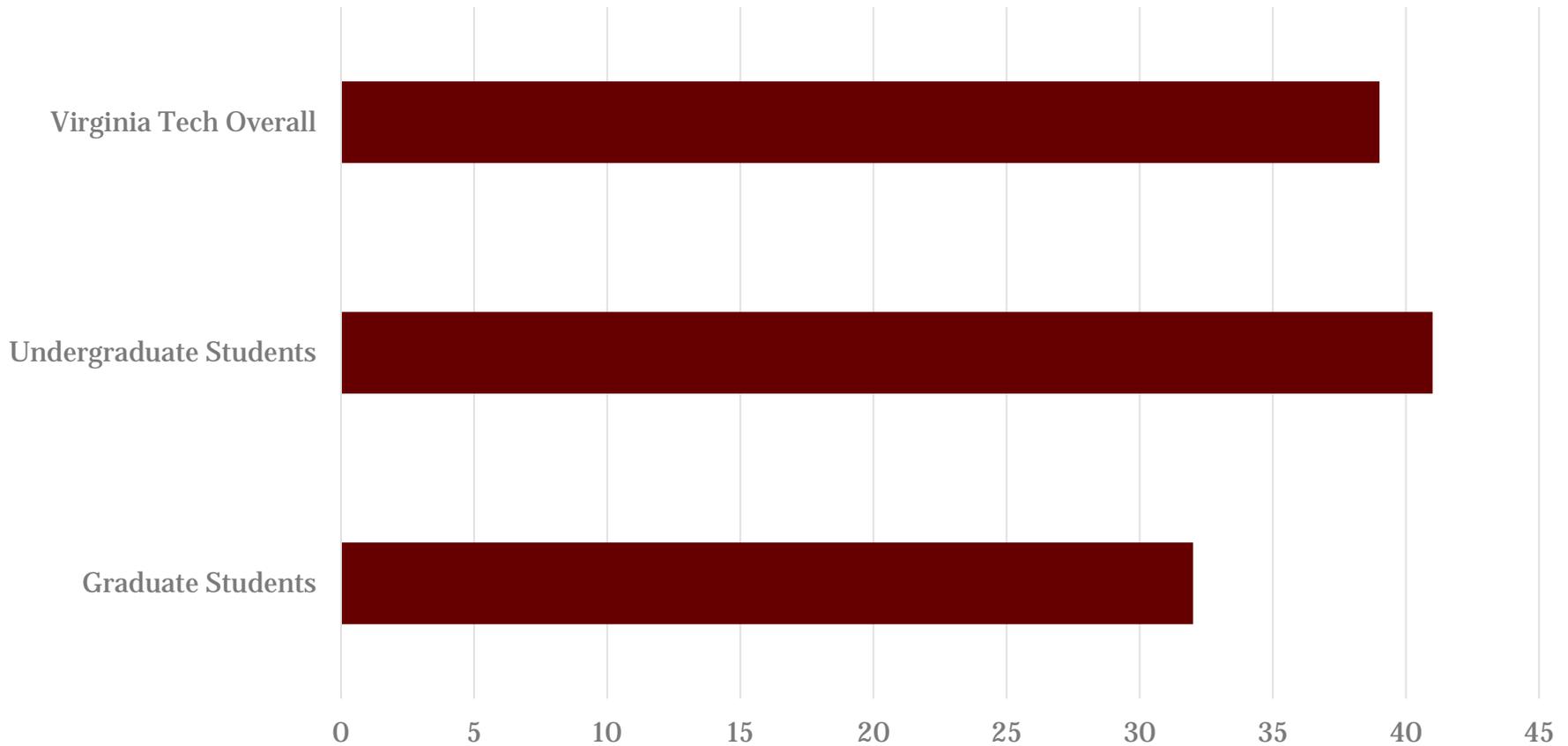
**60%** I know which courses I need to take in order to graduate.

**46%** There is someone at Virginia Tech I can count on to help plan my path to graduation.

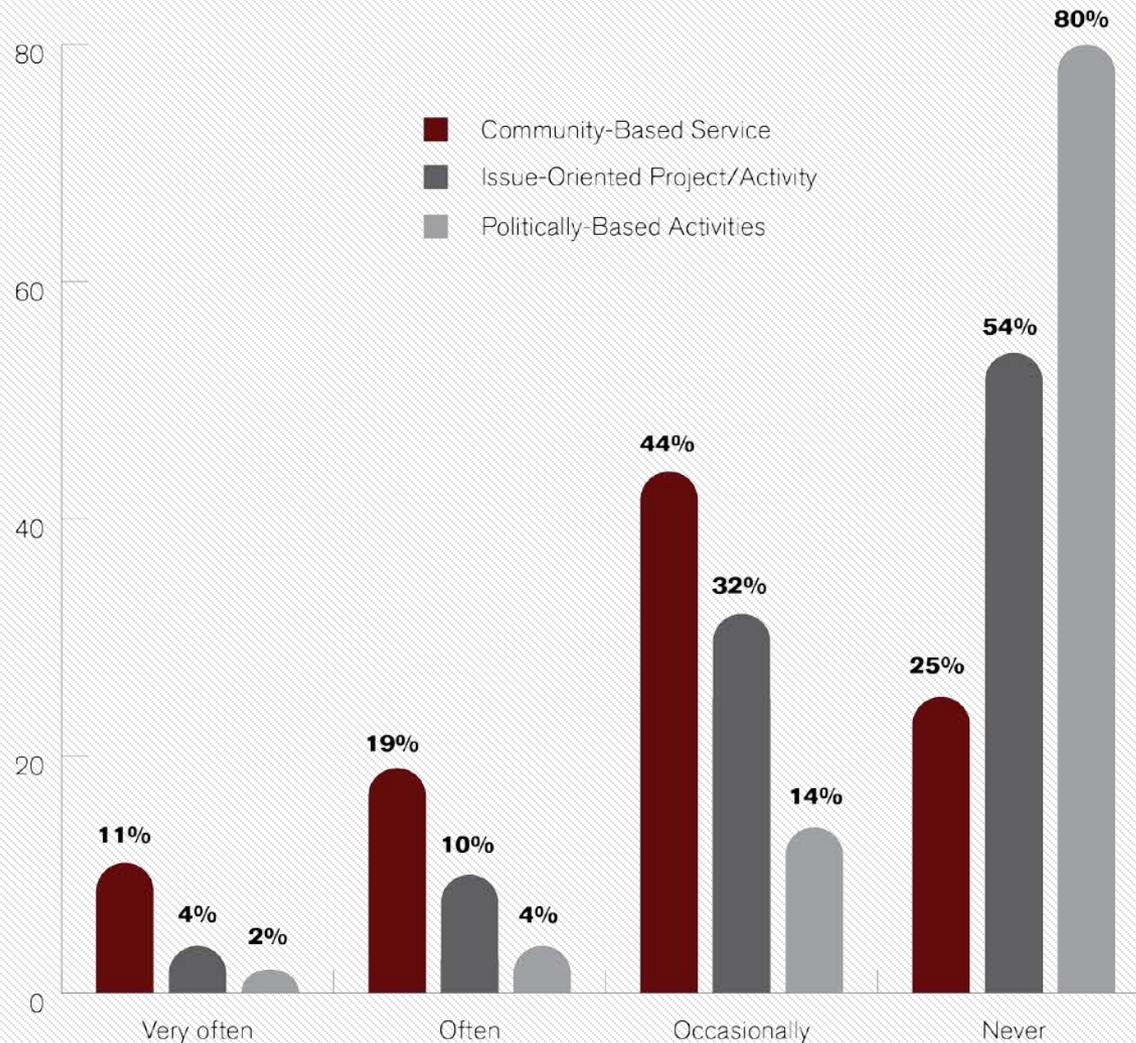
**63%** I plan to graduate in 4 years or less.

# VIRGINIA TECH STUDENTS: ENGAGEMENT WITH AND ATTACHMENT TO SCHOOL

STRONGLY AGREE

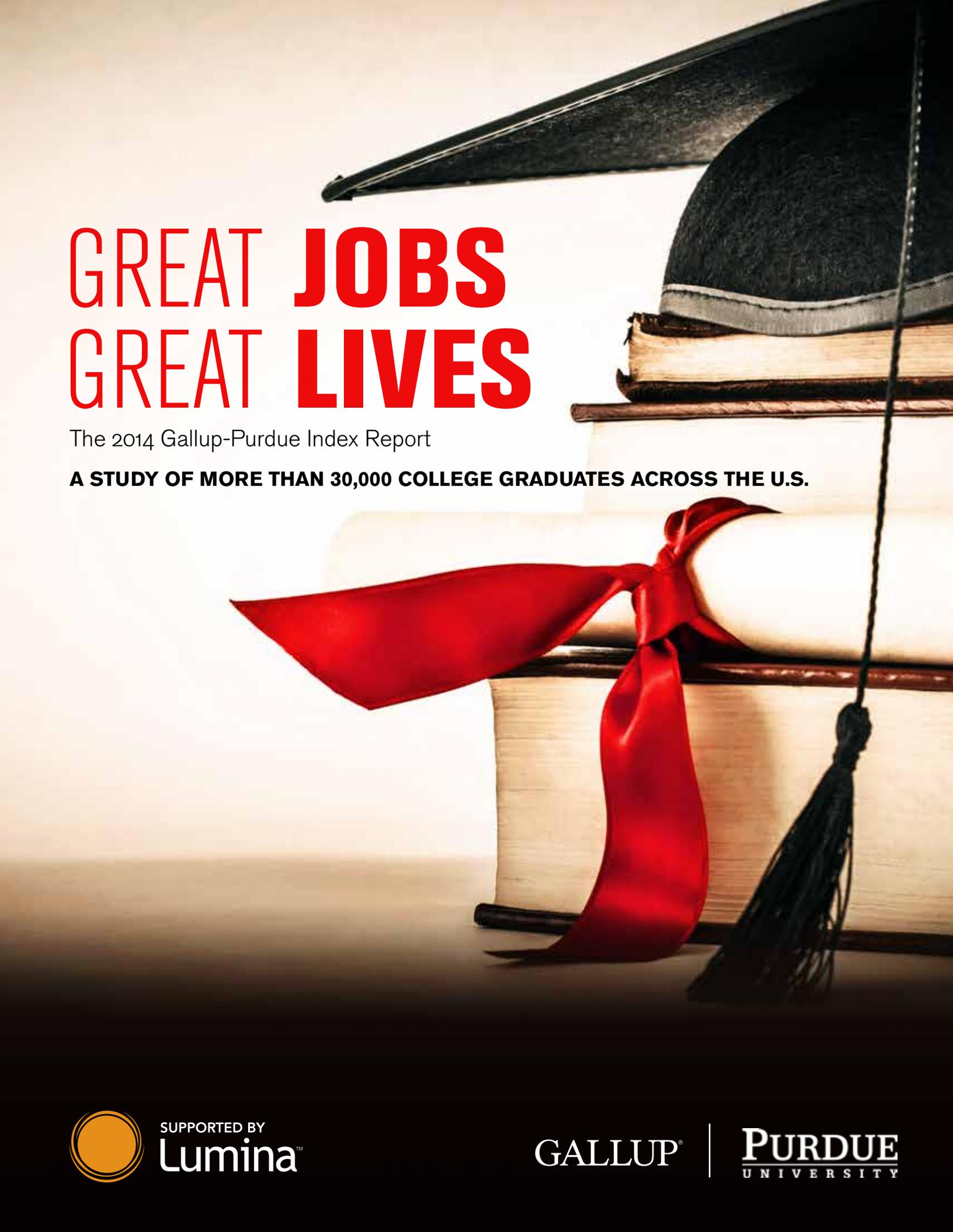


# OVERALL, **75%** OF VIRGINIA TECH STUDENTS PARTICIPATED AT LEAST OCCASIONALLY IN COMMUNITY-BASED SERVICES OVER THE PAST YEAR



# INITIAL NEXT STEPS

- Analyze and interpret current data in greater depth (*plus examine relationship to other campus data*)
- Determine what to explore more deeply with Gallup
- Full in-depth report from Gallup in Summer 2015
- Identify recommendations for initial action steps based on data



# GREAT JOBS GREAT LIVES

The 2014 Gallup-Purdue Index Report

**A STUDY OF MORE THAN 30,000 COLLEGE GRADUATES ACROSS THE U.S.**



SUPPORTED BY  
**Lumina**<sup>™</sup>

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**PURDUE**  
UNIVERSITY

**If you are a college or university leader** who would like to learn more about Gallup's work with institutions of higher education, please contact [education@gallup.com](mailto:education@gallup.com).

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# INTRODUCTION

For years, the value of a college degree has been determined not by the most important outcomes of a college education, but by the easiest outcomes to measure, namely, job and graduate school placement rates and alumni salaries (usually only from their first job out of college). While these metrics have some merit, they do not provide a holistic view of college graduates' lives. These outcomes do not reflect the missions of higher education institutions, and they do not reflect the myriad reasons why students go to college.

Responding to the call for increased accountability among higher education institutions, Gallup and Purdue University focused their research efforts on outcomes that provide insight into the common and essential aspirations for college graduates, no matter what type of institution they attend. Together, Gallup and Purdue created an index that examines the long-term success of graduates as they pursue a good job and a better life. This index provides insight into the relationship between the college experience and whether college graduates have great jobs and great lives.

## WORKPLACE ENGAGEMENT

Gallup's expertise on engagement in the workplace is rooted in more than 30 years of research on the 12 elements that best predict employee and workgroup performance.<sup>1</sup> Engagement is more than job satisfaction. It involves employees being intellectually and emotionally connected with their organizations and work teams because they are able to do what they're best at, they like what they do at work, and they have someone who cares about their development at work.

Gallup's employee engagement index, based on responses to the 12 elements, categorizes workers as engaged, not engaged, or actively disengaged. People who are engaged at work are involved in and enthusiastic about their work. They are loyal and productive. Those who are not engaged may be productive and satisfied with their workplaces, but they are not intellectually and emotionally connected to them. Workers who are actively disengaged are physically present but intellectually and emotionally disconnected from their work and workplace. They are unhappy with their work, share their unhappiness with their colleagues, and are likely to jeopardize the performance of their teams.

Gallup studies show that worldwide, having a good job is one of the most important factors in life — because it occupies an enormous amount of people's time and their self-identity.<sup>2</sup> In the U.S., Americans enroll in higher education institutions to prepare themselves to attain that "good" job.<sup>3</sup> Additional recent Gallup research shows that only 30% of Americans are engaged in their jobs, meaning that the U.S. workplace is missing staggering amounts

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1 *The Relationship Between Engagement at Work and Organizational Outcomes: Q<sup>12</sup> Meta-Analysis*

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2 See *State of the American Workplace: Employee Insights for U.S. Business Leaders*, published 2013. Available online at <http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx>.

3 Cooperative Institutional Research Program (CIRP) surveys

of economic benefit that comes from workforces that are more engaged. If higher education does not lead graduates to an engaging job, then it has fallen down on a central expectation of students and their families who support them through college.

## WELL-BEING

Well-being is the combination of all the things that are important to each individual — it is how people think about and experience their lives. A common misconception is to confine well-being to just some areas — to believe that well-being is only about being happy or wealthy, or to make it synonymous with physical health. Rather, it is about the interaction and interdependency between many aspects of life such as finding fulfillment in daily work and interactions, having strong social relationships and access to the resources people need, feeling financially secure, being physically healthy, and taking part in a true community.

Understanding the need for a metric for institutions to measure well-being and monitor its improvement, Gallup and Healthways have developed the Gallup-Healthways Well-Being 5 View. This survey is based on findings from the Gallup-Healthways Well-Being Index and years of joint research.<sup>4</sup> The Well-Being 5 View asks 10 questions to gauge well-being in five elements:

**Purpose Well-Being:** Liking what you do each day and being motivated to achieve your goals

**Social Well-Being:** Having strong and supportive relationships and love in your life

**Financial Well-Being:** Effectively managing your economic life to reduce stress and increase security

**Community Well-Being:** The sense of engagement you have with the areas where you live, liking where you live, and feeling safe and having pride in your community

**Physical Well-Being:** Having good health and enough energy to get things done on a daily basis

Gallup categorizes people's well-being in each of the elements as "thriving," "struggling," and "suffering," based on their responses. Those who are thriving are strong, consistent, and progressing, while those who are struggling are moderate or inconsistent. Those who are suffering are at high risk.

Because each of the elements of well-being is additive, an individual who is thriving in two elements should have a cumulative advantage over someone who is thriving in just one. Someone thriving in three of the five areas should have an even greater advantage, and so on.<sup>5</sup> For example, with some employers, Gallup has seen the annual health-related costs decrease incrementally according to how many well-being elements employees are thriving in. Thriving in all five areas is the pinnacle of well-being where individuals see the greatest advantage.

Previous Gallup research indicates that as of 2013, 29% of people in the U.S. are not thriving in any of these elements.<sup>6</sup> Understanding how people think about and experience their lives is one of the first steps in determining the appropriate interventions that organizations, communities, and higher education need to take to solve their biggest challenges. This research has the ability to provide colleges and universities with insight on how to improve the lives of current undergraduates in these key areas, which are within their control. While there is no one way to achieve high well-being, except through work and accountability — institutions can help provide their students with goals that are ultimately more fulfilling than income alone.

5 Rath, T. & Harter, J. (2011). The Economics of wellbeing. Available online at <http://www.gallup.com/strategicconsulting/126908/Economics-Wellbeing.aspx>

6 Study of 21,556 Gallup U.S. Panel Members (Weighted to U.S. Census Statistics), December 2013.

4 <http://www.gallup.com/poll/128186/Gallup-Healthways-Index-work.aspx>

## **ALUMNI ATTACHMENT**

Gallup's research across hundreds of organizations in many industries shows that fully engaged customers buy more, stay with you longer, and are more profitable than average customers — in good economic times and in bad. The Gallup-Purdue Index measures graduates' current emotional attachment to their alma mater by adapting Gallup's research on customer engagement to assess graduates' perceptions of their colleges both in retrospect to their undergraduate experiences and their views as current alumni.

Because students spend a significant amount of resources preparing for life outside of college, it is crucial to gauge whether the experiences they had in college have promoted a well-lived life. This includes if they perceive that the college was a great fit for them, having professors who cared and made learning exciting, and, most importantly, feeling that their school prepared them well for life outside of college. The Gallup-Purdue Index will uncover which college experiences and perceptions are related to greater gains in the workplace and in well-being.



# EXECUTIVE SUMMARY

When thinking about the ultimate outcome of a college degree, there is almost universal agreement about the value people seek and expect: to increase the probability of getting a good job and having a better life. Yet, there is not a single college or university in the U.S. that has rigorously researched and measured whether their graduates have “great jobs” and “great lives.”

Findings from the inaugural administration of the Gallup-Purdue Index — which includes interviews with more than 30,000 U.S. graduates — yield important insights for colleges, educators, employers, and students on the factors that contribute to these outcomes for college graduates.

Chief among these is that where graduates went to college — public or private, small or large, very selective or not selective — hardly matters at all to their current well-being and their work lives in comparison to their experiences in college. For example, if graduates had a professor who cared about them as a person, made them excited about learning, and encouraged them to pursue their dreams, their odds of being engaged at work more than doubled, as did their odds of thriving in their well-being. And if graduates had an internship or job where they were able to apply what they were learning in the classroom, were actively involved in extracurricular activities and organizations, and worked on projects that took a semester or more to complete, their odds of being engaged at work doubled also. Feeling supported and having deep learning experiences means everything when it comes to long-term outcomes for college graduates.

That these six elements of the college experience are so strongly related to graduates’ lives and careers is almost hard to fathom. When it comes to finding the secret to success, it’s not “where you go,” it’s “how you do it” that makes all the difference in higher education. Yet few college graduates achieve the winning combination. Only 14% of graduates strongly agree they were supported by professors who cared, made them excited about learning, and encouraged their

dreams. Further, just 6% of graduates strongly agree they had a meaningful internship or job, worked on a long-term project, and were actively involved in extra-curricular activities. Those who strongly agree to having all six of these experiences during their college time are rare — only 3%.

The implications are broad. When a student is trying to decide between an elite Ivy League school, a large public university, or a small private college, what should he or she consider to help make the decision? When an employer is evaluating two recent graduates from different backgrounds and institutions, which educational background should distinguish one applicant over the other, and why? When colleges and universities are setting internal strategy, designing new programs and curricula, deciding what performance measures faculty should be compensated for, and attracting future students, what are they to do?

The answers to these questions are not simple enough to answer in one paragraph or one report. The data presented in this report suggest, however, that the answers lie in thinking about things that are more lasting than selectivity of an institution or any of the traditional measures of college. Instead, the answers may lie in *what* students are doing in college and *how* they are experiencing it. Those elements — more than any others — have a profound relationship to a person’s life and career. Yet they are being achieved by too few. It should be a national imperative — owned by higher education institutions, students, parents, businesses, non-profits, and government alike, to change this.

## SOME OF GALLUP'S MOST IMPORTANT FINDINGS INCLUDE:

### WORKPLACE ENGAGEMENT – GREAT JOBS

- Thirty-nine percent of college graduates are engaged at work.
- There is no distinction between graduates of public versus private colleges on employee engagement, but there is a substantial difference between graduates of for-profit institutions and the rest.
- There were no differences in employee engagement by race or ethnicity, or by whether the graduate had been the first in the family to attend college.
- As many graduates from the Top 100 *U.S. News & World Report* schools are engaged in their work as graduates from other institutions.
- If an employed graduate had a professor who cared about them as a person, one who made them excited about learning, *and* had a mentor who encouraged them to pursue their dreams, the graduate's odds of being engaged at work more than doubled. Only 14% of graduates have had all three.
- If employed graduates feel their college prepared them well for life outside of it, the odds that they are engaged at work increase nearly three times.

### WELL-BEING – GREAT LIVES

- Fifty-four percent are thriving in purpose well-being; 49% are thriving in social well-being, 47% in community well-being, 42% in financial well-being, and 35% in physical well-being.
- Only 11% of college graduates are thriving — strong, consistent, and progressing — in all five elements of well-being. More than one in six graduates are not thriving in any of the elements.
- If college graduates are engaged at work, the odds are nearly five times higher that they will be thriving in all five elements of well-being. The odds of thriving

in all areas of well-being more than double for college graduates when they feel their college prepared them well for life outside of it.

- There is no distinction between graduates of public versus private colleges on well-being. However, there is a big difference on well-being for graduates of for-profit colleges.
- As many graduates from the Top 100-ranked schools in *U.S. News & World Report* are thriving in all elements of well-being as graduates from all other institutions.
- Higher well-being is related to graduates' experiences. Graduates who felt “supported” during college (that professors cared, professors made them excited about learning, and had a mentor) are nearly three times as likely to be thriving than those who didn't feel supported.
- The higher the amount of school loans that graduates took out for their undergraduate education, the worse off their well-being is. Fourteen percent of graduates who did not take out any loans are thriving in their well-being, compared with 4% of graduates with \$20,000 to \$40,000 in loans — the current average loan debt.

### ALUMNI ATTACHMENT TO ALMA MATER

- Graduates who felt “supported” during their time in college are six times more likely to be emotionally attached to their alma mater.
- Overall, only 29% of college graduates “strongly agree” that college prepared them well for life outside of college, but agreement raises the odds of graduates' attachment nearly nine times.
- Twenty-nine percent of graduates who are attached to their alma mater are thriving in well-being, versus 4% who are actively unattached to their colleges.

# WORKPLACE ENGAGEMENT

Illustrating the importance of a college degree in today’s job market, Gallup Daily tracking surveys in 2013 show that nearly twice as many college-educated adults in the U.S. are employed full time for an employer (58%) as those with no more than a high school degree (34%). And illustrating the difference that these “good jobs” can make in Americans’ daily existence, those who are employed for an employer are more likely to be positive about their lives — particularly when they think about the future. When asked to rate what they think their lives will be like in five years, Americans who are employed for an employer give their lives an average rating of 8.0 on a 10-point scale, where 10 is the best possible life<sup>7</sup>. Those who are not employed for an employer give their future lives an average rating of 7.4.

Consistent with findings among the larger U.S. population, the majority of graduates (57%) surveyed in the Gallup-Purdue Index study are employed full time for an employer. This group includes nearly two-thirds (65%) of recent graduates who received their degrees between 2010 and 2014. Graduates who obtained their degrees after 1980 are the most likely to be working full time, while full-time employment drops precipitously among graduates who received their degrees earlier — placing them near or older than the typical retirement age.

More male graduates than female graduates are employed full time for an employer (63% vs. 52%) — in step with the gender patterns that Gallup sees in its measures of employment in the U.S. and worldwide.<sup>8</sup> More graduates who majored in science (63%) or business (61%) are working full time than those who majored in the social sciences (53%) or the arts and humanities (52%).

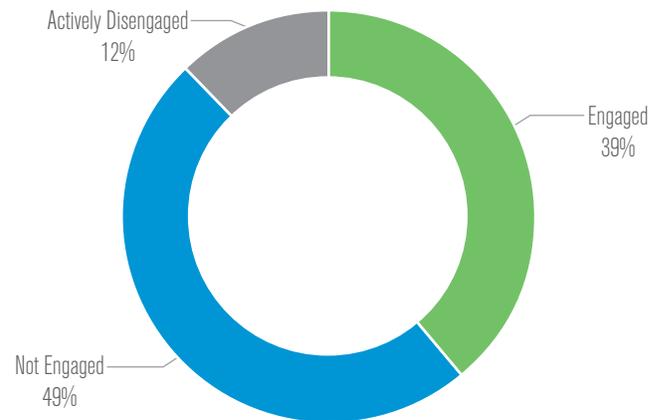
## NEARLY FOUR IN 10 EMPLOYED COLLEGE GRADUATES ARE ENGAGED AT WORK

But simply having a job isn’t enough. Gallup studies show that workplace engagement and people’s well-being are closely associated and that an engaging workplace increases the odds of higher well-being, regardless of policy or incentive.<sup>9</sup>

Overall, the Gallup-Purdue Index shows that 39% of college graduates who are employed full time for an employer (excluding the self-employed) are engaged in the workplace, the plurality (49%) are not engaged, and 12% are actively disengaged. While the Gallup-Purdue study did not include non-college graduates, a separate Gallup Daily tracking study shows that 30% of Americans overall are engaged and that engagement tends to be higher among those with less than a college degree. However, direct comparisons between the studies should be avoided because of methodological differences.<sup>10</sup>

### ENGAGEMENT IN THE WORKPLACE

Among graduates who are employed full time for an employer



7 Based on the Cantril Self-Anchoring Striving Scale.

8 Clifton, J. & Marlar, J. (2011) Good jobs: the new global standard. Available online at <http://www.gallup.com/poll/116431/Research-Reports.aspx>

9 See *State of the American Workplace: Employee Insights for U.S. Business Leaders*, published 2013. Available online at <http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx>.

10 Ibid.

## EMPLOYMENT STATUS OF U.S. COLLEGE GRADUATES

By decade of graduation

	ALL	<1949	1950-59	1960-69	1970-79	1980-89	1990-99	2000-09	2010-14
Employed Full Time (Employer)	57%	-	3%	11%	39%	61%	69%	75%	65%
Employed Full Time (Self)	5%	7%	4%	5%	7%	7%	6%	4%	2%
Employed Part Time, Do Not Want Full Time	11%	19%	20%	22%	17%	11%	10%	7%	7%
Unemployed	3%	-	-	1%	3%	2%	2%	3%	6%
Employed Part Time, Want Full Time	5%	-	1%	3%	4%	5%	4%	4%	11%
Not in Work Force	18%	74%	72%	58%	30%	14%	10%	8%	9%

## EMPLOYMENT STATUS OF U.S. COLLEGE GRADUATES

By gender and major

	ALL	MEN	WOMEN	SCIENCE MAJOR	SOCIAL SCIENCES MAJOR	BUSINESS MAJOR	ARTS & HUMANITIES MAJOR	OTHER
Employed Full Time (Employer)	57%	63%	52%	63%	53%	61%	52%	57%
Employed Full Time (Self)	5%	7%	4%	4%	4%	7%	6%	6%
Employed Part Time, Do Not Want Full Time	11%	8%	14%	10%	14%	9%	13%	11%
Unemployed	3%	3%	3%	2%	3%	3%	3%	3%
Employed Part Time, Want Full Time	5%	5%	6%	4%	4%	4%	7%	6%
Not in Work Force	18%	15%	22%	17%	23%	16%	19%	18%

Slightly more employed female college graduates, despite the gender equality issues they face in the workplace (including lower pay), than employed male graduates are engaged at work (42% vs. 36%). This is consistent with the gender patterns that Gallup has found in its previous national studies of the American workplace over the years and in its own client employee engagement database.<sup>11</sup>

There were no differences in employee engagement by race or ethnicity, or by whether the graduate had been the first in the family to attend college.

### COLLEGE PREPARATION FOR LIFE OUTSIDE OF COLLEGE DRIVES WORKPLACE ENGAGEMENT

If employed graduates feel their college prepared them well for life outside of it, the odds that they are engaged at work rise nearly three times. Experiences in college that contribute to feeling prepared for life after college, such as internships or jobs where students are able to apply what they are learning in the classroom, active involvement in extracurricular activities and organizations, and working on a project that took a semester or more to complete are part of this preparation.

Employed graduates are more likely to be engaged in the workplace if they had any of these experiences individually, but if they took part in all three, their odds of engagement more than doubled. Fifty-nine percent of graduates who experienced all three are engaged at work, compared with 30% of those who did not have any of these experiences.

Only 6% of all college graduates strongly agree that they experienced all three, with roughly one-third strongly agreeing they worked on a long-term project (32%), and fewer than three in 10 strongly agreeing they had an internship or job (29%) or were actively involved in extracurricular activities (20%).

The support that graduates recall receiving from the institution as students, and whether graduates feel that their institutions were passionate about their long-term success, are important well after college.

If an employed graduate recalls having a professor who cared about them as a person, one who made them excited about learning, *and* having a mentor who encouraged them to pursue their dreams, the graduate's odds of being engaged at work more than double. Fifty-seven percent of graduates who recalled receiving support in all three are engaged at work, compared with 25% who did not receive this support.

<sup>11</sup> See *State of the American Workplace: Employee Insights for U.S. Business Leaders*, published 2013. Available online at <http://www.gallup.com/strategicconsulting/163007/state-american-workplace.aspx>.

## The odds of being engaged at work are:

**2.6x** Higher if ... [College] prepared me well for life outside of college.

**2.4x** Higher if ... [College] passionate about the long-term success of its students.

**2.2x** Higher if ... I had a mentor who encouraged me to pursue my goals and dreams.

**2.0x** Higher if ... I had at least one professor at [College] who made me excited about learning.

**1.9x** Higher if ... My professors at [College] cared about me as a person.

**2.3x** Higher if ... graduates experience all three

**2.0x** Higher if ... I had an internship or job that allowed me to apply what I was learning in the classroom.

**1.8x** Higher if ... I was extremely active in extracurricular activities and organizations while attending [College].

**1.8x** Higher if ... I worked on a project that took a semester or more to complete.

**2.4x** Higher if ... graduates experience all three

Only 14% of all college graduates strongly agree that they had support in all three areas. College graduates are most likely to strongly agree that they had a professor who excited them about learning (63%), while 27% strongly agree that they had a professor who cared about them personally, and 22% strongly agree that they had a mentor who encouraged them.

Unfortunately, those who strongly agree to having experienced all six elements of support and experiential and deep learning during their college time are rare: just 3% of all college graduates. This suggests that colleges can give students the knowledge and experiences that help make them engagement-ready and savvy enough to identify and seek out workplaces that foster engagement.

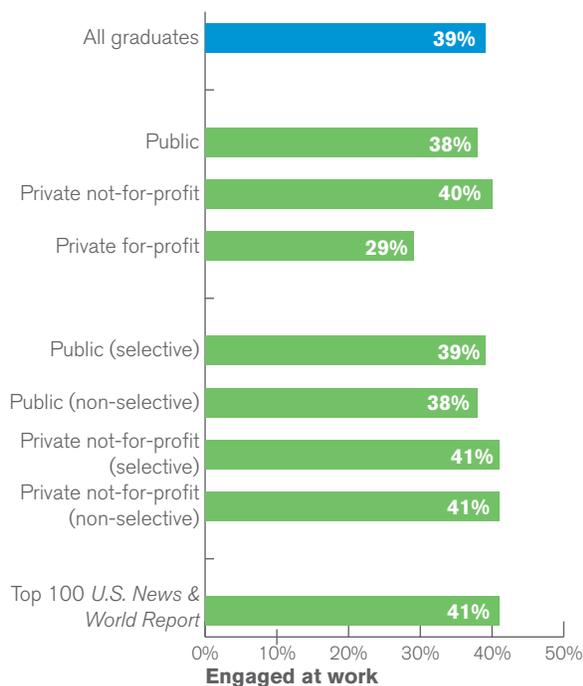
THE UNDERGRADUATE EXPERIENCE: SUPPORT AND EXPERIENTIAL AND DEEP LEARNING	% STRONGLY AGREE
I had at least one professor at [College] who made me excited about learning.	63%
My professors at [College] cared about me as a person.	27%
I had a mentor who encouraged me to pursue my goals and dreams.	22%
<b>All three</b>	<b>14%</b>
I worked on a project that took a semester or more to complete.	32%
I had an internship or job that allowed me to apply what I was learning in the classroom.	29%
I was extremely active in extracurricular activities and organizations while attending [College].	20%
<b>All three</b>	<b>6%</b>
<b>All six</b>	<b>3%</b>

### INSTITUTIONAL CHARACTERISTICS: TYPE OF SCHOOL DOESN'T MATTER MUCH TO ENGAGEMENT

Similar percentages of employed graduates of not-for-profit private colleges and employed graduates of public colleges are engaged at work. Graduates of private, for-profit institutions, however, are considerably less likely to be engaged at work (29%) than are graduates of private, not-for-profit institutions (40%) or public institutions (38%).

### ENGAGEMENT IN THE WORKPLACE

Among graduates who are employed full time for an employer



Other aspects of institutions such as the type of degrees they grant — bachelor’s, master’s, or doctorate — or the region where they are located in the U.S. do not make a difference in whether graduates are engaged in the workplace. Graduates of smaller schools, however, are less likely to be engaged in the workplace than graduates of larger schools with full-time undergraduate populations of 10,000 or more.

Being a graduate of a more selective college does not predict workplace engagement. As many graduates of institutions with selective admissions processes (based on the Carnegie Classification) are engaged at work as graduates of other schools. The percentage of graduates of the highly selective schools that make the *U.S. News & World Report* Top 100 list who are engaged at work (41%) is in line with the overall average (39%).

### ADDITIONAL INSTITUTIONAL VARIABLES: ARTS, SOCIAL SCIENCES MAJORS MORE LIKELY TO BE ENGAGED

What graduates studied in school appears to contribute more to their likelihood of being engaged than where they studied it. Slightly more employed graduates who majored in the arts and humanities (41%) and social sciences (41%) are engaged at work than either science (38%) or business (37%) majors.

But the longer it takes graduates to get their degree, the lower their engagement. Four in 10 (40%) employed graduates who finished their degree in four or fewer years are engaged in the workplace, compared with about one-third (34%) of those who took five and a half or more years to graduate. Finishing school in four years actually doubles the odds of engagement for working graduates.

**As many graduates of selective schools are engaged as graduates of other schools.**

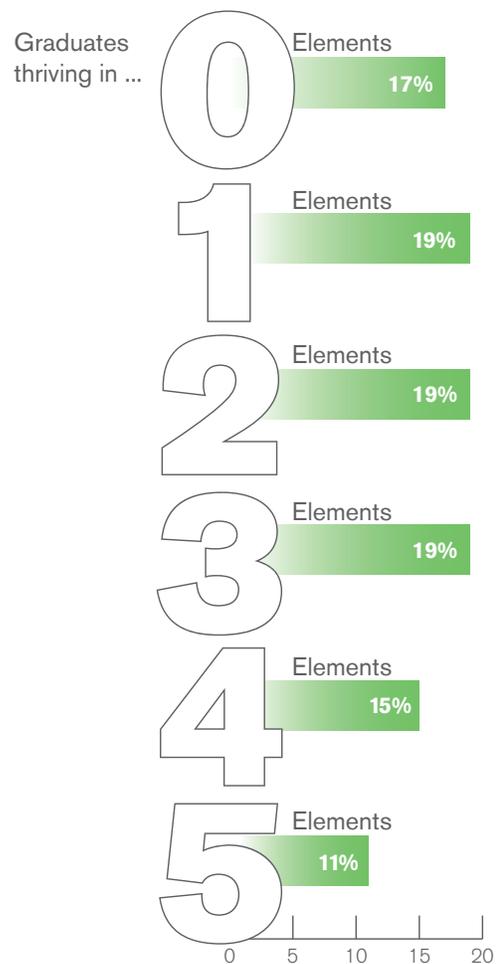
# WELL-BEING

College graduates expect that a college education will lead to a better life. Gallup Daily tracking studies in the U.S. suggest that it does on a relative scale: People's evaluations of their current lives rise with education, with college graduates and those with post-graduate education giving their lives the highest ratings. The Gallup-Purdue Index finds nearly nine in 10 graduates say they are satisfied with their lives, and on average, rate their current lives a 7.4 on a 10-point scale, where 10 is the best possible life.<sup>12</sup>

The majority of the graduates surveyed are thriving — strong, consistent, and progressing — in one or more of the five interrelated elements of well-being, but on average, they are thriving in just two elements. In fact, only 11% of graduates are reaping the cumulative advantages of thriving in all five elements — in line with the relatively small percentages Gallup generally sees among the larger U.S. population in other research. More than one in six (17%) graduates are not thriving in any of the elements. Altogether, this suggests that many graduates are still waiting to experience that “great life.”

This is particularly true of recent graduates — some of whom are likely still paying off their school loans and just starting their professional careers. Three percent of graduates who received their degrees in the past four years are thriving in all five elements. In contrast, well-being is higher across all five elements for older graduates. For

## ON AVERAGE, COLLEGE GRADUATES THRIVING IN TWO ELEMENTS OF WELL-BEING



instance, graduates who received their degrees in the 1950s and 1960s are much more likely to be thriving in all elements. As many as 26% of graduates who received their degrees in the 1960s are thriving in all elements. This highlights the important role that age plays in determining the relative influence of experiences on one's well-being.<sup>13</sup>

<sup>12</sup> Based on the Cantril Self-Anchoring Striving Scale

<sup>13</sup> Bhattacharjee, A., & Mogilner, C. (2014). "Happiness from Ordinary and Extraordinary Experiences," *Journal of Consumer Research*, 41 (June).

**GRADUATES THRIVING IN ALL FIVE ELEMENTS**  
by decade of graduation

All	11%
<1959	24%
1960-69	26%
1970-79	16%
1980-89	11%
1990-99	9%
2000-09	6%
2010-14	3%

**MAJORITY OF GRADUATES THRIVING IN PURPOSE WELL-BEING**

More college graduates are thriving in purpose well-being than any other element of well-being. These graduates like what they do every day and get to learn or do something interesting on a daily basis, leading more than half of them (54%) to be thriving in this area. Other Gallup research shows that people with thriving purpose well-being are more than twice as likely to be thriving in their lives overall.

Fewer college graduates are doing as well in the element of social well-being. Still, the positive energy and encouragement that graduates feel they get from their friends and family lead nearly half of them (49%) to be thriving in this area. A similar percentage of graduates (47%) like living in their communities and are engaged enough to be thriving in community well-being.

Slightly more than four in 10 graduates (42%) are thriving in the element that is more traditionally associated with

their long-term success — financial well-being. Still, those graduates who are thriving in financial well-being feel financially secure and do not regularly worry about money.

Fewer college graduates are thriving in physical well-being than in any other element, with about one in three (35%) strongly agreeing that their physical health is near-perfect and that they felt active and productive every day during the past week.

**WORKPLACES AND INSTITUTIONS ARE KEY DRIVERS OF WELL-BEING**

If employed graduates are engaged at work, the odds are nearly five times higher that they will be thriving in all five elements of well-being. Further, workplace engagement has a strong, positive relationship to each of the well-being elements individually.

When graduates are emotionally attached to their college or university — meaning that they strongly agree that their college or university was the perfect school for them and they can't imagine a world without it — they are twice as likely to be thriving in all elements of well-being.

The odds of thriving in all areas of well-being also more than double for college graduates when they agree that their college prepared them well for life outside of it, and the odds nearly double when they agree that their college was passionate about their long-term success.

**54%** **Purpose Well-Being**  
I like what I do every day.  
I learn or do something interesting every day.

**42%** **Financial Well-Being**  
I have enough money to do everything I want to do.  
In the last seven days, I have worried about money.

**49%** **Social Well-Being**  
Someone in my life always encourages me to be healthy.  
My friends and family give me positive energy every day.

**47%** **Community Well-Being**  
The city or area where I live is a perfect place for me.  
In the last 12 months, I have received recognition for helping to improve the city or area where I live.

**35%** **Physical Well-Being**  
In the last seven days, I have felt active and productive every day.  
My physical health is near-perfect.

## Odds of thriving in all areas of well-being are:

- 4.6x** Higher if ... Engaged at work
- 2.5x** Higher if ... [College] prepared me well for life outside of college.
- 2.0x** Higher if ... Emotionally attached to school
- 1.9x** Higher if ... [College] passionate about the long-term success of its students.
- 1.7x** Higher if ... I had a mentor who encouraged me to pursue my goals and dreams.
- 1.7x** Higher if ... My professors at [College] cared about me as a person.
- 1.5x** Higher if ... I had at least one professor at [College] who made me excited about learning.
- 1.9x** Higher if ... graduates experience all three
- 1.5x** Higher if ... I had an internship or job that allowed me to apply what I was learning in the classroom.
- 1.4x** Higher if ... I was extremely active in extracurricular activities and organizations while attending [College].
- 1.1x** Higher if ... I worked on a project that took a semester or more to complete.
- 1.3x** Higher if ... graduates experience all three

### WORKPLACE ENGAGEMENT INCREASES WITH THRIVING

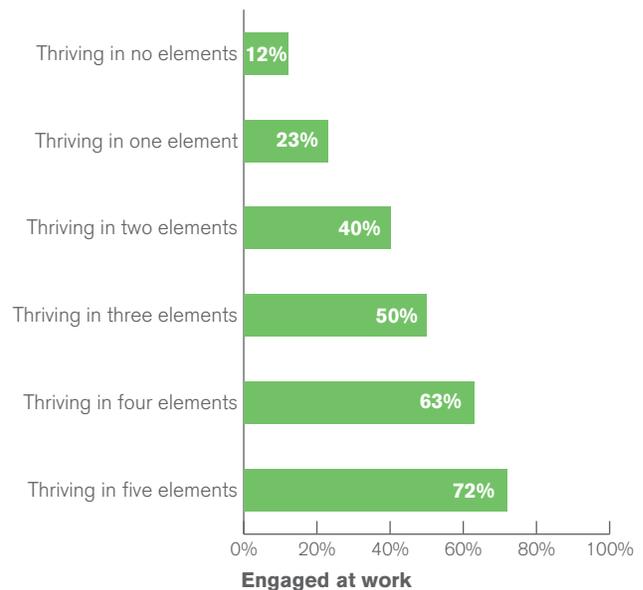
Workplace engagement also increases for graduates as the number of elements they are thriving in also increases. Only 12% of graduates who are thriving in none of the elements are engaged with their work. On the other hand, 72% of graduates who are thriving in all five elements are engaged with their work.

### INSTITUTIONAL CHARACTERISTICS: SCHOOL TYPE NOT RELATED TO WELL-BEING

Although what they experience in college stays with graduates long after they leave it, the type of school that graduates received their degrees from is not related to thriving in all five areas of their well-being.

Similar percentages of graduates of not-for-profit private institutions and public institutions are thriving in all five elements of well-being. However, considerably fewer graduates of private, for-profit institutions have thriving well-being in all areas than are graduates of private, not-for-

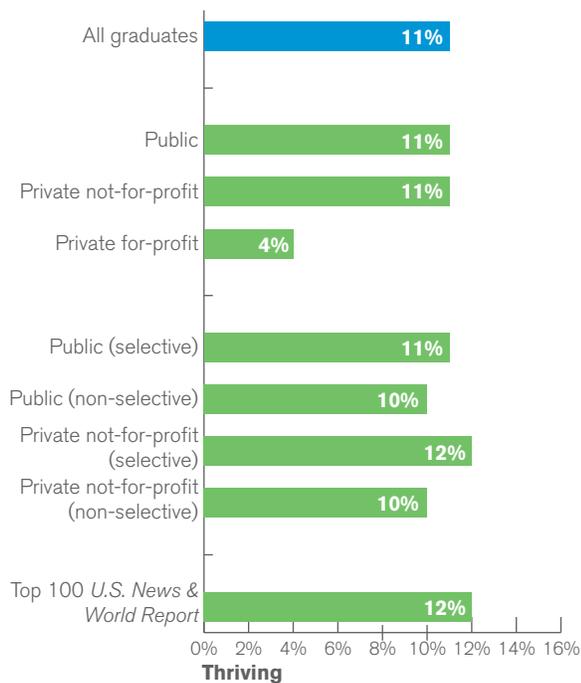
### ENGAGEMENT AND WELL-BEING



profit institutions. Only 4% of graduates of private, for-profit institutions are thriving in all areas of well-being.

Other aspects of institutions, such as their size, the type of degrees they grant — baccalaureate, master’s, or doctorate — or the region where they are located in the U.S., do not make a difference in whether graduates are thriving in all five elements of well-being. The percentage of graduates of more selective schools (based on the Carnegie Classification) who are thriving in all five elements is similar to the percentage of graduates of other schools. Twelve percent of graduates of *U.S. News & World Report* Top 100 schools are thriving — in line with the overall average (11%).

#### THRIVING WELL-BEING IN ALL FIVE ELEMENTS

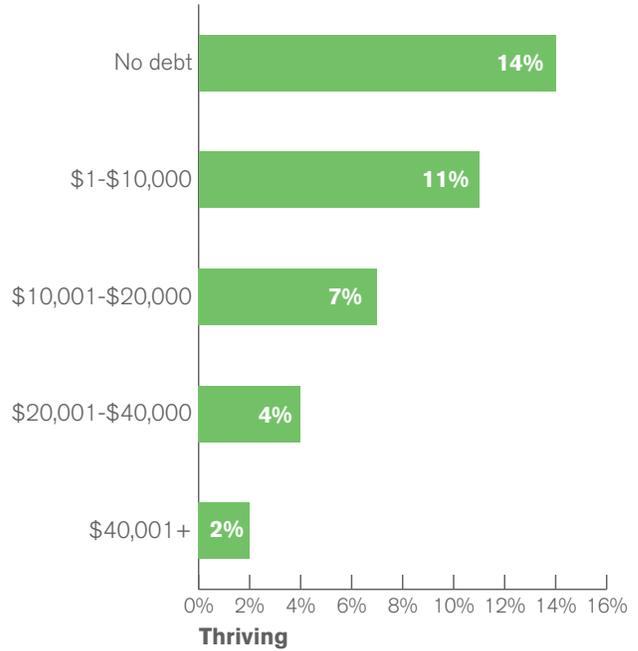


#### ADDITIONAL INSTITUTIONAL VARIABLES: LOAN DEBT CAN CRIPPLE WELL-BEING

With average student loan debts topping \$29,000 in 2012<sup>14</sup>, many of today’s graduates can expect to be paying for their education for a long time. And they may keep paying in other ways. The amount of student loans that graduates take out to pay for their undergraduate degree is related to their well-being in every element. The higher the loan amount, the worse the well-being. Only 4% of graduates who owed

between \$20,000 and \$40,000 are thriving in all areas, compared with 14% of those who did not take out loans.

#### LOAN DEBT FOR UNDERGRADUATE EDUCATION AND WELL-BEING



High student loan debt also may inhibit entrepreneurial activity, particularly among those who graduated after 1990. The higher the loan amount that graduates reported they took out for their undergraduate education, the less likely they are to say they started a business.

More college graduates who felt supported in college — because they had a mentor who encouraged them to pursue their goals and dreams, a professor who made them excited about learning, and felt their professors cared about them as a person — are thriving in all areas of their well-being. Seventeen percent of those who felt supported are thriving in all five areas, compared with 6% of those who did not feel supported.

Such support may matter even more to long-term well-being than other college experiences. Graduates who engaged in experiential and deep learning — by taking part in paid internships, being active in extracurricular activities and with organizations, *and* completing a long-term project — are slightly more likely to be thriving in all areas of well-being. Thirteen percent who had these experiences are thriving, compared with 10% who did not have these experiences.

14 Source: Institute for College Access & Success’ Project on Student Debt

## **ENGAGEMENT AND WELL-BEING AMONG THOSE WITH ASSOCIATE'S DEGREES**

In a separate study, Gallup looked at these same measures of engagement, well-being, and experiential learning and support among those with two-year degrees. While the results should not be directly compared with those who have bachelor's degrees or more education, the study did reveal some interesting information about these graduates.

### **ENGAGEMENT**

Fifty-four percent of those with associate's degrees who participated in the study work full time for an employer. Nearly four in 10 (39%) of those workers are engaged at work, while the plurality are not engaged (49%), and 12% are actively disengaged.

### **WELL-BEING**

Six percent of those with associate's degrees are thriving in all five areas of their well-being. Nearly one in four of those with two-year degrees are not thriving in any element of well-being. The highest percentage are thriving in purpose well-being, with nearly half (48%) thriving in this area, followed by social well-being (41%) and community well-being (39%). They are less likely to be doing well in the areas of financial well-being and physical well-being; three in 10 or fewer are thriving in either element.

### **SUPPORT AND EXPERIENTIAL AND DEEP LEARNING**

Only 12% of those with associate's degrees strongly agree they were supported by professors who cared, made them excited about learning, and encouraged their dreams. Very few (2%) strongly agree they had a meaningful internship or job, worked on a long-term project, and were actively involved in extra-curricular activities.



# ALUMNI ATTACHMENT

Though it was not the primary emphasis of this study, many colleges and universities spend inordinate resources to drive alumni giving and are concerned with alumni attachment to the school after graduation. Gallup explores this connection between the “customers of higher education” and their alma maters by looking at their level of agreement with two questions: “I can’t imagine a world without [College name]” and “[College name] was the perfect school for people like me.” Graduates who strongly agree with both items are considered “emotionally attached.”

When graduates are emotionally attached to their college or university, they are two times more likely to be thriving in all elements of well-being, and they are two times more likely to be engaged with their jobs. These interconnections make it important to look at the strength of the existing emotional bonds between graduates and their alma maters and what may contribute to them.

Overall, slightly fewer than one in five graduates (18%) are still emotionally attached to their schools. Nine percent are actively emotionally unattached — meaning that they strongly disagree that their schools were perfect for them and that they can’t imagine a world without their schools. Slightly more female graduates are attached (20%) to their

schools than are male graduates (16%). Those who received their degrees before 1970 also have higher-than-average attachment to their graduating institutions, rising well above one-quarter in the two oldest graduate groups.

## **PREPARATION, PASSION STRONGEST DRIVERS OF ALUMNI ATTACHMENT**

Overall, 29% of college graduates “strongly agree” that their college prepared them well for life outside of college. Nearly as many graduates (24%) “strongly agree” that their college is passionate about the long-term success of its students. These two items are strongly related to graduates’ attachment to their schools, just as they are to well-being and workplace engagement. Strongly agreeing with the first

# The odds of being emotionally attached to alma mater are:

**8.7x** Higher if ... [College] prepared me well for life outside of college.

**8.1x** Higher if ... [College] passionate about the long-term success of its students.

**6.2x** Higher if ... My professors at [College] cared about me as a person.

**5.5x** Higher if ... I had at least one professor at [College] who made me excited about learning.

**4.1x** Higher if ... I had a mentor who encouraged me to pursue my goals and dreams.

**6.1x** Higher if ... graduates experience all three

**2.7x** Higher if ... I was extremely active in extracurricular activities and organizations while attending [College].

**2.4x** Higher if ... I had an internship or job that allowed me to apply what I was learning in the classroom.

**2.2x** Higher if ... I worked on a project that took a semester or more to complete.

**3.2x** Higher if ... graduates experience all three

statement raises the odds of graduates' attachment nearly nine times, and strongly agreeing with the second increases the odds more than eight times.

The support that graduates recall receiving from their institution as students is also important well into their post-graduate careers. Forty-eight percent of graduates who say they had a professor who cared about them as a person, one who made them excited about learning, *and* had a mentor who encouraged them to pursue their dreams are emotionally attached, compared with 2% who did not receive any of this support.

Experiences such as internships or jobs, active involvement in extracurricular activities and organizations, and working on a long-term project are also related to attachment, but not nearly to the same degree as support. Thirty-nine percent of graduates who report experiencing all of these are emotionally attached, compared with 9% who did not have any these experiences.

## **INSTITUTIONAL CHARACTERISTICS: GRADUATES OF PRIVATE, SELECTIVE SCHOOLS MORE LIKELY TO FEEL ATTACHED**

Slightly more graduates of private colleges feel emotionally attached to their college (20%) than are graduates of public colleges (17%). But half as many graduates of private, for-profit schools (11%) are as attached as graduates who attended private, not-for-profit schools (20%).

Among graduates of public and private, not-for-profit institutions, more of those who attended schools with selective admissions (Carnegie Classifications) are attached to their school than those who attended schools that do not use this criterion.

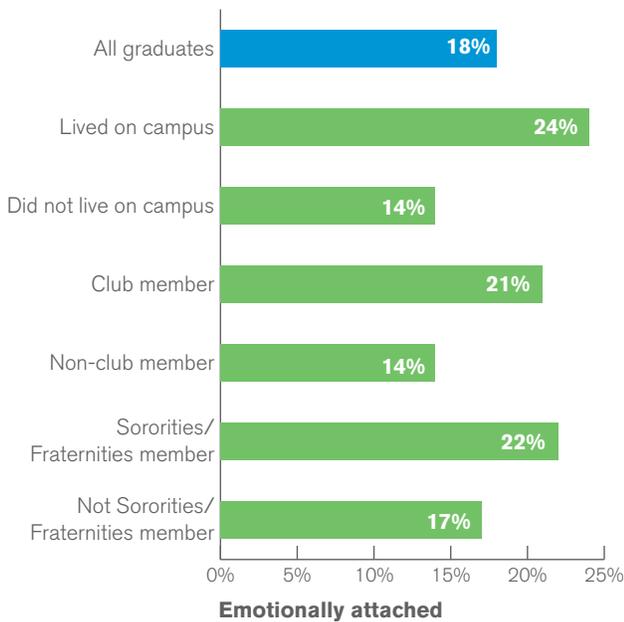
## **ADDITIONAL INSTITUTIONAL VARIABLES: TIME, INVOLVEMENT ON CAMPUS RELATES TO ATTACHMENT**

The time that graduates spent on campus as undergraduates and how involved they were relates to their current emotional attachment to their school. For example, more

graduates who attended the same college until graduation are emotionally attached to their school (20%) than those who transferred from a two-year (16%) or four-year college or university (13%). And more graduates who lived on their college's campus (24%) are attached than those who spent no time living on campus (14%).

Alumni who participated in school clubs or fraternities or sororities exhibit higher attachment. Twenty-one percent of graduates who say they were members of clubs on campus (about 56% of all graduates surveyed) are emotionally attached to their schools, compared with 14% who say they were not members of these clubs. Twenty-two percent of those who were in sororities or fraternities (16% of all graduates claimed membership) are attached, compared with 17% who were not members of sororities or fraternities.

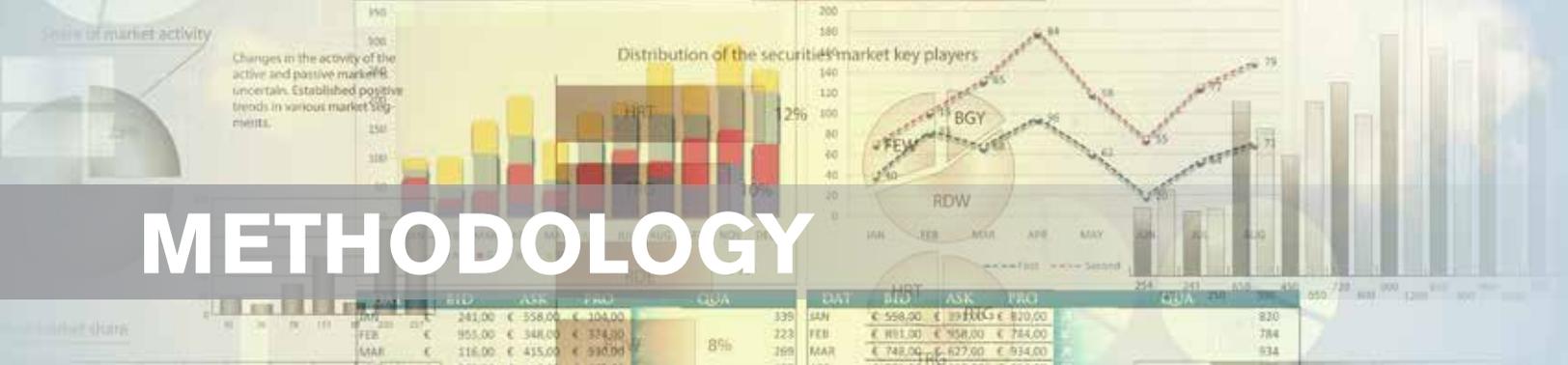
#### EMOTIONAL ATTACHMENT AND CAMPUS INVOLVEMENT



The well-being of emotionally attached college graduates is much higher than that of actively unattached graduates. Twenty-nine percent of attached college graduates are thriving in all five elements of well-being, whereas just 4% of actively unattached college graduates are thriving in all five elements of well-being.

## FINAL THOUGHTS

The initial findings from the 2014 Gallup-Purdue Index shed light on how the effects of certain powerful college experiences can be felt years and even decades after graduation. College students, their families, and the American public all expect that college is a transformative experience that leads to great jobs and great lives. All too often, however, that is not the case. Higher education has the power to change that. A national dialogue on improving the college experience should focus on ways to provide students with more emotional support, and with more opportunities for deep learning experiences and real-life applications of classroom learning. By taking action, colleges, educators, students, and their families can move the needle so more college graduates experience that great job and great life.



# METHODOLOGY

Results for the Gallup-Purdue Index are based on Web surveys conducted Feb. 4 – March 7, 2014, with a random sample of approximately 1,557 respondents with an associate’s degree and 29,560 respondents with a bachelor’s degree or higher, aged 18 and older, with Internet access, living in all 50 U.S. states and the District of Columbia.

The Gallup-Purdue Index sample was compiled from two sources — the Gallup Panel and the Gallup Daily Tracking survey.

The Gallup Panel is a proprietary, probability-based longitudinal panel of U.S. adults who are selected using random-digit-dial (RDD) and address-based sampling methods. The Gallup Panel is not an opt-in panel. The Gallup Panel includes 60,000 individuals. Panel members can be surveyed by phone, mail, or Web. Gallup Panel members with a college degree, and who have access to the Internet, were invited to take the Gallup-Purdue Index survey online.

Gallup Daily tracking includes two parallel surveys — the U.S. Daily and the Gallup-Healthways Well-Being Index®. Each sample of national adults includes a minimum quota of 50% cellphone respondents and 50% landline respondents, with additional minimum quotas by time zone within region. Landline and cellular telephone numbers are selected using RDD methods. Landline respondents are chosen at random within each household on the basis of which member had the most recent birthday. Gallup Daily tracking respondents with a college degree, who agreed to future recontact, were invited to take the Gallup-Purdue Index survey online.

Gallup-Purdue Index interviews are conducted with respondents via the Web, in English only. Samples are weighted to correct for unequal selection probability and nonresponse. The data are weighted to match national demographics of gender, age, race, Hispanic ethnicity, education, and region. Demographic weighting targets are based on the most recent Current Population Survey figures for the aged 18 and older associate’s degree population and U.S. bachelor’s degree or higher population. Weighting was conducted separately for the two groups (associate’s degree population and bachelor’s degree population).

All reported margins of sampling error include the computed design effects for weighting.

For results based on the total sample of associate’s degree respondents, the margin of sampling error is  $\pm 3.8$  percentage points at the 95% confidence level.

For results based on employee engagement of associate’s degree respondents, the margin of sampling error is  $\pm 4.8$  percentage points at the 95% confidence level.

For results based on the total sample of bachelor’s degree or higher respondents, the margin of sampling error is  $\pm 0.9$  percentage points at the 95% confidence level.

For results based on employee engagement of bachelor’s degree or higher respondents, the margin of sampling error is  $\pm 1.0$  percentage points at the 95% confidence level.

In addition to sampling error, question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of public opinion polls.

#### **ABOUT GALLUP**

Gallup delivers forward-thinking research, analytics, and advice to help leaders solve their most pressing problems. Combining more than 75 years of experience with its global reach, Gallup knows more about the attitudes and behaviors of the world's constituents, employees, and customers than any other organization. Gallup consultants help private and public sector organizations boost organic growth through measurement tools, strategic advice, and education. Gallup's 2,000 professionals deliver services at client organizations, through the Web, and in nearly 40 offices around the world.

#### **ABOUT PURDUE UNIVERSITY**

Purdue University is a vast laboratory for discovery. The university is known not only for science, technology, engineering, and math programs, but also for our imagination, ingenuity, and innovation. It's a place where those who seek an education come to make their ideas real — especially when those transformative discoveries lead to scientific, technological, social, or humanitarian impact.

Founded in 1869 in West Lafayette, Indiana, the university proudly serves its state as well as the nation and the world. Academically, Purdue's role as a major research institution is supported by top-ranking disciplines in pharmacy, business, engineering, and agriculture. More than 39,000 students are enrolled here. All 50 states and 130 countries are represented.

#### **ABOUT LUMINA FOUNDATION**

Lumina Foundation is an independent, private foundation committed to increasing the proportion of Americans with high-quality degrees, certificates, and other credentials to 60 percent by 2025. Lumina's outcomes-based approach focuses on helping to design and build an accessible, responsive, and accountable higher education system while fostering a national sense of urgency for action to achieve Goal 2025.

#### **ABOUT HEALTHWAYS**

Healthways is an independent, global well-being company that provides comprehensive improvement solutions to increase performance and lower healthcare costs in its client populations. Dedicated to creating a healthier world one person at a time, Healthways uses the science of well-being and behavior change to produce and measure well-being improvement for its customers. Healthways provides personalized support to individuals to optimize each participant's health and productivity and to reduce health related costs, and also advises leaders on how to maximize well-being across an organization.



### **ABOUT GALLUP-HEALTHWAYS PARTNERSHIP**

In 2008, Gallup and Healthways initiated a 25-year partnership merging decades of clinical research and development expertise, health leadership, and behavioral economics research to track and understand the key factors that drive well-being. This partnership marked a transformation for American health by developing a national measure of well-being, the Gallup-Healthways Well-Being Index. The Well-Being Index provided the first in-depth look into Americans' perceptions of their daily experiences and the choices that impact their well-being, and after 2 million surveys, we now have the world's largest data set on well-being.

In 2012, building upon the success of the Gallup-Healthways Well-Being Index, Gallup and Healthways announced the creation of a global joint venture between the two firms to develop the next generation of Gallup-Healthways well-being assessment tools. This collaboration has already produced the Gallup-Healthways Well-Being 5 to measure an individual's well-being and the Gallup-Healthways Well-Being 5 View to evaluate organization and workgroup-level well-being. Research is continuing to further advance the science of well-being on topics such as how an individual's sense of purpose, social relationships, financial security, connection to community, and physical health can be leveraged for overall well-being improvement. Our scientific measurement helps organizations establish a baseline, benchmark their population, determine gaps, prioritize and implement interventions, and ultimately realize the full benefit of their investment in well-being. Measurement is a foundational step in the process of systematic and meaningful well-being improvement.



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## MINUTES

June 1, 2015

The Board of Visitors of Virginia Polytechnic Institute and State University met on Monday, June 1, 2015, at 1:25 p.m. in Torgersen Boardroom (Room 2100), Virginia Tech Campus, Blacksburg, Virginia.

### **Present**

Mr. James L. Chapman, IV (Vice-Rector)  
 Dr. Nancy V. Dye  
 Mr. William D. Fairchild, III  
 Mr. B. Keith Fulton  
 Mr. John C. Lee, IV  
 Ms. Deborah Leigh Martin Petrine (Rector)  
 Mr. Michael J. Quillen  
 Mr. Wayne H. Robinson  
 Dr. J. Thomas Ryan  
 Mr. Mehul P. Sanghani  
 Mr. Steve Sturgis  
 Mr. Dennis H. Treacy  
 Mr. Horacio A. Valeiras

### **Absent**

Mr. Cordel Faulk

### **Constituent Representatives:**

Dr. Rami Dalloul for Dr. Bernice L. Hausman, Faculty Representative  
 Mr. Walter D. Cook III (Dan), Staff Representative  
 Ms. S. Ashley Francis, Graduate Student Representative  
 Mr. Austin Larrowe Undergraduate Student Representative

Also present were the following: President Timothy Sands, Mr. Ralph Byers, Ms. Shelia Collins, Ms. Wanda Dean, Dr. John Dooley, Dr. Elizabeth Flanagan, Ms. Hunter Gresham, Ms. Natalie Hart, Ms. Kay Heidbreder, Mr. Larry Hincker, Mr. Tim Hodge, Dr. Rachel Holloway, Dr. Paul Knox, Ms. Sharon Kurek, Dr. Stephen McKnight, Dr. Mark McNamee, Dr. Scott Midkiff, Mr. Mike Mulhare, Ms. Kim O'Rourke, Dr. Patty Perillo, Dr. Ellen Plummer, Dr. Scot Ransbottom, Ms. Savita Sharma, Mr. Dwight Shelton, Ms. Sandra Smith, Mr. Michael Stowe, Dr. Tom Tillar, Dr. David Travis, Dr. Sherwood Wilson, Mr. Chris Yianilos, faculty, staff, students, guests, and reporters.

\* \* \* \* \*

Rector Petrine asked for a motion to approve the minutes of the March 30, 2015, meeting as distributed. The motion was made by Mr. Sturgis and seconded by Mr. Treacy. The minutes were approved unanimously.

\* \* \* \* \*

## REPORT OF THE ACADEMIC AFFAIRS COMMITTEE

Rector Petrine called on Mr. Treacy for a report of the Academic Affairs Committee. (Copy filed with the permanent minutes and marked Attachment A.)

\* \* \* \* \*

As part of the Academic Affairs Committee report, approval of the following resolution was moved by Mr. Treacy, seconded by Mr. Chapman, and approved unanimously.

### **Resolution to Adopt a New Honor Code for Doctor of Veterinary Medicine Students at the Virginia-Maryland Regional College of Veterinary Medicine**

**That the resolution to adopt a new honor code for doctor of veterinary medicine students at the VMRCVM be approved.** (Copy filed with the permanent minutes and marked Attachment B.)

\* \* \* \* \*

As part of the Academic Affairs Committee report, approval of the following resolution was moved by Mr. Treacy, seconded by Mr. Chapman, and approved unanimously.

### **Resolution to Approve Master of Arts Degree in Data Analysis and Applied Statistics**

**That the resolution to establish a master of arts degree in data analysis and applied statistics be approved.** (Copy filed with the permanent minutes and marked Attachment C.)

\* \* \* \* \*

As part of the Academic Affairs Committee report, approval of the following resolution was moved by Mr. Treacy, seconded by Mr. Chapman, and approved unanimously.

### **Resolution to Revise Definitions of Sexual Violence and Related Terms in University Policies to Comply with State Legislation and federal Title IX Regulations**

**That the resolution revising the university's definitions be approved.** (Copy filed with the permanent minutes and marked Attachment D.)

\* \* \* \* \*

## REPORT OF THE BUILDINGS AND GROUNDS COMMITTEE

Rector Petrine called on Mr. Fairchild for a report of the Buildings and Grounds Committee. (Copy filed with the permanent minutes and marked Attachment E.)

\* \* \* \* \*

As part of the Buildings and Grounds Committee report, approval of the following resolution was moved by Mr. Fairchild, seconded by Mr. Quillen, and approved unanimously.

### **Resolution on Appointment to the Virginia Tech/Montgomery Regional Airport Authority**

**That the resolution reappointing Sherwood G. Wilson, Vice President for Administration, as the university's representative to the Virginia Tech/Montgomery Regional Airport Authority through August 31, 2019, be approved.** (Copy filed with the permanent minutes and marked Attachment F.)

\* \* \* \* \*

As part of the Buildings and Grounds Committee report, approval of the following resolution was moved by Mr. Fairchild, seconded by Mr. Quillen, and approved unanimously.

### **Resolution on Appointment to the New River Valley Emergency Communications Regional Authority**

**That the resolution reappointing Sherwood G. Wilson, Vice President for Administration, as the university's representative to the New River Valley Emergency Communications Authority through August 31, 2019 be approved.** (Copy filed with the permanent minutes and marked Attachment G.)

\* \* \* \* \*

As part of the Buildings and Grounds Committee report, approval of the following resolution was moved by Mr. Fairchild, seconded by Mr. Quillen, and approved unanimously.

**Resolution to Grant an Easement to ATMOS Energy Corporation  
For Natural Gas Distribution Line**

**That the resolution authorizing the Vice President for Administration, or his successors and/or assigns, to execute any and all necessary documents to create and convey an easement to ATMOS for installation and maintenance of an eight-inch (8") natural gas line in the general route and location as stated herein be approved. (Copy filed with the permanent minutes and marked Attachment H.)**

\* \* \* \* \*

As part of the Buildings and Grounds Committee report, approval of the following resolution was moved by Mr. Fairchild, seconded by Mr. Fulton, and approved unanimously.

**Resolution to Demolish University Building 433E**

**That the resolution authorizing the demolition of Building No. 433E be approved. (Copy filed with the permanent minutes and marked Attachment I.)**

\* \* \* \* \*

**REPORT OF THE FINANCE AND AUDIT COMMITTEE**

Rector Petrine called on Mr. Chapman for the report of the Finance and Audit Committee. (Copy filed with the permanent minutes and marked Attachment J.)

\* \* \* \* \*

As part of the Finance and Audit Committee report, approval of the following resolution was moved by Mr. Chapman, seconded by Mr. Treacy, and approved unanimously.

**Resolution for Approval of the 2015-2016 Faculty Compensation Plan**

**That the proposed 2015-16 Faculty Compensation Plan for Teaching and Research, Administrative and Professional, and Research Faculty be approved.** (Copy filed with the permanent minutes and marked Attachment K.)

\*\*\*\*\*

As part of the Finance and Audit Committee report, approval of the following resolution was moved by Mr. Chapman, seconded by Mr. Treacy, and approved unanimously.

**Resolution for Approval of the Year-to-Date Financial Performance Report  
(July 1, 2014 – March 31, 2015)**

**That the report of income and expenditures for the University Division and the Cooperative Extension/Agricultural Experiment Station Division for the period of July 1, 2014, through March 31, 2015, and the Capital Outlay report be accepted.** (Copy filed with the permanent minutes and marked Attachment L.)

\*\*\*\*\*

**Resolutions for Approval of the 2015-2016 University Budgets**

As part of the Finance and Audit Committee report, approval of the following resolution was moved by Mr. Chapman, seconded by Mr. Valeiras, and approved unanimously.

**a. Operating and Capital Budgets**

**That the resolution regarding the 2015-2016 Operating and Capital Budgets be approved.**

As part of the Finance and Audit Committee report, approval of the following resolution was moved by Mr. Chapman, seconded by Mr. Valeiras, and approved unanimously.

**b. Hotel Roanoke Conference Center Commission Budget**

**That the resolution regarding the 2015-2016 Hotel Roanoke Conference Center Commission Budget be approved.**

As part of the Finance and Audit Committee report, approval of the following resolutions were moved by Mr. Chapman, seconded by Mr. Quillen, and approved unanimously.

**c. Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget**

**That the resolution regarding the 2015-2016 Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget be approved.**

(Copies filed with the permanent minutes and marked Attachment M.)

\* \* \* \* \*

As part of the Finance and Audit Committee report, approval of the following resolutions as a group was moved by Mr. Chapman, seconded by Mr. Valeiras, and approved unanimously.

**Resolution for Approval of the 2015-2016 Auxiliary Systems Budgets**

- a. Dormitory and Dining Hall System Budget**
- b. Electric Service System Budget**
- c. University Services System Budget**
- d. Intercollegiate Athletics System Budget**

**That the resolutions regarding the 2015-2016 Auxiliary Systems Budgets be approved.** (Copies filed with the permanent minutes and marked Attachment N.)

\* \* \* \* \*

As part of the Finance and Audit Committee report by Mr. Chapman and with the endorsement of the Academic Affairs Committee, the following resolution was moved by Mr. Chapman, seconded by Mr. Treacy, and approved unanimously.

**Resolution for Approval of the 2015-2016 Pratt Fund Budgets**

**That the proposed 2015-2016 allocation and use of Pratt Funds be approved.** (Copy filed with the permanent minutes and marked Attachment O.)

\* \* \* \* \*

As part of the Finance and Audit Committee report by Mr. Chapman, the following resolution was moved by Mr. Chapman, seconded by Mr. Robinson, and approved unanimously.

**Resolution for Approval to Reappoint University Commissioner to the Hotel Roanoke Conference Center Commission**

**That the resolution for the appointment of the Chief Executive Officer of Virginia Tech Foundation as the university's representative on the Hotel Roanoke Conference Center Commission for a four-year term commencing July 1, 2015, be approved.** (Copy filed with the permanent minutes and marked Attachment P.)

\* \* \* \* \*

As part of the Finance and Audit Committee report by Mr. Chapman, the following resolution was moved by Mr. Chapman, seconded by Mr. Valeiras, and approved unanimously.

**Resolution to Comply with Tuition Residency Requirements of the Veteran's Access, Choice, and Accountability Act of 2014**

**That the resolution to comply with tuition requirements of the Veterans Access, Choice and Accountability Act of 2014 be approved.** (Copy filed with the permanent minutes and marked Attachment Q.)

\* \* \* \* \*

As part of the Finance and Audit Committee report by Mr. Chapman and with the endorsement of the Buildings and Grounds Committee, the following resolution was moved by Mr. Chapman, seconded by Mr. Fairchild, and approved unanimously.

**Resolution for Approval for Lane Electric Substation Expansion**

**That the resolution authorizing Virginia Tech to move forward with the Lane Electric Substation Expansion project at a total project cost of \$6.5 million be approved.** (Copy filed with the permanent minutes and marked Attachment R.)

\* \* \* \* \*

As part of the Finance and Audit Committee report by Mr. Chapman and with the endorsement of the Buildings and Grounds Committee, the following resolution was moved by Mr. Chapman, seconded by Mr. Chapman, and approved unanimously.

**Resolution for Approval to Construct the Health Center Improvements**

**That the resolution authorizing Virginia Tech to complete the design, construction, and equipping of the Health Center Improvements project be approved.** (Copy filed with the permanent minutes and marked Attachment S.)

\* \* \* \* \*

**REPORT OF THE RESEARCH COMMITTEE**

Rector Petrine called on Mr. Lee for the report of the Research Committee. (Copy filed with the permanent minutes and marked Attachment T.)

\* \* \* \* \*

As part of the Research Committee report by Mr. Lee, the following resolution was moved by Mr. Lee, seconded by Mr. Quillen, and approved. Mr. Treacy abstained.

**Resolution to Revise Policy No 13000:  
Policy on Intellectual Properties**

**That the resolution revising Policy 13000: Policy on Intellectual Properties be approved.** (Copy filed with the permanent minutes and marked Attachment U.)

\* \* \* \* \*

As part of the Research Committee report by Mr. Lee, the following resolution was moved by Mr. Lee, seconded by Mr. Quillen, and approved. Mr. Treacy abstained.

**Resolution to Revise Policy No 13015:**

## Policy on Ownership and Control of Research Results

**That the resolution revising Policy 13015: Ownership and Control of Research Results be approved.** (Copy filed with the permanent minutes and marked Attachment V.)

\*\*\*\*\*

## REPORT OF THE STUDENT AFFAIRS AND ATHLETICS COMMITTEE

Rector Quillen called on Mr. Robinson for the report of the Student Affairs and Athletics Committee. (Copy filed with the permanent minutes and marked Attachment W.)

\*\*\*\*\*

## PRESIDENT'S REPORT

As part of the President's report, President Sands shared with the Board the **Report of Research and Development Disclosures** – no disclosures to report, no action needed. (Copy filed with the permanent minutes and marked Attachment X.)

### Update on Active Searches

Two searches are complete:

Blacksburg native and Cornell Vice President for Alumni Affairs and Development, Mr. Charles Phlegar, has been named to serve as Virginia Tech's Vice President for Advancement, effective July 1.

Dr. Thanassis Rikakis, Vice Provost for Design, Arts and Technology at Carnegie Mellon University, will become Virginia Tech's Executive Vice President and Provost, effective August 16. Dr. Rikakis was introduced and welcomed by President Sands. Dr. Rikakis thanked President Sands for his comments and stated that he is excited to be at Virginia Tech. On behalf of the Board, Ms. Petrine added that they welcome and look forward to working with Dr. Rikakis

Three searches continue:

Vice President for Research and Innovation, chaired by Dr. Mark McNamee

Senior Advisor to the President and Vice Provost for Inclusion and Diversity, chaired by Dr. Elizabeth Spiller

Associate Vice President for University Relations, chaired by Dr. Paul Winistorfer

President Sands thanks all who had served or are currently serving on the search committees.

President Sands also thanked the departing Virginia Tech administrators, Senior Vice President and Provost Mark McNamee, and Vice President for Development and University Relations Betsy Flanagan, for their extraordinary service to Virginia Tech.

Mr. Austin Larrowe, Undergraduate Student Representative, Ms. Ashley Francis, Graduate Student Representative, and Dr. Bernice Hausman, Faculty Representative, were also acknowledged for their service to the Board. President Sands concluded by recognizing and thanking the three Board members whose terms have also expired: Mr. Cordel Faulk, Mr. John Lee, and Ms. Debbie Petrine. Mr. Steve Sturgis will remain on the Board for an additional year in his ex-officio capacity as president of the Virginia Board of Agriculture and Consumer Services.

\*\*\*\*\*

### **Motion to Begin Closed Session**

Mr. Chapman moved that the Board convene in a closed meeting, pursuant to § 2.2-3711, Code of Virginia, as amended, for the purposes of discussing:

1. Appointment of faculty to Emeritus status, consideration of individual salaries of faculty, consideration of Endowed Professors, review of departments where specific individuals' performance will be discussed, and consideration of personnel changes including appointments, resignations, tenure, and salary adjustments of specific employees\* and faculty leave approvals.
2. The status of current litigation and briefing on actual or probable litigation.
3. Special recognitions.

all pursuant to the following subparts of 2.2-3711 (A), Code of Virginia, as amended, .1, .7, and .10.

The motion was seconded by Mr. Lee and passed unanimously.

\*Note: This includes a review of the president's performance evaluation, which was conducted by the Executive Committee on May 31, 2015.

### Motion to Return to Open Session

Following the Closed Session, members of the media, students, and the public were invited to return to the meeting. Rector Petrine called the meeting to order and asked Mr. Chapman to make the motion to return to open session.

Mr. Chapman made the following motion:

**WHEREAS**, the Board of Visitors of Virginia Polytechnic Institute and State University has convened a closed meeting on this date pursuant to an affirmative recorded vote and in accordance with the provision of The Virginia Freedom of Information Act; and

**WHEREAS**, Section 2.2-3712 of the Code of Virginia requires a certification by the Board of Visitors that such closed meeting was conducted in conformity with Virginia law;

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors of Virginia Polytechnic Institute and State University hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the Board of Visitors.

The motion was seconded by Mr. Quillen and passed unanimously.

\* \* \* \* \*

Upon motion by Mr. Treacy and second by Mr. Fairchild, approval was given to the resolutions for **Emeritus status (5)** as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment Y.)

\* \* \* \* \*

Upon motion by Mr. Treacy and second by Mr. Fairchild, approval was given to the resolutions for **Endowed Chairs, Professorships, and Fellowships (7)** as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment Z.)

\* \* \* \* \*

Upon motion by Mr. Chapman and second by Mr. Fairchild, approval was given to the resolution for approval of the **2015-2016 Promotion, Tenure, and Continued Appointment Program** as considered in Closed Session. This item was reviewed by the Finance & Audit and Academic Affairs Committees. (Copy filed with the permanent minutes and marked Attachment AA.)

\* \* \* \* \*

Upon motion by Mr. Chapman and second by Mr. Fulton, approval was given to the resolution for ratification of the **Personnel Changes Report** as considered and amended in Closed Session. This item was reviewed by the Finance & Audit and Academic Affairs Committees. (Copy filed with the permanent minutes and marked Attachment BB.)

\* \* \* \* \*

**Litigation Report  
No Action Required**

\* \* \* \* \*

**Constituent Reports (no action required)  
Presented at BOV Information Session on May 31, 2015**

Undergraduate Student Representative to the Board – Mr. Austin Larrowe  
Graduate Student Representative to the Board – Ms. Ashley Francis  
Staff Representative to the Board – Mr. Dan Cook  
Faculty Representative to the Board – Dr. Rami Dalloul in the absence of  
Dr. Bernice Hausman

(Copies filed with the permanent minutes and marked Attachment CC.)

\* \* \* \* \*

**Election of Officers for 2015-2016**

Rector Petrine turned the chairmanship of the meeting over to Mr. Treacy for the election of officers of the Board. On behalf of the Nominating Committee, which Mr. Treacy chaired and which also included Mr. Sturgis and Mr. Robinson, Mr. Treacy presented the following nominees:

**Rector: Ms. Deborah Petrine**, contingent upon reappointment by the Governor\*.

**Vice Rector: Mr. James Chapman**

**Secretary: Ms. Kim O'Rourke**

Mr. Treacy requested additional nominations from the floor. There being no additional nominations, a motion was made to close nominations; the motion was seconded and passed. Mr. Robinson made a motion for approval of the nominees presented. The motion was seconded by Mr. Sturgis and passed.

Mr. Treacy then turned the meeting back over to Rector Petrine.

[\*Note: The next day, on June 2, 2015, Governor McAuliffe announced the reappointment of Ms. Petrine to a second four-year term on the Board beginning July 1, 2015.]

\* \* \* \* \*

Rector Petrine presented certificates of appreciation to Mr. Larowe and Ms. Francis. A certificate will be given to Dr. Hausman at a later time. Mr. Cook will be returning next year to serve an additional year as Staff Representative to the Board.

The date of the next regular meeting is August 30-31, 2015, at a Virginia Tech facility to be determined.

\* \* \* \* \*

Following a motion by Mr. Treacy and second by Mr. Chapman, the meeting was adjourned at 3:40 p.m.

[Redacted signature area]

Deborah Petrine, Rector

[Redacted signature area]

Kim O'Rourke, Secretary

## Committee Meeting Minutes

### ACADEMIC AFFAIRS COMMITTEE

Drillfield Room  
Inn at Virginia Tech and Skelton Conference Center  
9:00 – 11:30 a.m.

June 1, 2015

#### **Board Members Present:**

Dennis Treacy (chair), Nancy Dye, John Lee, Tom Ryan, Rami Dalloul (faculty representative), Ashley Francis (graduate student representative)

#### **Guests:**

Janice Austin, Beth Armstrong, Stephen Biscotte, Kris Bush, Robert Bush, Brian Bond, Matt Chan, Yohna Chambers, Lay Nam Chang, Cyril Clarke, Angella De Soto, Jeff Earley, Juan Espinoza, Wanda Hankins Dean, Cathy Grimes, Tony Haga, Jennifer Harris, Natalie Hart, Kay Heidbreder, Jennifer Hodgson, Rachel Holloway, Daniel Inman II, Mildred Johnson, Frances Keene, Marlana Lester, Gary Long, Alison Matthiessen, Ennis McCrery, Mark McNamee, Steven McKnight, Steve Milley, Larisa Niehaus, Kim O'Rourke, Robin Panneton, Ellen Plummer, Katie Polidoro, Timothy Sands, Mohammed Seyam, Jill Sible, Christine Dennis Smith, Eric Smith, Ken Smith, Natasha Smith, Rick Sparks, Judy Taylor, David Travis, Jr., Alexis Ward, Pam White, Tod Whitehurst, Katie Wilson, Ashley Wood

#### **OPEN SESSION**

1. **Welcome.** Dennis Treacy welcomed committee members and guests. Ashley Francis, graduate representative, introduced Mohammed Seyam as the incoming representative to the academic affairs committee. Dennis Treacy introduced Rami Dalloul as the incoming faculty representative to the Board.

2. **Approval of Minutes.**

**A motion passed unanimously to approve the minutes of the committee's March 30, 2015 meeting.**

3. **Report of Closed Session Action Items.** The committee approved a resolution to move into closed session to consider five appointments to emeritus status, seven appointments to endowed professorships, consideration of 94 appointments to promotion, tenure, and continued appointments, and the ratification of the faculty personnel changes report.

**All resolutions were unanimously approved and the report was ratified. The session was formally certified and the committee moved to open session.**

- 4. Provost's Update.** Mark McNamee, senior vice president and provost, discussed the faculty compensation plan under consideration by the Board in the Finance and Audit committee. Making reasonable progress towards the 60<sup>th</sup> percentile for faculty salaries – the university is on track to continue to close the gap in faculty salaries. A robust and reliable merit process is important to improving the growth of faculty salaries. Provost McNamee thanked dean Lay Nam Chang for his leadership of the College of Science. Dean Chang has announced his intent to step down as dean and the university will launch a search for a dean of the College of Science. InclusiveVT completed a successful inaugural year. The search is underway for a vice provost for inclusion and diversity who will also serve as advisor to the president. Candidates are expected to be on campus at the end of August. Twenty seven deans, vice presidents, and other leaders submitted progress reports on their inclusion and diversity efforts. These progress reports are under review and a report will be produced over the summer that summarizes the progress of initiatives across the university. Karen DePauw, vice president and dean for graduate education is organizing the review process. One goal of InclusiveVT is to actively engage senior leaders in establishing and pursuing activities that advance inclusion and diversity, and hold these leaders accountable for progress. Members of the committee continue to support this effort and are interested in receiving regular updates on evidence of continued progress.

#### **5. Academic Affairs.**

- a. Resolution to Approve the Pratt Fund Budget Proposal.** Mark McNamee asked the committee to approve the Pratt Fund Budget Proposal. This resolution is also under consideration in the Finance and Audit committee.

**The Resolution to Approve the Pratt Fund Budget Proposal was approved unanimously.**

- b. Resolution to Adopt a New Honor Code for Doctor of Veterinary Medicine Students at Virginia Tech.** Cyril Clark, dean for the Virginia Maryland Regional School of Veterinary Medicine, and Jennifer Hodgson, associate dean of professional programs for the college, presented a resolution to adopt a new honor code for doctor of veterinary medicine students. The code applies to academic conduct, a distinct student handbook applies to professional conduct and patient care.

**The Resolution to Adopt a New Honor Code for Doctor of Veterinary Medicine Students at Virginia Tech was approved unanimously.**

**c. Resolution to Approve a Master of Arts Degree in Data Analysis and Applied Statistics.** Lay Nam Chang, dean for the College of Science, and Eric Smith, professor and department head for statistics, presented a resolution to approve a Master of Arts Degree in Data Analysis and Applied Statistics. The degree program is designed to respond to the national need for trained statisticians in many fields including the natural, human, and social sciences. Industrial and high tech markets also demand individuals with training in the analysis of all forms of data and can communicate the results of research to a variety of audiences.

**The Resolution to Approve a Master of Arts Degree in Data Analysis and Applied Statistics was approved unanimously.**

**d. College of Natural Resources and Environment: Update on Packaging Systems and Design Degree, Leadership, and Sustainability Institutes.** Robert Bush, professor of sustainable biomaterials, presented an update on the new degree in packaging systems and design. The program is focused on the sustainable impact of packaging, partners with industry partners, and graduated 14 students in the spring and is proving to be successful. Brian Bond, associate professor of sustainable biomaterials, presented on the Leadership Institute. The institute is in its fifth year and is supported by private gifts. The institute's curriculum includes course work in leadership and experiential opportunities in private and public sectors. Angie De Soto, director of the Sustainability Institute, updated the committee on the Sustainability Institute. The institute responds to the need expressed by students and employers for individuals who are well versed in the environmental and societal impacts of business operations in the non-profits and business sectors.

## **6. Academic Administration**

**a. Resolution to Revise Sexual Violence and Related Definitions in University Policies to Comply with State Legislation and Title IX Regulations.** Ellen Plummer, associate vice provost for academic administration, provided an overview of the Governor's Task Force on Combating Sexual Violence, the campus sexual violence legislation signed by the Governor that goes into effect on July 1, 2015. The committee requested frequent updates and encourages the university to create a culture that encourages safety and care in addition to maintaining compliance. The committee considered a resolution to define sexual violence and related definitions for use in all appropriate university policies and communications.

**The Resolution to Revise Sexual Violence and Related Definitions in University Policies to Comply with State Legislation and Title IX Regulations approved unanimously.**

**b. General Education.** Rachel Holloway, vice provost for undergraduate academic affairs, updated the committee on the status of the new general education program. The goals of general education is to empower individuals to deal with complexity, diversity, and change. Students will have the opportunity to study many disciplines and develop broad knowledge in addition to in-depth study in a specific area of interest. The program is comprised of six core learning outcomes and two integrative outcomes. Three *Pathways* will provide students with options for how to shape their undergraduate academic experiences.

**c. Enrollment Management Group Annual Report and Discussion.** Wanda Dean, vice provost for enrollment and degree management, presented to the committee the annual report on the enrollment management group. Undergraduate enrollments are up and on target to continue to grow, several initiatives have resulted in increased yield. Access and affordability continues to shape initiatives that include reaching out to families and sharing information regarding costs and sources of aid. Summer Academy and Winter Session continue to be successful enrollment management strategies. Sources of growth include focusing on geographically diverse areas of the U.S. and internationally.

**The committee voted unanimously to accept the report of the Enrollment Management Group.**

**d. Academic Aspects of Enrollment Growth.** Ken Smith, vice provost for resource management and institutional effectiveness, and Jeff Earley, associate vice provost for finance, presented to the committee on the academic aspects of enrollment growth. The university will make strategic decisions aiming at growing undergraduate enrollment over an eight year period to approximately 29,000 undergraduate students by 2023. Data will drive decisions with the goal to achieve growth and improve quality. Planning areas include educational programs, student life, academic support services, and campus infrastructure and support service. Quality metrics include a number of variables that will take into account the many aspects of academic quality such as student credit hours, instructional full-time equivalents, faculty, professional advising, assignable square feet, and classroom and laboratory utilization. Metrics that include instructional and space ratios set by colleges and will be tied to resource decisions.

Dennis Treacy thanked Bernice Hausman, Ashley Francis for their service to the committee and the Board, and welcomed Rami Dalloul and Mohammed Seyam to the committee. Dennis Treacy asked all those present to join him in thanking Mark McNamee for his service to the committee, the board, the university and the Commonwealth.

**9. Adjournment.** The meeting adjourned at 11:50.



# B.S. in Packaging Systems & Design

## College of Natural Resources & Environment

Robert J. Bush, professor

Department of Sustainable Biomaterials



**VirginiaTech**  
*Invent the Future*

# Packaging Systems & Design

## Vision

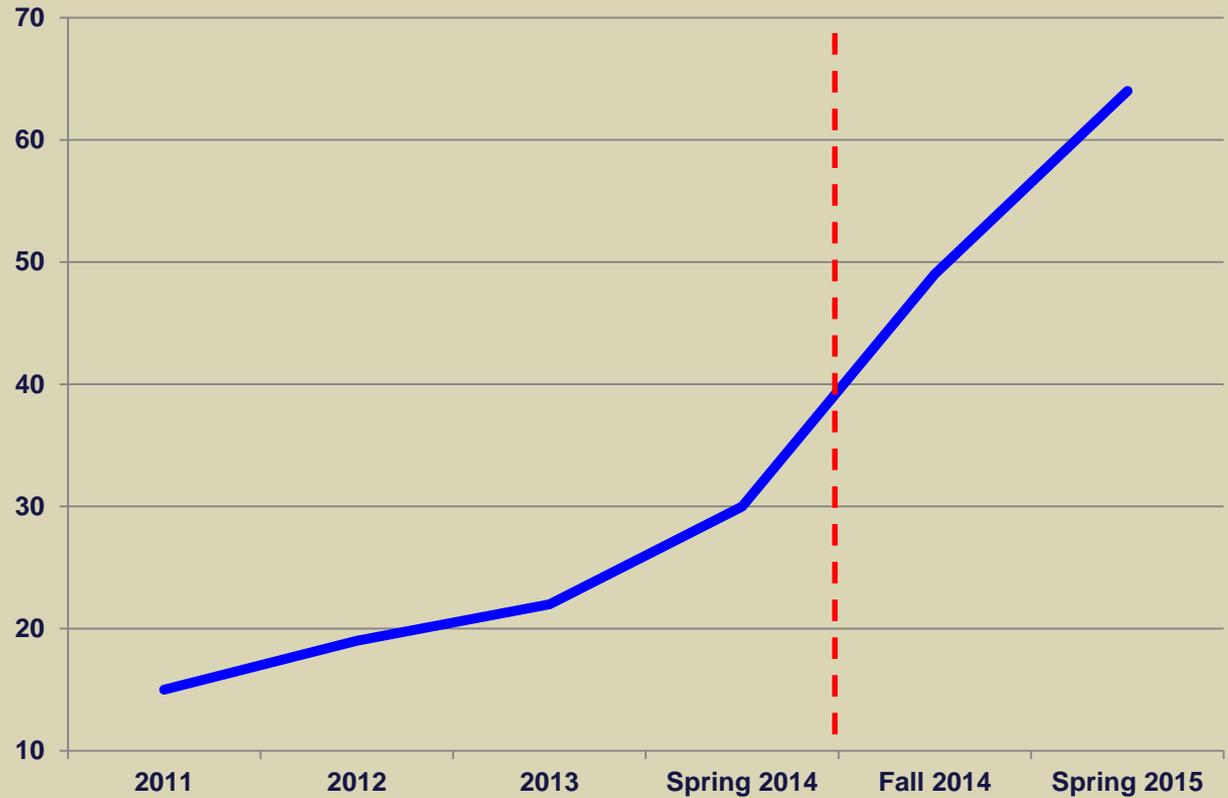
*Build on existing strength in distribution packaging to develop a nationally-recognized, comprehensive packaging program that serves the people of Virginia, the Nation, and the World*

# Packaging Systems & Design

- Student Enrollment
- Graduation
- Employment
- Discovery
- Engagement
- Goals

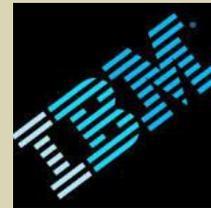
# Packaging Systems & Design

## Student Enrollment



# Packaging Systems & Design

- Companies hosting interns



# Packaging Systems & Design



# Packaging Systems & Design

- Organizations hiring graduates



PEPSICO



# Packaging Systems & Design



# Packaging Systems & Design



# Packaging Systems & Design



# Packaging Systems & Design



# Packaging Systems & Design



# Packaging Systems & Design

## Trade Association and Industry Support

- Scholarships
- Internships
- Equipment and Supplies

# Packaging Systems & Design

## Discovery

- Packaging Sustainability
- Renewable Bio-Polymers
- Unit-Load Design and Packaging Systems
- Consumer Response to Packaging

# Packaging Systems & Design

## Eye-Tracking Research



[www.tobii.com](http://www.tobii.com)

# Packaging Systems & Design

## Engagement

- Center for Packaging and Unit-Load Design



# Packaging Systems & Design

## Plans and Goals

- 100 students
- 200 students
- Professional certification as part of outcomes assessment
- One of top five programs in country



**Thank You!**



The Leadership Institute  
College of Natural Resources & Environment

Dr. Brian Bond, professor and co-director



## Co-curricular, cohort-based program for CNRE students focusing on leadership and personal awareness

- Inaugural cohort fall 2010
- Just finished our 5<sup>th</sup> year
- Supported entirely with private donor dollars
- Co-directors – Drs. Steve McMullin and Brian Bond
- Our goal – to make the Leadership Institute a signature program in the college





# The Need

- Retiring Baby Boomers leaving a leadership vacuum in organizations
- Employer surveys: leadership, communication, critical thinking skills critical to career success of young professionals
- Most curricula focus on basic technical knowledge
- Educating the whole person





# Our Approach

- 12 of our best students from all departments in CNRE, interdisciplinary
- Cohort-based courses & projects to learn and apply leadership, communication, working in teams
- Build the skills to help students thrive & lead
- Only program of its kind in our disciplines; gaining national attention



# Experiential Learning

- Two 3-credit courses to learn principles of leadership
- Begin the year-long experience with a team-building retreat to improve self-awareness, team-building skills; Myers-Briggs Type Indicator for the weekend
- We buy books and reading materials for the students
- Focus on leadership studies, leadership styles, leadership examples – case studies
- Personality assessment tools





# Experiential Learning

- Week-long trip to Charlottesville, Richmond, Washington, DC to meet, interview leaders & policy makers in natural resources & environment
- Private sector
- Public sector – state and federal
- NGOs
- A marathon week of meeting with leaders and engaging in first hand conversation about leadership





# Outcomes

- Preparing the next generation of leaders in natural resources
- Graduates who have the self-awareness & self-confidence to network with natural resource professionals, lead from the beginning of their careers
- Employers seeking Virginia Tech CNRE students – the Institute has been the competitive advantage to many students seeking employment
- Personal student testimony regarding the impact of the experience on how they see themselves and growing confidence in all things leadership!





**Thank You!**



## The Sustainability Institute College of Natural Resources & Environment

Angella De Soto, director



# Advancing the Science of Sustainability

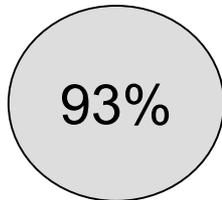


# The Need

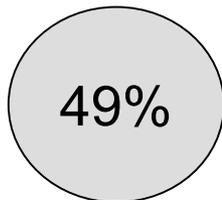
1. Corporate social responsibility and sustainable practices are becoming the new business-as-usual.
2. Industry wants graduates that have practical, hands-on experience with sustainability projects so they can contribute immediately upon hire.
3. Students want meaningful jobs with employers that understand their operation's environmental and social impacts.
4. It is our responsibility to prepare students to secure positions in an ever increasingly competitive job market.



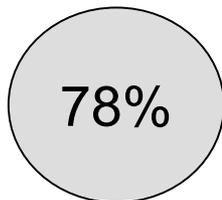
# The Market Demand



Of CEO's globally see sustainability as important to their company's future success



Of CFOs believe there is a strong link between sustainability performance and financial performance



Of businesses said environmental and sustainability knowledge would grow in importance as a hiring factor in the next 5 years



# The Student Demand

60%

Of college applicants and their parents said university's commitment to environmental issues contributes to their application and attendance decisions (Princeton Review)

92%

Of recent college graduates want to work for a company that cares about the environment (Monster)



# Our Guiding Question

What would every entry-level hire, **regardless of position**, need to know to be able to contribute to your corporate sustainability program?



# Our Vision

Engage today's  
sustainability leaders  
to prepare tomorrow's.



# Our Mission

- Partner with and learn from a range of industry experts to understand what they need from graduates
- Cultivate leaders with a “sustainability lens” for problem solving that can be applied in any position
- Provide applied learning experiences through workshops, projects, and mentoring
- Directly connect students to positions and employers
- Equip students with skills to differentiate themselves



# Problem-Solving Boot-Camp Trainings

- Co-curricular, experiential + cohort model
- Off-season trainings allow maximum flexibility
  - Winter session + end of summer
- 10 days of intensive workshops
  - Case studies, skills based training & WebEx panels
  - 1-5pm every day - 40 hours total
- 3 day travel practicum to assess “lens”
  - Real problems, fresh ideas
- Top performers selected for semester projects



**Thank You**  
for your time!

# Pathways: General Education at Virginia Tech



STRATEGIC PLAN

# A PLAN FOR A NEW HORIZON

ENVISIONING VIRGINIA TECH 2012-2018

 VirginiaTech  
*Invent the Future®*

Office of the  
**SENIOR VICE PRESIDENT  
AND PROVOST**

Academic Implementation Strategy for  
**A PLAN FOR A NEW HORIZON**

**ENVISIONING VIRGINIA TECH 2013-2018**

**Improve Core and  
Liberal Education,  
Including the  
Incorporation of  
Computational  
Thinking**

**Anticipated Actions and Related Investments During the Planning Period**

- The university will launch a new general education curriculum that provides foundational learning in discourse and computational thinking; a capstone experience; and interdisciplinary programs across the sciences, social sciences, arts, and humanities to complement a student's major field of study with a coherent and substantive course of study. This curriculum will engage students in self-authorship, deep reflection, and ethics.
- We will both identify and realign resources from the current general education curriculum to support the new curriculum and will invest in professional development for faculty, staff, advisors, and graduate students to support the new initiatives in general education.
- The university will construct new facilities with state-of-the-art learning environments that will showcase the very best teaching and learning experiences on campus, and we will continue to refurbish and improve existing general assignment classrooms and instructional laboratories.
- Virginia Tech will create new foundational courses in computational thinking required for fulfillment of the general education curriculum and will facilitate the development and implementation of advanced courses that focus on computational thinking for all upper-level undergraduate students.

# What is a 21<sup>st</sup> Century Liberal Education?

- Empowers individuals to deal with complexity, diversity, and change.
- Provides students with broad knowledge of the wider world as well as in-depth study in a specific area of interest.
- Helps students develop a sense of social responsibility.
- Builds strong and transferable intellectual and practical skills and a demonstrated ability to apply knowledge and skills in real-world settings.

# What Employers Say . . .

**80%**

“regardless of their major, **all college students should acquire broad knowledge in the liberal arts and sciences.**”

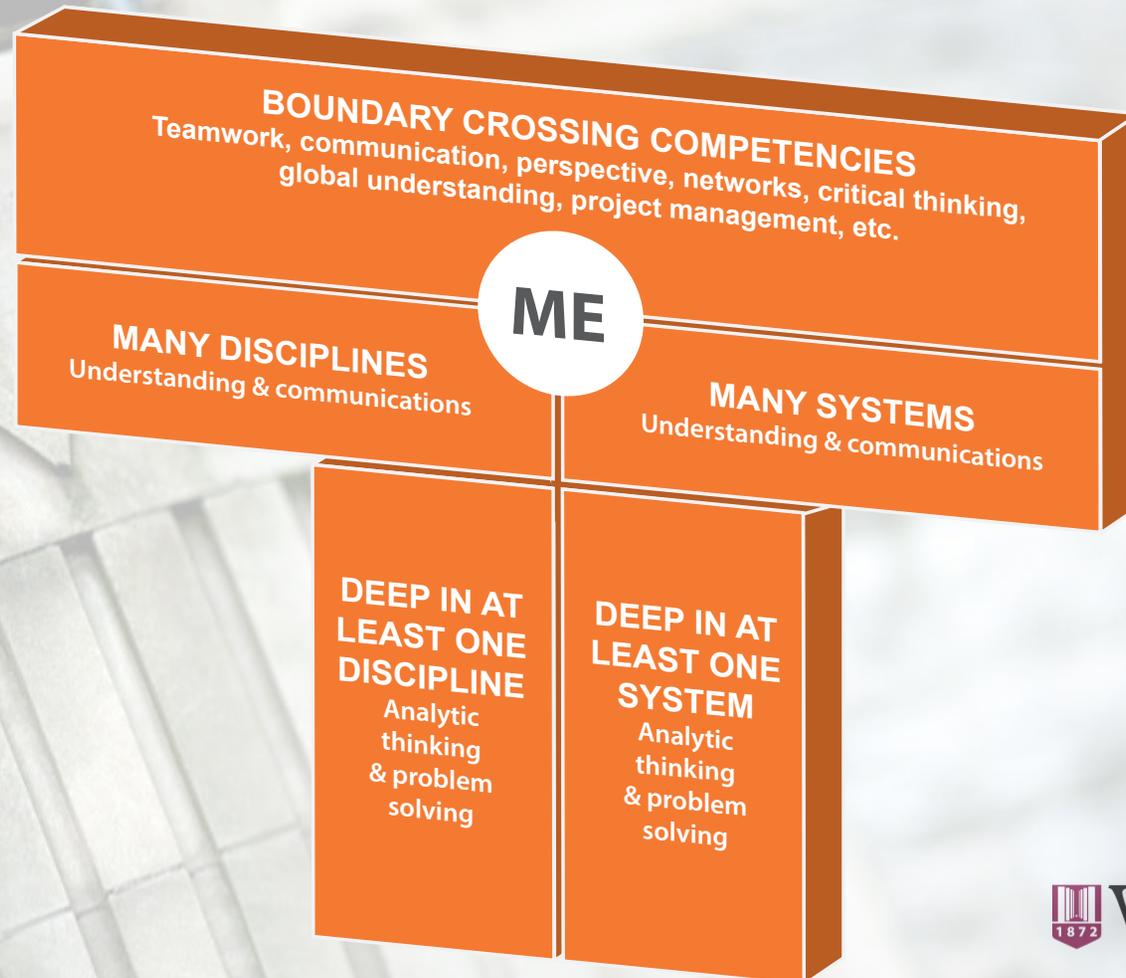
**90%**

demonstrate **ethical judgment and integrity; intercultural skills; and the capacity for continued new learning.**”

**93%**

Ability to **think critically, communicate clearly, and solve complex problems is more important than [a candidate’s] undergraduate major.**”

# T-Shaped Professional



# What Our Students Say . . .

*“more of **an interdisciplinary path**, but these area views tend to promote tunnel vision. **What is the big picture? Why is it important? How do I fit into the scheme of things?** I think the ability to link different areas and see a connection is very important.”*

*“Stronger incorporation of themed courses from different areas. It can be very helpful to **see how different viewpoints and approaches can tackle the same problems**, and what different methods are used in doing so. I think this might help students to be more comfortable and willing to look beyond their major and attempt to take a greater variety of courses.”*

Source: 2010 student survey conducted during SGA elections

# What Research Tells Us . . .

- *Build curricula and courses focused on meaningful learning outcomes.*
- *Create a curricular framework to promote both foundational and integrated learning.*
- *Infuse active and inclusive pedagogy across the curriculum.*

# Virginia Tech's mission and structure require us to . . .

- *retain and expand opportunities for exploration.*
- *ensure access for all students.*
- *respect time to degree.*
- *ensure flexibility, scalability, and continuous improvement.*

An aerial photograph of the Virginia Tech campus during autumn. The image shows a large green lawn with scattered trees displaying yellow and orange foliage. In the background, several large, multi-story brick buildings are visible under a clear blue sky. A paved walkway runs through the foreground, with many students walking. A white rounded rectangular box is superimposed over the center of the image, containing the text 'Pathways: General Education at Virginia Tech'.

# Pathways: General Education at Virginia Tech

# Pathways: General Education

## Comprised of Six Core Learning Outcomes

- **Discourse:**  
9 credits—6 foundational and 3 advanced/applied
- **Quantitative and Computational Thinking**  
9 credits—6 Foundational + 3 advanced/applied
- **Reasoning in the Natural Sciences**  
6 credits with an additional 2 lab credits for some majors
- **Critique and Practice in Design and the Arts**  
6 credits—3 design + 3 arts or 6 integrated design and arts
- **Reasoning in the Social Sciences**  
6 credits
- **Critical Thinking in the Humanities**  
6 credits

# Pathways: General Education

## Two Integrative Outcomes

- Ethical Reasoning
- Intercultural and Global Awareness



# Pathways: General Education

## Comprised of Six Core Learning Outcomes

- **Discourse:**  
9 credits—6 foundational and 3 advanced/applied
- **Quantitative and Computational Thinking**  
9 credits—6 Foundational + 3 advanced/applied
- **Reasoning in the Natural Sciences**  
6 credits with an additional 2 lab credits for some majors
- **Critique and Practice in Design and the Arts**  
6 credits—3 design + 3 arts or 6 integrated design and arts
- **Reasoning in the Social Sciences**  
6 credits
- **Critical Thinking in the Humanities**  
6 credits

## Two Integrative Outcomes

Ethical Reasoning

Intercultural and Global Awareness

# Pathways: General Education

## Comprised of Six Core Learning Outcomes

- **Discourse:**  
9 credits—6 foundational and 3 advanced/applied
- **Quantitative and Computational Thinking**  
**9 credits**—6 Foundational + 3 advanced/applied
- **Reasoning in the Natural Sciences**  
6 credits with an additional 2 lab credits for some majors
- **Critique and Practice in Design and the Arts**  
**6 credits**—3 design + 3 arts or 6 integrated design and arts
- **Reasoning in the Social Sciences**  
6 credits
- **Critical Thinking in the Humanities**  
6 credits

## Two Integrative Outcomes

Ethical Reasoning

Intercultural and Global Awareness

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Two Integrative Outcomes

**Ethical Reasoning**  
**Intercultural and Global Awareness**

# Pathways: General Education

Pathway I: Distribution Model

Pathway II: Pathways Minors

Pathway III: Alternative Pathways



# Pathways: General Education



# Pathways: General Education

Alternate Pathways might include . . .

- Education Abroad
- Undergraduate Research
- Service-Learning
- Internships
- Co-Curricular Experiences
- And more.



# Pathways: General Education

## Next Steps:

- Name the second cohort of Pathways Scholars.
- Host a Pathways Summer Institute focused on the integrative learning outcomes.
- Develop the implementation plan and present to the university community early in Fall semester.
- Support course pilots during 2015-2016.
- Provide professional development throughout 2015-2016.



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# **Enrollment & Degree Management**

# **Achieving Growth**

*Virginia Tech*  
*Board of Visitors*

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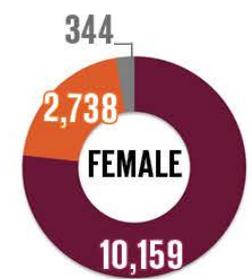
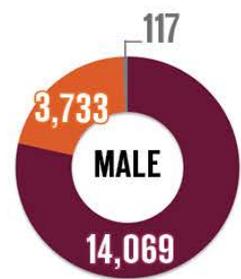
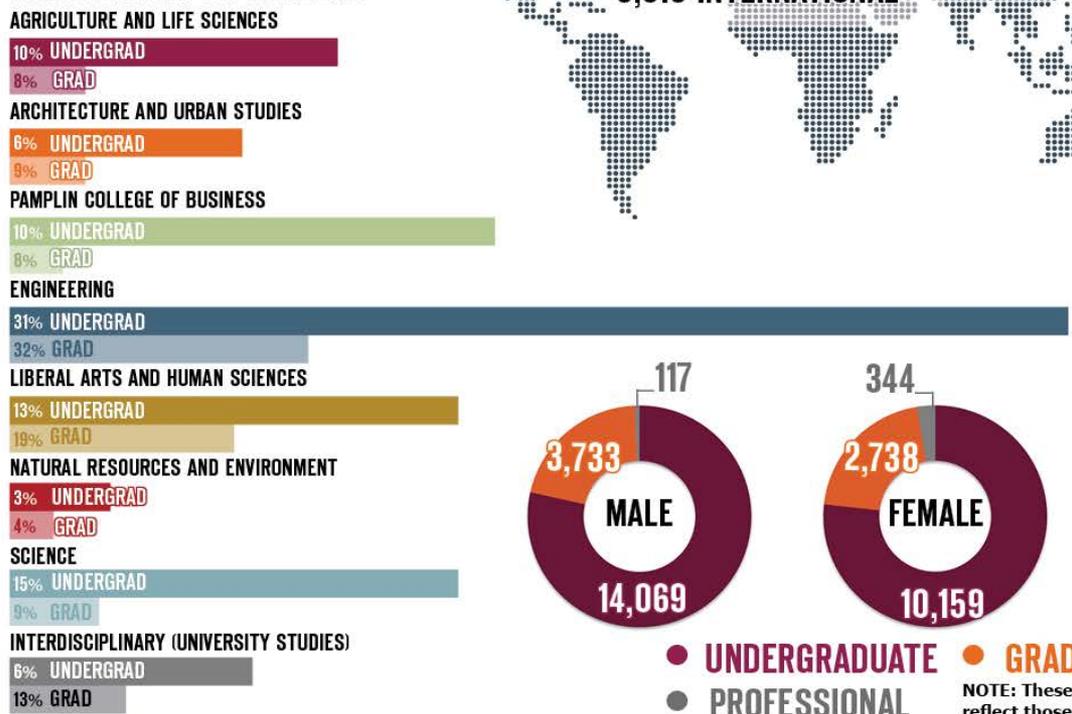
*June 2015*

# 2014 UNIVERSITY SNAPSHOT



- 31,224 TOTAL
- 29,173 ON CAMPUS
- 1,266 OFF CAMPUS
- 785 VIRTUAL CAMPUS

## ENROLLMENT BY COLLEGE



- UNDERGRADUATE
- GRADUATE
- PROFESSIONAL

NOTE: These figures do not reflect those who did not report gender.

# INITIATIVES TO EFFECT ENROLLMENT GROWTH 2015

# 2014-15 RECRUITMENT & YIELD HIGHLIGHTS

## OPPORTUNITIES TO EXPLORE VIRGINIA TECH

- Virtual Tour
- Social Media
- Live Web Q&A Events
- Chegg

ADDITIONAL DIRECT MAILINGS

NEW EMAIL CAMPAIGNS:  
ASSISTED COLLEGES & DEPARTMENTS

PERSONAL CONTACT:  
FOCUSED ON VISIT EXPERIENCE



## APPLYING THE HANDS-ON, MINDS-ON APPROACH

- New Events
- Visitor Experience
- Counselor Engagement
- Collaboration

ADDITIONAL CALLING CAMPAIGNS

# INCLUSIVE INITIATIVES | 2014-15 HIGHLIGHTS

## *Enhancing Engagement and Interaction*

- ◆ **Yates Project**
- ◆ **Sneak Peek**
- ◆ **First to VT**
- ◆ **Spanish Information Session**
- ◆ **Fall Visitation**
- ◆ **Gateway**  
identified additional engagement opportunities

**Coming Soon!**

**Hispanic College  
Institute:  
July 15-18, 2015**



**Gear Up:  
July 31-Aug. 2, 2015**



## LOOKING AHEAD: IDENTIFYING & ENHANCING EFFECTIVE STRATEGIES

**Planning & Implementation**

- Enhance Prospect Search
- Expand Travel
- Collaborate

**Recruitment & Yield**

- New Events & Direct Mail
- Targeted Ads
- Major Key

**Relationships & Experiences**

- Extended Connections
- Counselors
- First Generation Experience

# ACCESS & AFFORDABILITY

# SCHOLARSHIPS & FINANCIAL AID: FOSTERING ACCESS & AFFORDABILITY

**COMMUNICATION**  
ENHANCED TO  
BOTH STUDENTS  
AND PARENTS

**TRANSFER GRANT**  
INCREASED  
DOLLAR AMOUNT  
DISTRIBUTED

**WORK-STUDY**  
INCREASED  
FEDERAL  
WORK-STUDY  
PARTICIPATION

**YOUR FUTURE**  
**OUR COMMITMENT**

## LOAN REPAYMENT COUNSELING SESSIONS

- ◆ **Loan history**
- ◆ **One-page chart of repayment plans**
- ◆ **Information from federal loan servicer**
- ◆ **Personalized contact information for federal loan servicers**



**Earlier  
Distribution  
of Aid Packages**

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**Distributed  
EXPEDITED  
CREDITING OF  
STUDENT ACCOUNTS**



# ALTERNATE PATHWAYS TO GRADUATION

**2014 COHORT**

**277**  
FIRST-YEAR  
STUDENTS

**69%**  
EARNED 3.0  
GPA OR HIGHER

**67**  
TRANSFER  
STUDENTS

**53%**  
EARNED DEAN'S  
LIST STATUS



**2015 COHORT**

**1,766**  
STUDENTS

**67%**  
INCREASE

**5,883**  
CREDIT  
HOURS

**58%**  
EARNED DEAN'S  
LIST STATUS

# ENROLLMENT & DEGREE MANAGEMENT THE NEXT 10 YEARS

## SOURCES OF GROWTH

- ◆ **Recognizing the demand**
  - ◆ **Virginia**
  - ◆ **Out-of-State**
  - ◆ **International**

# SOURCES OF GROWTH

## ◆ Diversifying the demand

- ◆ Geographic Areas
- ◆ Academic Discipline

## ◆ Recognizing the demand

- ◆ Virginia
- ◆ Out-of-State
- ◆ International

# SOURCES OF GROWTH

## ◆ Reinvesting the demand

- ◆ Student Success Initiatives
- ◆ Nontraditional Students

## ◆ Diversifying the demand

- ◆ Geographic Areas
- ◆ Academic Discipline

## ◆ Recognizing the demand

- ◆ Virginia
- ◆ Out-of-State
- ◆ International

**NEXT STEPS  
RESOURCING GROWTH**

# Undergraduate Enrollment Growth Plan



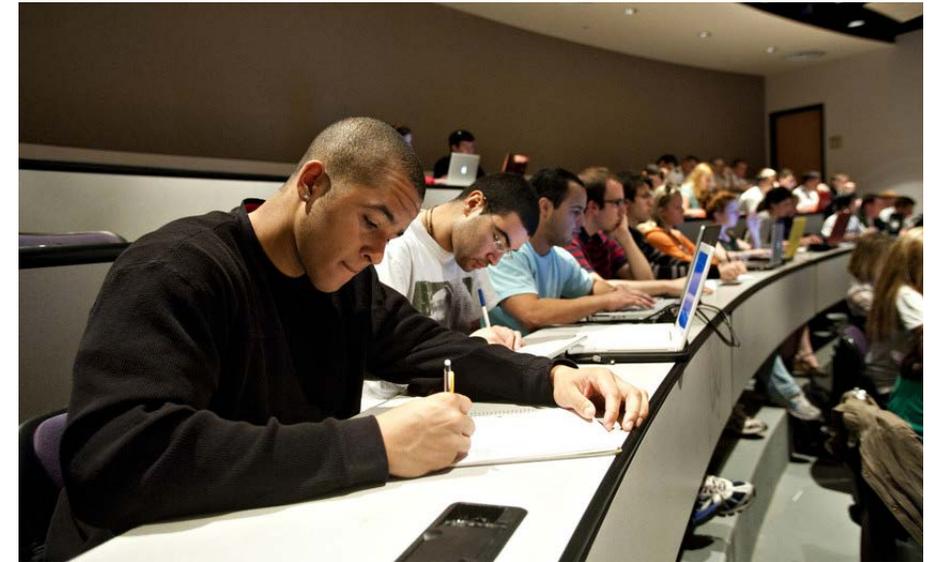
Draft Planning Outline – Academic Affairs Committee of the  
Virginia Tech Board of Visitors June 2015



# GROWTH AND QUALITY

# Undergraduate Growth Scenarios

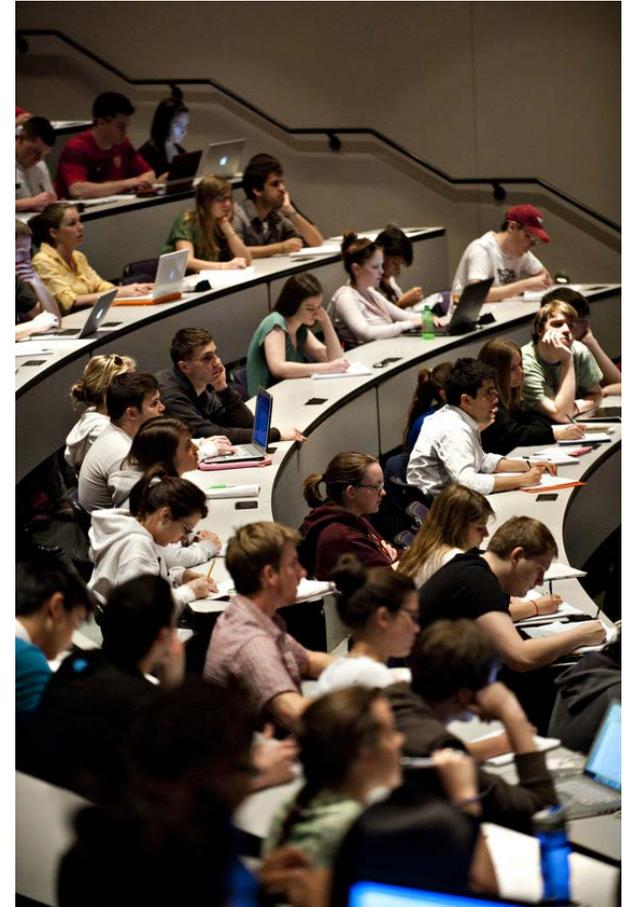
- 500 Additional Entering First Year Students Fall 2015
- Results in 2,000 Net Growth over Four Years
- Possible growth beyond 2,000 over a 8 year period to approximately 29,000 undergraduates by 2023



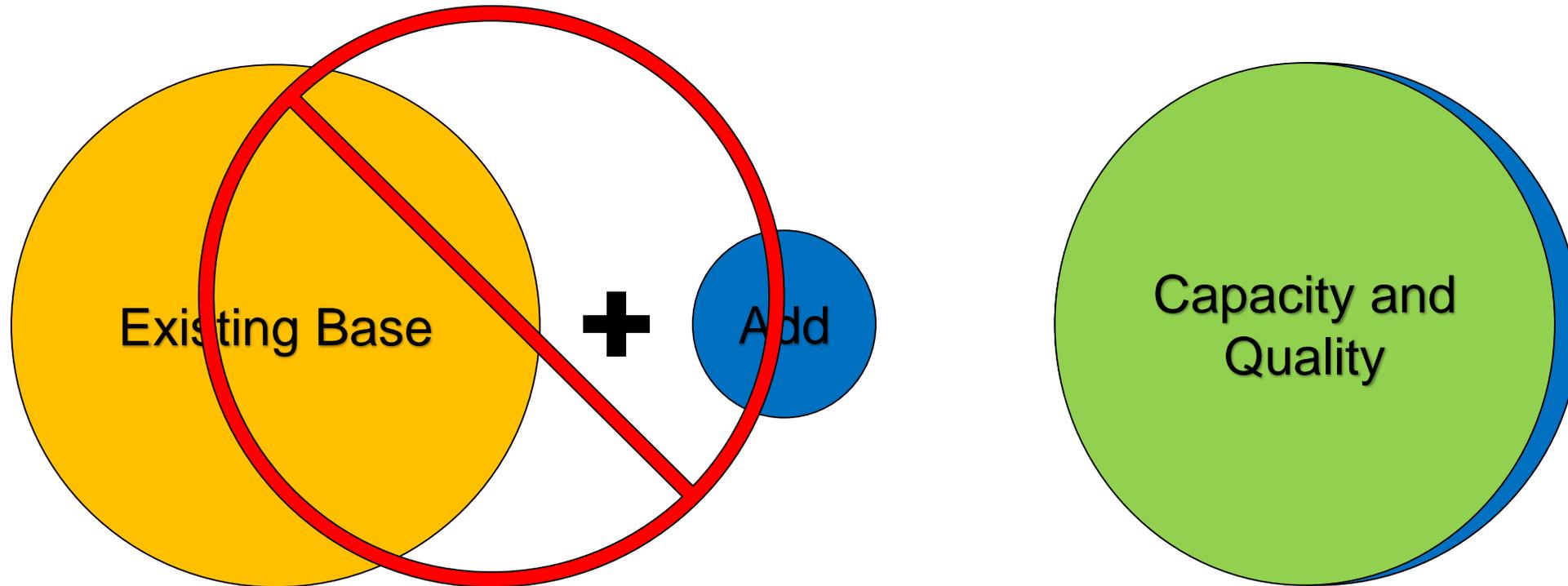
# Sustaining and Improving Quality

Use data driven decision making to:

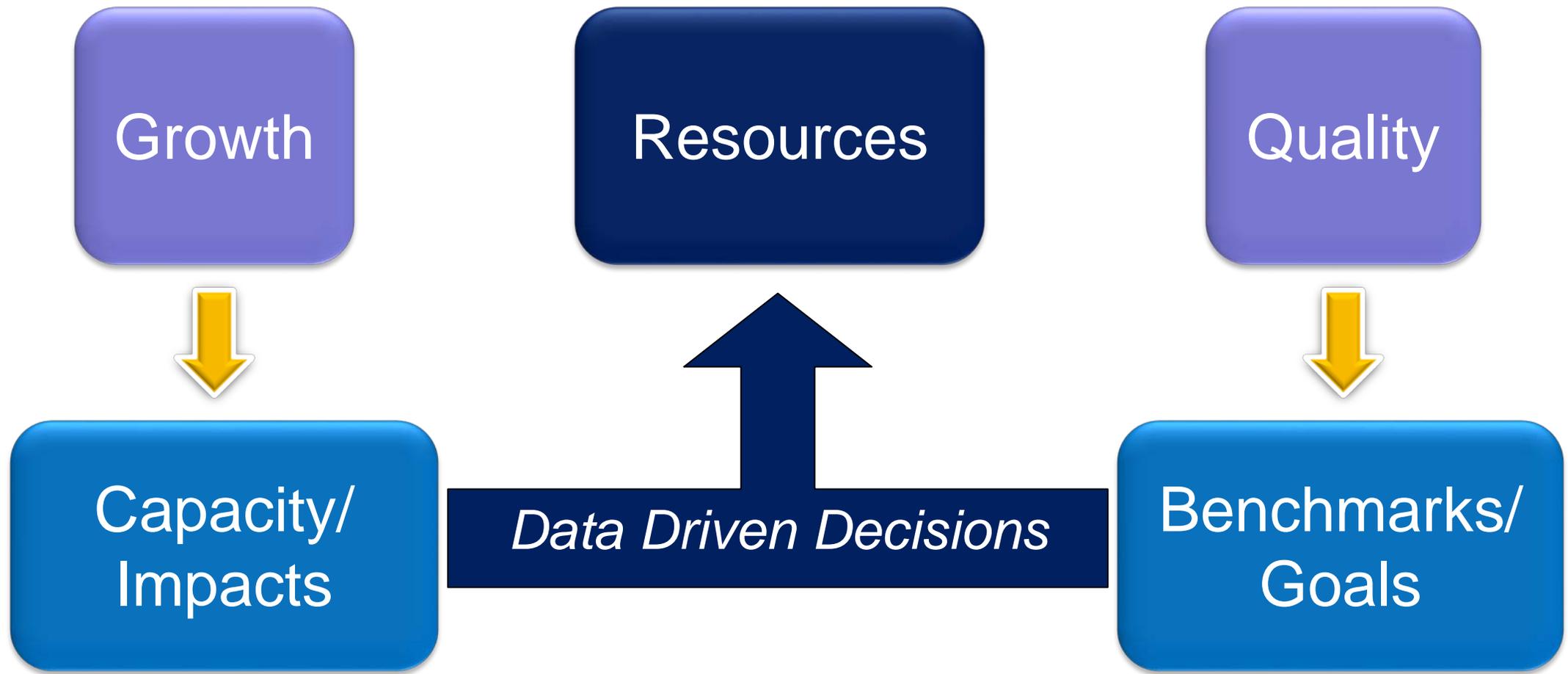
- Identify enrollment growth goals and project impacts of growth
- Monitor campus level metrics and quality benchmarks
- Use existing capacity to provide net resources for maintaining quality and investing in new initiatives
- Maintain affordability for students



# Achieving Growth and Improving Quality



# Achieving Growth and Improving Quality



# Resource Planning Areas for Quality

- Educational Programs
- Student Life
- Academic Support Services
- Campus Infrastructure and Support Services



# Student Life

- Residential Programs – on-campus beds and living learning communities
- Dining Services – capacity for more on-campus diners
- Health and Counseling Services – student to professional staff ratios
- Recreational Sports – capacity for more students and quality of existing facilities
- Student Union – distributed commons approach
- Dean of Students – student to professional staff ratios
- International/Multicultural Programs – appropriate to needs and size of international student population
- VT Engage – Service Learning Programs – capacity and growth in “hands-on minds-on”



# Residential Programs

- **Benchmarks**

- Minimum of 1/3<sup>rd</sup> of the undergraduate enrollment.
- 2/3<sup>rd</sup> of beds to be in living learning communities per Virginia Tech Experience plan.

- **Goals**

- 1,700 to 2,400 new Living Learning Community
- Maintain affordability of on-campus housing

- **Actions**

- Active Planning for New Living Learning Community Residence Halls
- Renovations of existing space to add capacity
- Renovations of existing space to improve quality



# Academic Support Services

- General Assignment Classrooms
- Instructional Laboratories/Departmentally Assigned Classrooms
- General Education Reform
- National Capital Region Residential Internship and Practicum Experiences
- International Experiences
- Enrollment Services (USFA, Registrar, Admissions)
- Libraries
- Informal Learning Spaces
- Advising and Academic Services
- TLOS/Learning Technologies
- Services for Students with Disabilities
- Commencement Planning and Sites

# Other Support Services

- Campus Safety
  - Police
  - Emergency Management
  - Environmental Health and Safety
- Transportation and Parking
  - Blacksburg Transit
  - Parking Capacity
- IT Capacity and Licensing
- Campus and Residential Mail Services
- Facilities and Grounds
- Utility Capacities
- Space Management and Reallocation



# Educational Programs Terminology

- Student Credit Hours (SCH)
- Instructional Full-Time Equivalents (FTE)
- Tenure/Tenure Track Faculty (T/TT)
- Professional Instructors
- Graduate Teaching Assistants (GTA)
- Professional Advising
- Assignable Square Feet (ASF)
- Classroom/Laboratory Utilization



# Educational Programs - Quality Metrics

- **Undergraduate SCH per Instructional FTE**
  - Set by college, informed by trends and discipline based comparisons
- **Instructional FTE Composition**
  - Ratio of T/TT faculty to instructors to GTAs
  - Set by college, informed by trends and discipline based comparisons
- **Majors per T/TT Faculty**
  - Ratio of primary and secondary majors to T/TT faculty
  - Set by college, informed by trends and discipline based comparisons
- **Majors per Professional Advisor**
  - Ratio of primary and secondary majors to professional advisor FTEs
  - 300-400 undergraduate majors per professional advisor

# Educational Programs - Quality Metrics

- **Office Assignable Square Feet per Employee**
  - 70-90 ASF per employee
- **Lab Assignable Square Feet per T/TT Faculty**
  - 1,000 ASF in COS, COE, CALS, CNRE. Set by college in other areas.
- **Instructional Laboratory Utilization**
  - 75% utilization per SCHEV guidelines
- **Staffing**
  - A portion of an FTE per added faculty or advisor position
- **Operating Support**
  - A percentage of added salaries

# Educational Programs – Planning Process



# SCH per Instructional FTE Example

	College A			College B		
	Student Credit Hours (SCH)	Instructional FTE	SCH per Instructional FTE (Ratio)	Student Credit Hours (SCH)	Instructional FTE	SCH per Instructional FTE (Ratio)
Fall 2014 Baseline	129,000	400	323	164,000	470	349
<u>Projected Fall 2015 Growth</u>						
From College Majors	1,000			800		
From Non-Majors	200			2,800		
Fall 2015 Projection	130,200	400	326	167,600	470	357
<b>Quality Goal</b>			<b>314</b>			<b>360</b>
Adjust Instructional FTEs		14			-5	
Fall 2015 Adjusted	130,200	414	314	167,600	465	360
<u>Composition of Instructional FTE</u>						
Tenure/Tenure Track Faculty		11				
Instructors		3				
Graduate Teaching Assistants		0				

- Actions in cases of excess capacity:**
- No new FTEs; growth using existing capacity.
  - Hold vacant positions pending growth.
  - Reallocate positions between programs.



# QUESTIONS AND DISCUSSION

**RESOLUTION TO ADOPT A NEW HONOR CODE FOR DOCTOR OF VETERINARY  
MEDICINE STUDENTS AT THE VIRGINIA-MARYLAND REGIONAL COLLEGE OF  
VETERINARY MEDICINE**

Documents included:

1. Resolution to Adopt a New Honor Code for Doctor of Veterinary Medicine Students at the Virginia-Maryland Regional College of Veterinary Medicine
2. Presentation – slides
3. New Honor Code for Doctor of Veterinary Medicine Students at the Virginia-Maryland Regional College of Veterinary Medicine
4. Old Honor Code for Doctor of Veterinary Medicine Students at the Virginia-Maryland Regional College of Veterinary Medicine

**RESOLUTION TO ADOPT A NEW HONOR CODE FOR DOCTOR OF VETERINARY MEDICINE STUDENTS AT THE VIRGINIA-MARYLAND REGIONAL COLLEGE OF VETERINARY MEDICINE**

**WHEREAS**, the doctor of veterinary medicine (DVM) students in the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM) have a Code of Student Conduct that applies specifically to the student body; and

**WHEREAS**, the Code of Student Conduct for DVM students was written in 1980 at the time of the opening of the VMRCVM and has been in use by students in the college since this time; and

**WHEREAS**, the Code of Student Conduct for DVM students is now unsuitable and ineffective as a student governed honor system for DVM students; and

**WHEREAS**, alignment of the DVM honor code with the university's Graduate Honor System would be beneficial for DVM students; and

**WHEREAS**, retirement of the current DVM Code of Student Conduct required a petition to be presented to the chair of the Student Board with signatures of not fewer than 10% of the students operating under the code (445 students), and 50 such signatures were obtained; and

**WHEREAS**, the petition to retire the DVM Code of Student Conduct was then, as required, presented to the entire student body for consideration, and a majority of DVM students in the college voted to retire the current code and to support a new Doctor of Veterinary Medicine Honor Code presented at the same time; and

**WHEREAS**, if approved, the proposed Doctor of Veterinary Medicine Honor Code maintains the integrity of the DVM Code of Student Conduct while paralleling the Graduate Student Honor Code and including cooperation between the two honor systems during investigations of infractions;

**NOW, THEREFORE, BE IT RESOLVED**, that the current DVM Code of Student Conduct be retired and the Doctor of Veterinary Medicine Honor Code, incorporated herein by reference, be adopted as the honor code governing the academic conduct of DVM students in the VMRCVM.

**RECOMMENDATION:**

That the resolution to adopt a new honor code for doctor of veterinary medicine students at the VMRCVM be approved.

June 1, 2015



## Honor Code for Doctor of Veterinary Medicine (DVM) Students at the Virginia-Maryland Regional College of Veterinary Medicine

Board of Visitors  
June 1, 2015

Dr. Jennie Hodgson  
Associate Dean, CVM

# BACKGROUND

- Students enrolled in the Doctor of Veterinary Medicine (DVM) program are considered “professional” students, whose program is distinct from the undergraduate and graduate student programs at Virginia Tech.
- As a result, a need was identified for a code of conduct, that applied specifically to students in the DVM program, and which identified a set of moral standards of conduct essential for a student undergoing professional training in a program in which the public places their trust.

# BACKGROUND

- The “Code of Student Conduct” for DVM students has been in place since the inception of the Virginia-Maryland Regional College of Veterinary Medicine at Virginia Tech in 1980
- However, this code is now considered inadequate for effective DVM student governance of an honor system, and a code that was more closely aligned with the Graduate Honor System (GHS) would be beneficial for this administrative structure
- Therefore, the DVM students voted to retire the “Code of Student Conduct” and adopt a new “Doctor of Veterinary Medicine Honor Code” that parallels the constitution of the GHS

# HIGHLIGHTS OF NEW CODE

- The proposed new DVM Honor Code incorporates many features of the GHS previously missing in the Code of Student Conduct:
  - ✓ Training of DVM student Honor Board Members by personnel in the GHS,
  - ✓ Use of facilitated discussions to investigate, and potentially resolve, issues brought to the DVM Student Honor Board,
  - ✓ Reciprocity during Investigations; GHS Investigators used for our investigations and DVM Investigators used in GHS investigations,
  - ✓ Participation of GHS personnel on DVM Honor Board Hearing Panels in an advisory capacity.

# PROPOSAL

- The current DVM “Code of Student Conduct” be retired and the “Doctor of Veterinary Medicine Honor Code” be adopted as the honor code governing the academic conduct of DVM students in the Virginia-Maryland Regional College of Veterinary Medicine.
- The college recommends the new code be immediately adopted and applied to all DVM students thereafter.
- Appendix 1: “Code of Student Conduct” for DVM Students
- Appendix 2: “DVM Honor Code”

# QUESTIONS?



## **Doctor of Veterinary Medicine Honor Code**

**This code is an alternate version of the Graduate Honor System Constitution specific to students in the Doctor of Veterinary Medicine Program.**

### **Article I: Purpose and Description**

#### ***Section 1 – Doctor of Veterinary Medicine Honor Code***

The Doctor of Veterinary Medicine (DVM) Honor Code for DVM Students is an alternate version of the Graduate Honor System (GHS) Constitution and applies only to students in the DVM program in the Virginia Maryland Regional College of Veterinary Medicine (VMRCVM). Parts of the code will be managed by the GHS while other parts will be managed internally. The DVM Honor Code establishes a standard of academic integrity. As such, this code demands a firm adherence to a set of values. In particular, the code is founded on the concept of honesty with respect to the intellectual efforts of oneself and others. Compliance with the DVM Honor Code requires that *all* DVM students exercise honesty and ethical behavior in all their academic pursuits in the VMRCVM, whether these undertakings pertain to study, course work, research, or clinical rotations.

It is recognized that DVM students have very diverse cultural backgrounds. In light of this, the term *ethical behavior* is defined as conforming to accepted professional standards of conduct, such as codes of ethics used by professional societies in the United States to regulate the manner in which their professions are practiced. The knowledge and practice of ethical behavior shall be the full responsibility of the student. DVM students may, however, consult with their professors, department heads, Academic Affairs, or the Office of the Dean for further information on what is expected of them.

More specifically, all students, while being affiliated with the VMRCVM, shall abide by the standards established by VMRCVM, as these are described in this Code. DVM students, in accepting admission, indicate their willingness to subscribe to, and be governed by the DVM Honor Code and acknowledge the right of the University to establish policies and procedures, and to take disciplinary action (including suspension or expulsion) when such action is warranted. Ignorance shall be no excuse for actions which violate the integrity of the academic community.

The fundamental beliefs underlying and reflected in the DVM Honor Code are: (1) to trust in a person is a positive force in making a person worthy of trust, (2) to study, perform research, and practice veterinary medicine in an environment that is free from the inconveniences and injustices caused by any form of intellectual dishonesty is a right of every student, and (3) to live by an honor system, which places a positive emphasis on honesty as a means of protecting this right, is consistent with, and a contribution to, the University's quest for truth.

#### ***Section 2 - Implementation***

The DVM Honor Board (DVMHB) is established to implement the DVM Honor Code, and its functions shall be:

1. To promote honesty and ethical behavior in all academic pursuits, including, but not limited to, study, course work, research, and clinical rotations.
2. To disseminate information concerning the DVM Honor Code to all new students, faculty, and other interested parties.
3. To investigate suspected violations of the DVM Honor Code in an impartial, thorough, and unbiased manner.
4. To try cases involving potential academic infractions of the DVM Honor Code brought before the DVM Honor Board.
5. To assure that the rights of all involved parties are protected and assure due process in all proceedings.

### **Section 3 - Violations**

All forms of academic work including, but not limited to, course work, examinations, research, and that which is produced during clinical rotations performed by any DVM student shall be subject to the stipulations of the DVM Honor Code. Violations of the DVM Honor Code are categorized as follows: Cheating, Plagiarism, Falsification, and Academic Sabotage. Violations are defined as follows:

*Cheating:* Cheating is defined as the giving or receiving of any unauthorized aid, assistance, or unfair advantage in any form of academic work. Cheating applies to the products of all forms of academic work. These products include, but are not limited to, in-class tests, take-home tests, lab assignments, problem sets, group work, term papers, clinical tests, research projects, theses, dissertations, preliminary and qualifying examinations given for the fulfillment of the degree, or any other work assigned by an instructor, professor or department that pertains to veterinary medicine work or degrees.

Any student giving or receiving unauthorized information concerning academic work shall be guilty of a DVM Honor Code violation. Submitting work that counts towards the student's grade or degree which is not the sole product of that student's individual effort shall be considered cheating, unless, for example, the professor explicitly allows group work, use of out-of-class materials, or other forms of collective or cooperative efforts. In general, all academic work shall be done in accordance with the requirements specified by the instructor or professor. In the absence of specific allowances or instructions by the professor, students shall assume that all work must be done individually.

Some uses of permanently returned, graded material ("koofers") are cheating violations of the DVM Honor Code. By permanently returning graded materials, a faculty member or instructor demonstrates the intent that these materials should be accessible to all students. Such materials may be used for study purposes, such as preparing for tests or other assignments, and other uses explicitly allowed by the professor or course instructor. Once test questions have been handed out, koofers may not be used. Other specific examples of the illegal use of koofers include, but are not limited to, using koofers during closed-book exams, handing in any type of copy (e.g., a photocopy or a transcribed copy) of someone else's work (partial or complete) from a previous term, and copying a current answer key or one that was handed out in a previous term. Students may not copy and hand in as their own work answers taken from any kind of koofer. When in doubt of what may or may not be used, students should consult with the course instructor. In the absence of specific instructions concerning koofers from the instructor, students shall assume that all submitted work must be the product of their own efforts.

*Plagiarism:* Plagiarism is a specific form of cheating, and is defined as the copying of the language, structure, idea, and/or thoughts of another and claiming or attempting to imply that it is one's own original work. It also includes the omitting of quotation marks when references are copied directly, improper paraphrasing, or inadequate referencing of sources. Sources used in preparing assignments for classes, theses, dissertations, manuscripts for publication, and other academic work should be documented in the text and in a reference list, or as directed by the instructor or professor. Sources requiring referencing include, but are not limited to, information received from other persons that would not normally be considered common knowledge, computer programs designed or written by another person, experimental data collected by someone else, graded permanently-returned materials such as term papers or other out-of-class assignments (koofers), as well as published sources. A more detailed discussion of plagiarism may be found in <http://www.lib.vt.edu/instruct/plagiarism/>

*Falsification:* Students who falsify, orally, in writing, or via electronic media, any circumstance relevant to their academic work shall be guilty of a violation of this Code. Included are such actions as forgery of official signatures, tampering with official records or documents, fraudulently adding or deleting information on academic documents, fraudulently changing an examination or testing period or due date of an assignment, and the unauthorized accessing of someone else's computer account or files. Violations also include willfully giving an improper grade or neglecting to properly grade submitted material, improperly influencing the results of

course evaluations, and knowingly including false data or results in any paper or report submitted for a grade, as a degree requirement, or for publication.

*Academic Sabotage:* Academic sabotage is purposeful vandalism directed against any academic endeavor or equipment. It includes, but is not limited to, the destruction or theft of written material, laboratory or field experiments, equipment used in teaching or research, or computer files or programs. Unauthorized tampering with computer programs or systems shall constitute a violation. Academic sabotage includes deliberately crashing or attempting to crash a computer system or the use of files intended to cause or actually causing computer systems to behave atypically, thereby impeding another person's or group's efforts. In particular, knowingly infecting any system with a virus, worm, time bomb, trap door, Trojan horse, or any other kind of invasive program shall be considered a serious violation. Note that violations under this category may also lead to University judicial action or to criminal suits charged by the University.

#### **Section 4 - Composition**

The DVM Honor Board shall consist of one or two DVM Honor Board Faculty Advisor(s), an Honor Board Chair, a minimum of twelve (12) Honor Board student members with at least three (3) representatives from each class, and two (2) Honor Board faculty members. The Associate Dean of Professional Programs (or designee) of the VMRCVM shall be responsible for the continued operation of the System. Appointment of DVM Honor Board personnel shall be made in accordance with Article II.

## **Article II: General Administration**

### **Section 1 - Appointment of the DVM Honor Board Faculty Advisor(s)**

One or two member(s) of faculty of the VMRCVM shall be recommended by the Honor Board Members to serve as the DVM Honor Board Faculty Advisor(s). The advisor(s) recommendation will be presented to the Associate Dean of Professional Programs who will appoint the new advisor(s). The Advisor(s) shall serve in an advisory capacity to the Honor Board Chair and at least one Advisor shall be present (or represented) at all hearings of the DVM Honor Board. The Advisor(s) will have a three-year term with the limit of two consecutive terms.

### **Section 2 - Duties and Functions of the DVM Honor Board Faculty Advisor(s)**

The following duties and functions shall be performed by the DVM Honor Board Faculty Advisor(s) (or their designee):

1. The Advisor(s) shall assume responsibility for the instruction and training of student and faculty members of the DVM Honor Board in the operation, function, and responsibility of the DVM Honor Code.
2. The Advisor(s), with assistance from the Honor Board Chair, shall orient entering DVM students and new faculty to the values and obligations of the DVM Honor Board.
3. The Advisor(s) shall provide counsel to the Honor Board Chair and GHS Investigators in the preparation of cases.
4. The Advisor(s) shall counsel faculty or students referring cases as well as those students charged with offenses. The advisor(s) may appoint additional members of faculty to assist with counseling the accused and/or Honor Board.
5. The Advisor(s) shall, in conjunction with the Honor Board Chair, decide based on the investigators' report if the violation will go to a Hearing Panel.
6. The Advisor(s) (or their designee) shall attend all hearings.
7. The Advisor(s), in consultation with the Honor Board Chair, shall be responsible for appointing the members in a hearing.

### ***Section 3 - Appointment of the DVM Honor Board Chair***

1. Nominations for the position of Honor Board Chair shall be accepted from the Honor Board. Candidates for the position of Honor Board Chair must be a member of the Honor Board, in good standing, and must have been in residence for at least two (2) semesters immediately preceding nomination.
2. The term of office shall be one (1) year, but if available and willing, the current Honor Board Chair may be re-appointed by the DVM Honor Board Faculty Advisor(s) to serve subsequent terms, up to two (2) years, upon the recommendation of the DVM Honor Board.
3. The Honor Board shall be convened by the DVM Honor Board Faculty Advisor(s) upon the resignation of the current Chair, upon completion of term of office, or upon termination of office. All members shall have equal voting privileges. The function of the meeting shall be to nominate a candidate for appointment by the DVM Honor Board Faculty Advisor(s). The nomination process shall be: (1) to invite nominations (2) review nominations, and (3) to recommend to the DVM Honor Board Faculty Advisor(s) from among these applicants a nominee for the position of Honor Board Chair. The recommendation of this committee shall be by majority vote.
4. The DVM Honor Board Faculty Advisor(s) shall appoint the Honor Board Chair.
5. In the absence of a timely appointment, the DVM Honor Board Faculty Advisor(s) can appoint the nominee as an interim Honor Board Chair until the conclusion of the appointment process.

### ***Section 4 - Duties and Functions of the DVM Honor Board Chair***

The DVM Honor Board Chair shall perform the following duties and functions:

1. The DVM Honor Board Chair shall receive reports of suspected violations and determine, in consultation with the DVM Honor Board Faculty Advisor(s), if the accused student(s) is eligible for a Facilitated Discussion. Cases are deemed not eligible for Facilitated Discussion if the accused is on Honor Board probation.
2. The DVM Honor Board Chair shall work with the GHS Chief Justice to refer cases to the GHS Investigative Board.
3. The DVM Honor Board Chair will orient the GHS Investigators to the DVM Honor Code.
4. The DVM Honor Board Chair shall, in conjunction with the DVM Honor Board Faculty Advisor(s), decide if the violation will go to a Hearing Panel, based on the Investigators' report.
5. The DVM Honor Board Chair shall preside at all DVM Honor Board hearings. The DVM Honor Board Chair may request a member of the DVM Honor Board to preside in his or her place.
6. The DVM Honor Board Chair shall assure justice, fairness, and due process.
7. The DVM Honor Board Chair shall secure nominations and select student and faculty members for the Facilitated Discussion Process, and DVM Honor Board, subject to approval by the DVM Honor Board Faculty Advisor(s).
8. The DVM Honor Board Chair will assist the Faculty Advisor(s) with orientation of entering DVM students to the values and obligations of the DVM Honor Code.
9. The DVM Honor Board Chair shall keep the VMRCVM community apprised of relevant activities of the DVM Honor Code.
10. The DVM Honor Board Chair shall consult with the DVM Honor Board Faculty Advisor(s) in the appointment of the DVM Honor Code Facilitators.
11. The DVM Honor Board Chair, in conjunction with the Faculty Advisor(s), shall select the DVM Honor Board members to hear the cases at the DVM Honor Board Hearing Panel.

### ***Section 5 – Appointment of Honor Board Student and Faculty Members***

1. Unless otherwise determined by members of a class, procedures for election of the members of the student board shall be by simple majority from candidates nominated or volunteering from the floor.
2. There shall be two DVM Honor Board Student Members elected from the first year DVM class within one month of the beginning of the first semester of the first year. Elections for reappointment or new representatives will be conducted at the end of the second semester in conjunction with other class officer re-elections.
3. In the event of a vacancy in Board membership, such as with the appointment of a new Honor Board Chair, the class from which the vacancy occurs shall fill the vacancy for the unexpired term by electing a student from that class. During the second semester of the third year two additional students will be elected to act as alternate Honor Board members during the fourth year.
4. DVM Honor Board Faculty Members shall be selected by the DVM Honor Board Chair upon consultation with the DVM Honor Board Members and shall be approved by the DVM Honor Board Faculty Advisor(s). The term of office shall be three (3) years from the time of the appointment. If available and willing, faculty may be reappointed to serve subsequent terms, up to six (6) consecutive years.

### ***Section 6 – Duties of Honor Board Student and Faculty Members***

1. DVM Honor Board Student Members will be trained by the DVM Honor Board Chair and DVM Honor Board Faculty Advisor(s) as to the proper function of the DVM Honor Code.
2. DVM Honor Board Student Members will advise classmates as to the proper function of the DVM Honor Code as necessary.
3. DVM Honor Board Student Members should volunteer to participate as GHS Investigators.
4. DVM Honor Board Student Members will vote as to the suitability of a proposed reason for the accused student(s), referrer(s) or DVM Honor Board Hearing Panel to postpone the date of a DVM Honor Board Hearing.
5. One (1) DVM Honor Board Student Member from each class shall sit on the DVM Honor Board Hearing Panel in the case of a DVM Honor Board Hearing.
6. One (1) DVM Honor Board Faculty Member shall sit on the DVM Honor Board Hearing Panel in the case of a DVM Honor Board Hearing.

### ***Section 7 - Appointment of Investigators***

In instances where investigation is warranted, GHS Investigators will be responsible for investigating the case. GHS investigator appointment is described in the GHS constitution (<http://ghs.graduateschool.vt.edu/constitution>).

### ***Section 8 - Duties of Investigators***

Investigators shall perform the following duties:

1. Investigators shall gather evidence and conduct interviews with the referrer and the accused student(s).
2. Investigators shall prepare a report summarizing the evidence and deliver it to the DVM Honor Board Faculty Advisor(s) and Honor Board Chair for review. The case report shall include all details of the case in hand.
3. In the event of a hearing, Investigators shall present the evidence before the DVM Honor Board Hearing Panel.

### **Section 9 - Appointment of DVM Honor Code Facilitators**

1. The DVM Honor Board Faculty Advisor(s), in consultation with the Honor Board Chair, shall appoint one or more DVM Honor Code Facilitators.
2. DVM Honor Code Facilitators will be trained by GHS Facilitators before appointment as Discussion Facilitators.
3. Facilitators shall serve a two (2) year term, but may be re-appointed to serve a second term, if available and willing.
4. The appointment of new Facilitators shall be made as necessary to meet the needs of the Honor Code.
5. The Facilitator will be appointed from the DVM faculty community and should not be a member of the DVM Honor Board.

### **Section 10 - Duties DVM Honor Code Facilitators**

1. DVM Honor Code Facilitators shall facilitate a discussion meeting between the referrer, and the accused student(s).
2. The DVM Honor Code Facilitators shall ensure that all applicable GHS guidelines are observed and followed (<http://ghs.graduateschool.vt.edu/process/fd>).
3. The DVM Honor Code Facilitators shall ensure that the rights of the accused and referrer are upheld.
4. The DVM Honor Code Facilitators shall, upon examination of the facts of the case, have the authority to refer cases to the DVM Honor Board Chair so that they may be assigned an Investigator.
5. The DVM Honor Code Facilitators shall prepare a full report for the DVM Honor Code Chair which summarizes the outcome of the facilitated discussion and shall brief the Honor Board Chair on all the details of the case at hand.
6. The DVM Honor Code Facilitators shall aid the GHS Facilitators in conducting training session for new DVM Honor Code Facilitators.

### **Section 11 – Communication between the Graduate Honor System and DVM Honor Board**

1. Investigators are recruited from experienced panelists of the GHS and may include trained DVM students.
2. The GHS Chief Justice will provide the DVM Honor Board Chair the report from the GHS Investigators.
3. The DVM Honor Board Chair in conjunction with the DVM Honor Board Faculty Advisor will determine if there is sufficient evidence to proceed to a DVM Hearing.

## **Article III: Reporting potential DVM Honor Code Violations**

### **Section 1 – Reporting of Violations**

It is the obligation of all members (students, faculty and staff) of the VMRCVM community to report alleged violations of the DVM Honor Code. *Reporting the observance of a DVM Honor Code violation shall not be optional; it shall be mandatory.* The referrer shall notify via email the DVM Honor Board Chair or DVM Honor Board Faculty Advisor(s) of their intention to submit a suspected violation. The official report should be submitted in a sealed envelope to the Honor Board Chair or the DVM Honor Board Faculty Advisor(s) on forms provided for that purpose, which are available in the VMRCVM intranet under "Student Information" and "VMRCVM Honor Code". The report form also may be obtained at the Office of Academic Affairs.

Alleged violations of the DVM Honor Code must be reported within ten (10) University business days after the date of discovery. Only under very special circumstances shall exceptions to this policy be granted, and then only at the discretion of the DVM Honor Board Chair and the DVM Honor Board Faculty Advisor(s). A possible reason for exception could include, but is not limited to, unavoidable delays in obtaining the evidence.

***Section 2 - Violations at Extended Campuses***

1. Students engaged in DVM studies at any of VMRCVM's affiliated campuses (Marion DuPont Scott Equine Medical Center in Leesburg, VA and Avrum Gudelsky Veterinary Center in College Park, MD) shall be subject to all provisions of this Code.
2. Unless otherwise designated by the DVM Honor Board Chair, with the approval of the Associate Dean of Professional Programs, all hearings shall be conducted at the VMRCVM.

**Article IV: Facilitated Discussion**

***Section 1 – Composition***

1. The Facilitated Discussion shall be attended by the referrer(s) of the case, the accused student(s), and one DVM Honor Code Facilitator (as outlined in Article II, Sections 9 and 10).

***Section 2 – Functions of the Facilitated Discussion***

The Facilitated Discussion shall fulfill the following functions:

1. It shall assure that the rights of the accused and the referrer are protected and assure due process.
2. It shall facilitate a discussion between the referrer and accused student(s).
3. It shall attempt to build a consensus resolution to a suspected Honor Code violation without convening a DVM Hearing Panel.
4. It shall create a record of a DVM Honor Code violation if all parties conclude that a violation did occur. This record shall be kept in the DVM Honor Board's confidential case files.

***Section 3 – Eligibility for the Facilitated Discussion***

A suspected Honor Code violation will be eligible for a Facilitated Discussion if **ALL** of the following criteria are met:

1. The accused student(s) is(are) not on DVM Honor Code Probation at the time the report of the suspected violation is received by the DVM Honor Board Chair and DVM Honor Board Faculty Advisor(s);
2. The violation is one for which a reasonable person, who is familiar with the form and functions of the DVM Honor Code, would not assign a penalty of more than the sanctions outlined in Article VIII, Section 1, Item 1, Part a-d of this Code.

***Section 4 – Operation***

1. The DVM Honor Board Chair, after determining a case eligible for a Facilitated Discussion, will notify the referrer(s) and the accused student(s) of this determination.
2. The referrer(s) and accused student(s) will then have no more than ten (10) University business days to notify the DVM Honor Board Chair of their desire to participate in a Facilitated Discussion; otherwise the case will be sent for GHS investigation and a possible DVM Honor Board hearing. Exceptions to the ten-day period will only be made under extenuating circumstances, as determined by the DVM Honor Board Chair or DVM Honor Board Faculty Advisor(s).

3. If either the referrer(s) or the accused student(s) does not agree to participate in the Facilitated Discussion, the case will be sent for GHS investigation and a possible DVM Honor Board hearing.
4. During the Facilitated Discussion, the referrer(s) of the alleged violation and the accused student(s) will attempt to reach a resolution to the case, with the assistance of the DVM Honor Code Facilitator. The question which the accused student(s) and the referrer(s) must answer is "Is the student guilty of the alleged violation?" A determination of guilt shall require both the referrer(s) and the accused student(s) to agree that the student is guilty of the alleged violation. A determination of not guilty shall require both the referrer and the accused student to agree that the student is not guilty of the alleged violation. In the absence of such an agreement, the case shall be sent for an investigation and a possible hearing.
5. If the referrer(s) and accused student(s) agree that the student is guilty of the alleged violation, the referrer(s) and accused student(s) may then decide upon an appropriate penalty. Sanctions for the Facilitated Discussion will be limited to those sanctions outlined in Article VIII, Section 1, Item 1, Parts a-d of this Code.
6. The referrer(s) and accused student(s) must both come to an agreement on the appropriate penalty. In the absence of such an agreement, the case shall be sent for an investigation and a possible DVM Honor Board hearing.
7. The DVM Honor Code Facilitator shall make an audio recording of the facilitated discussion and provide a written summary of the outcome of the Facilitated Discussion. The recording, the summary, the original report of the alleged violation, and any relevant evidence shall be held in the DVM Honor Board's confidential file. The DVM Honor Board Chair shall inform the Associate Dean of Professional Programs (or designee), in writing, of the outcome of all Facilitated Discussions.
8. For cases in which the referrer(s) or the accused student(s) withdraws from the Facilitated Discussion, no record shall be kept that either the referrer(s) or accused student(s) participated in a Facilitated Discussion and the fact that they did participate in such a proceeding shall not be deemed relevant in any future DVM Honor Board proceedings.

***Section 5 – Withdrawal from the Decision of the Facilitated Discussion***

1. The accused student(s) or referrer(s) may withdraw from a decision reached during a Facilitated Discussion for any reason.
2. If the accused student(s) or referrer(s) wishes to withdraw from the Facilitated Discussion decision, the DVM Honor Board Chair must be notified of the desire to withdraw from the decision within two (2) calendar days of the conclusion of the Facilitated Discussion.
3. If the accused student (s) or referrer(s) withdraws from the Facilitated Discussion decision, the case shall be immediately sent for an investigation and a possible hearing.
4. In these instances no record shall be kept that the Facilitated Discussion occurred and the fact that they did participate in such a proceeding shall not be deemed relevant in any future DVM Honor Board proceedings.

**Article V: DVM Honor Code Investigations**

***Section 1 – Eligibility for Investigations***

Investigations may be instigated if:

1. Either the accused student(s) or referrer(s) declines or withdraws from facilitated discussion.

2. The accused student(s) is on DVM Honor Code probation at the time the report of a suspected honor code violation is received by the DVM Honor Board Chair and DVM Honor Board Faculty Advisor(s).
3. If the suspected violation is one for which a reasonable person, who is familiar with the form and functions of the DVM Honor Code, would assign a penalty of more than the sanctions outlined in Article VIII section 1, item 1 part a)-d).

### ***Section 2 – Operation***

1. If a decision is made to investigate a suspected violation, the DVM Honor Board Chair will ask the GHS Chief justice to appoint one (1) GHS Investigators to investigate the matter.
2. The GHS Investigator shall promptly conduct a confidential investigation of the alleged violation by interviewing all individuals whom they believe may possess facts directly bearing upon the incident. They shall also examine any documents or records that they deem pertinent. They shall interview the accused student(s).
3. The Investigator shall complete their investigation as promptly as possible, having due regard for the right of the accused student(s) to assemble and present any relevant evidence.
4. The GHS Honor Code Investigator shall make an audio recording of each interview. The Investigator shall present a report to the DVM Honor Board Chair and the DVM Honor Board Faculty Advisor(s) for review. The case shall include all details of the case in hand.
5. If the DVM Honor Board Chair and the DVM Honor Board Faculty Advisor(s) determine that there is insufficient evidence that a violation has occurred, they shall declare the matter closed and shall so notify the accused student(s).
6. If the DVM Honor Board Chair and the DVM Honor Board Faculty Advisor(s) determine that there is sufficient evidence that a violation has occurred, they shall (1) immediately notify the accused student(s) in writing of the investigators' conclusion and provide the accused student(s) with a copy of the investigative report, and (2) call a meeting of the DVM Honor Board Hearing Panel, such meeting to take place not more than ten (10) school days after her/his receipt of the investigators' report, having due regard for the right of the accused student(s) to prepare for the hearing.
7. The accused student(s) or any member of the DVM Honor Board Hearing Panel may petition to change the time of the hearing to a later date provided there is just cause. Just cause shall be determined by a majority vote of the DVM Honor Board Members, excluding the student investigators.

## **Article VI: DVM Honor Code Hearing**

### ***Section 1 - Composition***

1. The DVM Honor Board Hearing Panel shall consist of at least one (1) DVM Honor Board student member from each class except the class from which the accused is part, an additional DVM Honor Board student member from one of the alternate students classes, one (1) DVM Honor Board faculty member, one (1) GHS Judicial Panel member, the DVM Honor Board Chair, and one (1) DVM Honor Board Faculty Advisor.
2. DVM Honor Board Student and Faculty Members will be selected by the DVM Honor Board Chair and DVM Honor Board Faculty Advisor(s) to participate on each DVM Honor Board Hearing Panel.
3. Both DVM Honor Board Student and Faculty Members of the DVM Honor Board Hearing Panel shall have full voting rights.
4. The DVM Honor Board Chair (or designee) shall be a non-voting member and shall serve as the panel moderator.

5. The DVM Honor Board Faculty Advisor shall be a non-voting member and shall serve in an advisory capacity to the DVM Honor Board Chair and the DVM Honor Board Hearing Panel.
6. The GHS Judicial Panel Member shall be a non-voting member and shall serve in an advisory capacity to the DVM Honor Board Chair, DVM Honor Board Faculty Advisor, and the DVM Honor Board Hearing Panel.

***Section 2 - Functions of the DVM Honor Board Hearing Panel***

The DVM Honor Board Hearing Panel shall perform the following functions:

1. It shall hear evidence gathered by the GHS Investigators.
2. It shall hear testimony of the referrer(s), accused student(s), and witnesses.
3. It shall assure that the rights of the accused student(s) and the referrer(s) are protected and assure due process.
4. It shall determine guilt or innocence.
5. It shall recommend the penalty when the accused student(s) is determined to be guilty of the charge.

***Section 3 - Operation***

1. For each case, a hearing shall be conducted by the DVM Honor Board Hearing Panel.
2. The number of voting faculty shall not exceed the number of voting students present. The DVM Honor Board Student and Faculty Members shall be selected as outlined in Section 1. Each student and faculty member shall have full voting privileges, while the DVM Honor Board Chair (or designee) shall be a non-voting member and shall serve as the moderator of the hearing. In addition, the DVM Honor Board Faculty Advisor shall be a non-voting member and shall serve in an Advisory capacity to the DVM Honor Board Chair and the DVM Honor Board Hearing Panel. The GHS Judicial Panel Member shall also be a non-voting member and shall serve in an advisory capacity to the DVM Honor Board Chair, DVM Honor Board Faculty Advisor, and the DVM Honor Board Hearing Panel.
3. All DVM Honor Code Hearings shall adhere to the basic tenets of due process of an academic honor violation as outlined in Graduate Honor System (<http://ghs.graduateschool.vt.edu/constitution>).
4. All persons involved with the hearing have the right to be treated with respect. Persons displaying disrespect for another person at the hearing or contempt for the proceedings shall be dismissed, and the hearing shall be concluded in their absence.
5. All evidence regarding cases should be submitted to the Investigators during the investigation and interviewing process. If additional information is submitted after the case is sent forward, the DVM Honor Board Hearing Panel will decide the relevancy of that information.
6. The accused must be adjudged guilty before any consideration is given to the penalty, unless the accused pleads guilty, in which case the deliberations shall focus solely on the penalty.
7. In evaluating evidence and testimony regarding guilt or innocence, each member of the DVM Honor Board Hearing Panel shall consider whether or not there exists substantive evidence of guilt. The verdict of guilt or innocence shall be determined solely on the basis of the facts regarding the charge, i.e., based on evidence collected and testimony presented at the hearing.
8. At the conclusion of the deliberations on guilt or innocence for each charge against the student the DVM Honor Board Chair shall poll the members of the Panel on the question: "Is the student guilty of the alleged violation?" An affirmative vote represents "guilty," while a negative vote represents "not guilty." A determination of

- guilt shall require a majority vote. In the absence of such a vote, the Panel shall be deemed to have found the student "not guilty." An abstention shall not be counted as a vote. In the unlikely event that a majority of the DVM Honor Board Hearing Panel members do not vote, then the current panel shall be dismissed and a new panel shall be convened to re-hear the case.
9. In determining the appropriate sanction, such factors as the accused student's past history of violations and severity of the violation may be considered.
  10. Recommendations of penalty shall be by majority vote. An abstention shall not be counted as a vote.
  11. A taped recording of the DVM Honor Code Hearing will be made except during deliberations by the DVM Honor Board Hearing Panel regarding guilt or innocence, or during determination of a penalty.
  12. An audio recording of the proceedings, the recommendations of the DVM Honor Board Hearing Panel, together with all submitted evidence and votes recorded, shall be held in the DVM Honor Board's confidential file. The DVM Honor Board Chair shall inform the Associate Dean of Professional Programs (or designee), in writing, of the findings and recommendations of the DVM Honor Board Hearing Panel.

## **Article VII: VMRCVM Action**

### ***Section 1 - Review and Decision***

1. The recommendations (verdict, and penalty if required) of the DVM Honor Board Hearing Panel shall be submitted in writing by the DVM Honor Board Chair to the Associate Dean of Professional Programs (or designee) for review and decision.
2. No penalty shall be announced until an official decision has been rendered by the Associate Dean of Professional Programs (or designee).
3. The official decision of the Associate Dean of Professional Programs (or designee) shall be transmitted in writing to the accused student(s), the referrer(s), and (if applicable) the course instructor. The accused student(s) shall also be notified of the right to appeal the decision.
4. When the DVM Honor Board Hearing Panel's recommendation is not accepted by the Associate Dean of Professional Programs (or designee), the Panel shall be notified of the final decision of the Associate Dean of Professional Programs (or designee) in consultation with the VMRCVM Dean.

### ***Section 2 - Appeals***

1. The accused may appeal the official decision to the Associate Dean of Professional Programs of the Veterinary School on grounds of (1) failure of the DVM Honor Board to follow proper procedures, (2) introduction of new evidence, and/or (3) severity of the penalty. The imposition of the penalty shall be deferred until the termination of the appeals process.
2. The Associate Dean of Professional Programs of the Veterinary School must be notified of an intention to appeal within five (5) University business days after the accused receives written notification of the verdict and penalty.
3. In the event of an appeal, the Associate Dean of Professional Programs of the VMRCVM (or designee) shall convene an Appeals Board. The Board shall consist of the VMRCVM Standards Committee. When convened, the Board shall serve in an advisory capacity and the Associate Dean of Professional Programs of the VMRCVM shall preside.
4. The accused may present the argument of the defense before the Appeals Board. The case of the DVM Honor Board shall be presented by one (1) DVM Honor Board Student Member and one (1) DVM Honor Board Faculty Member, both selected by the DVM

Honor Board Chair and the DVM Honor Board Faculty Advisor, who were members of the DVM Honor Board Hearing Panel that considered the case. The DVM Honor Board Chair and the DVM Honor Board Faculty Advisor shall be present at the appeal hearing.

5. The appeals hearing is not a retrial and must be focused solely upon one or more of the following: (1) failure of the DVM Honor Board to follow proper procedures, (2) introduction of new evidence, and/or (3) severity of penalty. The hearing shall be limited to the consideration of the specific information pertaining to one or more of the above. The burden shall be placed on the appealing student(s) to demonstrate why the original finding or sanction should be changed.
6. The decision of the appeals committee is limited to grounds of the appeal. Judgments are made according to the following guidelines:
  - a. *Failure of the DVM Honor Board to Follow Proper Procedures*  
Determine whether or not the DVM Honor Board followed proper procedures. If proper procedures were followed, then the official decision is enforced. If proper procedures were not followed, then the student is acquitted and the case is closed.
  - b. *Introduction of New Evidence*  
Determine whether or not the new evidence is relevant to the official decision. In the event that the information is determined to be relevant, the appeals board would request a new hearing with no members from a previous DVM Honor Board Hearing Panel. If information is determined to be irrelevant, then the official decision is upheld.
  - c. *Severity of Penalty*  
Determine if the penalty is too severe for the violations of which the student was found guilty. The finding of guilt is not appealable and the case will not be retried. In the event that the penalty is found to be too severe, a lower penalty may be given from those specified under Article VIII of this Code.
7. The final determination of an appeal shall be the sole responsibility of the Associate Dean of Professional Programs (or designee) of VMRCVM. The accused student(s), DVM Honor Board Chair, and DVM Honor Board Faculty Advisor shall be notified in writing of the disposition of the appeal.

## **Article VIII: Actions of the DVM Honor Board**

### **Section 1 - Penalties**

Where guilt is determined, the DVM Honor Board Hearing Panel or DVM Honor Code Facilitated Discussion shall also be responsible for determining an appropriate sanction. There are three major penalty levels (1-3) with increasing severity. These penalties are (1) DVM Honor Board Probation, (2) Suspension, and (3) Permanent Dismissal. For each charge of a DVM Honor Code violation for which a student is found (or pleads) guilty, one of these three penalties must be given.

For cases resolved through Facilitated Discussion, only penalty 1 (DVM Honor Board Probation), subparts a-d may be applied.

For those cases where suspension or dismissal is not warranted, the subparts of penalty 1 (DVM Honor Board Probation) provide a further gradation in the penalty action. Whereas penalties 2, and 3 must be given as a whole (i.e., no parts may be given without the others), penalty 1 may be given in part or in full. However, *if penalty 1 is selected, parts a-c must always be given*. Only parts d-h of penalty 1 shall be optional. The very minimum penalty given shall be penalty 1, parts a-c.

1. **DVM Honor Board Probation** (parts a-c are mandatory, parts d-h optional)
  - a. The accused shall not be suspended from the University, but shall be placed on DVM Honor Board Probation until graduation or termination of enrollment. The sentence of Probation is a warning and is intended to serve as a deterrent against future misconduct. In the event of any other University or DVM Honor Code violation, the appropriate parties shall be notified of the previous history of the accused. In the event of resignation and re-enrollment within a period of one (1) year, the accused shall be reinstated on DVM Honor Board Probation (penalty 1, part a only) subsequent to re-enrollment.
  - b. The accused shall also automatically receive a zero on the assignment on which the violation occurred. If the violation occurred in an exam the maximum score will be 74% of the points allocated to the assessment. In cases other than those involving course work (or other similar work where a zero is applicable), action shall be taken to negate any advantages obtained by the violation.
  - c. A record of the action shall be kept in the accused's folder (*not* the official transcript) in Academic Affairs until graduation from the University or termination of enrollment.
  - d. The accused shall be required to attend a meeting or meetings with the Honor Board Chair and the Associate Dean of Professional Programs for the purpose of achieving a better understanding on the student's part of the requirements and purpose of the DVM Honor Code. Failure to participate in this meeting(s) shall constitute grounds for the *automatic* invocation of part "f" below.
  - e. The accused may be sanctioned to perform an appropriate number of hours (not to exceed 50) of public service and/or restitution congruent with the nature of the offense. Failure to perform this service as specified by the DVM Honor Board shall constitute grounds for the *automatic* invocation of part "f" below.
  - f. The notation "placed on DVM Honor Board Probation" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.
2. **Suspension** (all parts mandatory)
  - a. Suspension is immediate and the student shall not be allowed to complete the current semester. In addition, the accused shall be suspended for a period not to exceed one (1) full academic year following the current semester.
  - b. All credits shall be lost for work done during the semester in which the student is currently enrolled. The penalty shall automatically include a grade of "F for violation of the DVM Honor Code" for the course (or equivalent) in which the offense occurred. This grade shall appear on the student's grade report and permanent record (transcript) as an "F\*", and it shall be a permanent notation.
  - c. The notation "suspended for violation of the DVM Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.
  - d. Upon the accused's re-enrollment at Virginia Tech at the end of the period of suspension, the student shall be placed on DVM Honor Board Probation (penalty 1, part a only) until graduation or termination of enrollment.
3. **Permanent Dismissal** (all parts mandatory)
  - a. The accused shall be permanently dismissed from the University without being allowed to complete the current semester.

- b. All credits shall be lost for work done during the semester in which the student is currently enrolled. In addition, if the offense did not occur during the semester in which the hearing is held, then a grade of "F for violation of the DVM Honor Code" shall also be assigned for the course in which the offense was committed. This grade shall appear on the student's grade report and permanent record (transcript) as an "F\*", and it shall be a permanent notation.
- c. The accused may never re-enroll in the DVM program at the VMRCVM.
- d. The notation "permanently dismissed for violation of the DVM Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.

### ***Section 2 - Acquittal***

In the event of acquittal by the DVM Honor Board, all records of any description in conjunction with the trial shall be completely destroyed, except the "charges" and the "Findings of the Board," which shall be filed in the DVM Honor Board's confidential file.

## **Article IX: Rights and Obligations of the Accused**

### ***Section 1 - Rights of the Accused***

A student accused of violating the DVM Honor Code shall have certain procedural guarantees to ensure fair judicial hearing of evidence. These rights under the DVM Honor Code shall be as follows:

1. Students shall be considered innocent until judged guilty.
1. Students shall have the right to be secure in person and property.
2. Students shall have the right to refrain from speaking for or against themselves.
3. Students shall have the right to speak in their own behalf.
4. Students may choose a member of the CVM community, such as a fellow student, faculty member, or staff member who is willing to assist them in preparing their defense. This person may attend a Facilitated Discussion if the referrer is a member of faculty or staff, but may only participate in an advisory capacity to the student. During a DVM Honor Board Hearing, the student's representative shall only be allowed to address the DVM Honor Board Hearing Panel; they may not question witnesses. Lawyers retained by accused students shall not be permitted at the DVM Honor Board Hearing or at Facilitated Discussions. A member of the student's immediate family or significant others may attend the DVM Honor Board Hearing, but shall be there strictly in an observatory role. They will not participate in the procedure in any way and will also be advised of the strict confidentiality of the matter before the DVM Honor Board Hearing Panel.
5. Students may terminate a Facilitated Discussion at any time, without reason.
6. Students shall have the right to review the report prepared by the Investigators, prior to the scheduling of the DVM Honor Board Hearing Panel.
7. Students shall have the right to suggest corrections and/or additions to the report prepared by the Investigator, prior to the scheduling of the DVM Honor Board Hearing Panel. All suggestions will be considered at the discretion of the DVM Honor Board Chair, and DVM Honor Board Faculty Advisor(s) and the Investigators for the case.
8. Students may at any time during Facilitated Discussion or at a DVM Honor Board Hearing, privately seek counsel with their VMRCVM community representative. Statements made at this time shall be confidential.
9. Students may have any DVM Honor Board or GHS function that they are entitled to attend stopped at any time for a point of clarification.

10. Students may leave any DVM Honor Board function at any time; however, it is in their best interest to remain until they are made aware of all the details.
11. Students shall have the right to receive written notice of the charges, the "Order of Events for DVM Honor Board Hearing Panel," and any other pertinent information sufficiently in advance of the DVM Honor Board Hearing Panel and in reasonable enough detail to allow them to prepare a case on their behalf. Likewise, students shall have the right to examine all evidence collected during the investigation prior to the DVM Honor Board Hearing. The students and their representatives shall have a copy of the evidence during the DVM Honor Board Hearing.
12. Students shall have the right to be aware of all testimony.
13. Students shall have the right to face the referrer(s), when such opportunity exists, at the DVM Honor Board Hearing and to present a defense against the charges, including presenting witnesses on their behalf. Consequently, students shall be consulted in the scheduling of the DVM Honor Board Hearing. However, students shall only be allowed to reschedule the DVM Honor Board Hearing one time (1). Except under extenuating circumstances, DVM Honor Board Hearing shall not be rescheduled unless the DVM Honor Board Chair or the DVM Honor Board Faculty Advisor(s) is notified of the requested change prior to three (3) working days preceding the scheduled hearing date.
14. Failure of students to be present at the DVM Honor Board Hearing, assuming reasonable effort has been made to ensure their presence, shall indicate that they are waiving their rights to face the referrer(s) and to appear before the DVM Honor Board Hearing Panel.
15. Students may ask that a panel member be excused from the DVM Honor Board Hearing if they can give reasonable cause why that panel member may be biased or have some other conflict of interest. The DVM Honor Board Chair and the DVM Honor Board Faculty Advisor(s) shall make a final ruling on any such request.
16. Students shall have the right to an appeal as specified under Article VII, Section 2.

### ***Section 2 - Obligations of the Accused***

Students accused of DVM Honor Code violations shall have the responsibility of cooperating with DVM Honor Board personnel. Furthermore, when a case involves other students, these students' rights to privacy should be observed. Students should be aware that the confidentiality of DVM Honor Board proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website at <http://www.registrar.vt.edu/records/ferpa.php>.

## **Article X: Rights and Obligations of the Referrer**

### ***Section 1 - Rights of the Referrer***

A person referring charges of a DVM Honor Code violation against a DVM student shall be accorded the following rights:

1. The referrer shall have the right to choose one person (any member of the DVM community, such as a DVM student, a VMRCVM faculty or staff member) to assist them in preparation of the case. This person is not allowed to be present at the DVM Honor Board Hearing or during Facilitated Discussion.
2. The referrer shall have the right to terminate Facilitated Discussion at any time, without reason.
3. The referrer shall have the right to review the report prepared by the Investigator, prior to the scheduling of a DVM Honor Board Hearing.
4. The referrer shall have the right to suggest corrections and/or additions to the report prepared by the Investigator, prior to the scheduling of a DVM Honor Board Hearing.

The referrer shall have the right to receive a copy of the evidence collected during the investigation, the "Order of Events for the DVM Honor Board Hearing" and any other pertinent information.

5. The referrer shall have the right to receive written notification of the final disposition of the case.
6. The referrer shall have the right to be secure in person and property.
7. Professors referring charges of violations may opt to grade or refrain from grading any assignment under investigation by the DVM Honor Board. It is recommended that instructors, if they are able to do so, grade the assignment with the assumption that the student is innocent of the charge. However, an incomplete grade may be assigned to the accused student pending the decision of the DVM Honor Board. The incomplete grade will be removed when the case is resolved.

### ***Section 2 - Obligations of the Referrer***

A person bringing charges of a DVM Honor Code violation against another shall accept the following obligations:

1. The referrer shall cooperate with the DVM Honor Board Chair, the DVM Honor Board Faculty Advisor, the GHS Investigator, and any other personnel of the DVM Honor Board or GHS.
2. The referrer shall be expected to appear at the DVM Honor Board Hearing.
3. The referrer shall have the responsibility of maintaining confidentiality in all matters pertaining to the case. However, referrers may discuss the case with their counsel (see Article X, Section 1, item 1). The referrer should be aware that the confidentiality of Honor Board proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website at <http://www.registrar.vt.edu/records/ferpa.php>.

## **Article XI: Obligations of Parties Indirectly Involved in DVM Honor Board Cases**

1. Parties indirectly involved in DVM Honor Board cases include but are not limited to persons who witness alleged violations, witness discussions between referrers and accused students, and serve as members of the DVM community that help referrers and accused students prepare their case.
2. Parties indirectly involved in DVM Honor Board cases shall have the responsibility of maintaining confidentiality in all matters. Parties indirectly involved in DVM Honor Board Cases should be aware that the confidentiality of DVM Honor Board proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website at <http://www.registrar.vt.edu/records/ferpa.php>.

## **Article XII: General**

### ***Section 1 - Violations Involving Graduate Students Already Graduated***

If the degree towards which the student was working at the time of the alleged violation has already been awarded, the case shall be referred to the Associate Dean of Professional Programs who shall convene a committee to review and investigate the charge and make recommendations. The committee composition shall be determined by the Associate Dean of Professional Programs. The DVM Honor Board Chair shall be an ex officio member of this committee and shall have the same voting privileges as the other members of this committee.

### ***Section 2 - Recruitment of DVM Honor Board Members***

Recognizing that it is strongest when it fosters and reflects the support of all DVM students and faculty at the College, the DVM Honor Board shall seek to be as broadly representative of the DVM student and faculty bodies at VMRCVM as possible. To this end, all qualified DVM students and faculty shall be encouraged to participate in the DVM Honor Board. No otherwise qualified DVM student or faculty may be excluded from membership on the basis of race, sex, handicap, age, veteran status, national origin, religion, political affiliation, or sexual orientation. At least two students from each class year are required to participate in the VMRCVM Honor Board.

### ***Section 3 - Clearance of DVM Honor Board Student Members' Records***

DVM students volunteering or appointed to serve on the DVM Honor Board must receive clearance of their personal disciplinary records and their academic records through the Associate Dean of Professional Programs. Such clearances shall be conducted consistent with the University's regulations on the confidentiality of records and shall assure a minimum academic quality credit average of 2.50 and no previous or current disciplinary action for each appointee.

### ***Section 4 - Confidentiality***

All details pertaining to a suspected DVM Honor Board violation shall be kept confidential by the referrer(s), the accused student(s), the DVM Honor Board Chair and Faculty Advisor(s), the DVM Honor Board, other members of the DVM community involved in the case including faculty, staff and students, and family members of the accused. Failure to maintain confidentiality will be considered an infraction of the Professional Standards for DVM Students as outlined in the DVM Student Handbook.

The accused student has the right to review the Facilitated Discussion Report, the Investigative Report, to receive written notice of the charges, the "Order of Events for DVM Honor Board Hearing Panel," and any other pertinent information. Likewise, the accused student shall have the right to examine all evidence collected during the investigation prior to the DVM Honor Board Hearing. The students and their representatives shall have a copy of the evidence during the DVM Honor Board Hearing. The accused does not have the right to access to DVM Student Honor Board Hearing Panel deliberations about: 1) guilt or innocence or, 2) the appropriate penalty.

All investigations, hearings, reviews, and other associated activities of the DVM Honor Board shall conform to the University's "Confidentiality of Student Records" as outlined on the University Registrar's website at <http://www.registrar.vt.edu/records/ferpa.php>.

### ***Section 5 - Substitution of DVM Honor Board Personnel***

The DVM Honor Board Chair or the DVM Honor Board Faculty Advisor(s) shall be authorized, when circumstances dictate, to appoint substitutes for any DVM Honor Board personnel in any case before the DVM Honor Board. However, faculty may not be substituted for DVM students and vice versa.

### ***Section 6 - University Policies***

Where appropriate, the DVM Honor Board shall abide by all applicable policies, statements, and principles as contained in the *University Policies for Student Life* and the current DVM Student Handbook.

### ***Section 7 – Definition of a "University business day"***

A "University business day," as referred to in this Code, shall be defined as any day on which the main Virginia Tech campus is open and the DVM offices are open.

### **Article XIII: Amendments**

**The GHS must be notified of any amendment(s) made to the DVM Honor Code and a new copy of the Code provided to the GHS Chief Justice within five (5) business days for their records.**

Proposed amendments to the DVM Honor Code may be initiated through one of the following channels: (1) by a majority vote of the DVM Student Body, (2) by a majority vote of the Standards Committee, or (3) by direct submission to the Honor Board Chair or the Associate Dean of Professional Programs. Also, at the discretion of the Honor Board Chair and the DVM Honor Board Faculty Advisor(s), amendments may be initiated through the DVM Honor Board. Upon receiving such proposals, the Associate Dean of Professional Programs shall convene the DVM Honor Code Revision Committee. With the approval of two-thirds of this committee, proposed amendments shall be forwarded for approval by the CVM Standards Committee and thereafter through the proper channels of the College governance structure. Substantive changes, however, will proceed through University governance. Any substantive changes in proposed amendments as they proceed through subsequent levels of approval shall be resubmitted to the DVM Honor Code Revision Committee for its approval.

The DVM Honor Code Revision Committee shall consist of the Honor Board Chair, the Associate Dean of Professional Programs, the DVM Honor Board Faculty Advisor(s), a minimum of three (3) members of the DVM Honor Board (minimum of two (2) DVM students and one (1) faculty), and up to two (2) other representatives from the DVM student body to be nominated by the DVM Honor Board.

***This Code is based on the Graduate Honor System Constitution and works closely with the GHS.***

## STUDENT HONOR CODE

The Honor System is a way of life to be zealously guarded. It is an educational asset to be conserved and strengthened. It is an opportunity for students to learn to govern themselves in the principles and practices of honor and personal integrity so fundamental in successful relationships among the individuals of a profession and in the scholarly education of its members.

Realizing this need for the development and the expression of moral standards of conduct, so essential to the professionally trained, in whom the public places their confidence, it is expected that the students of the Virginia-Maryland Regional College of Veterinary Medicine will avail themselves of the inspiration afforded by this Honor Code, and submit to guidance by the precepts herein enumerated. It is hoped that the habits and insights gained will enhance enduringly the performance of honorable, constructive, and satisfying service both personally and professionally.

It should be made known to all those who read "THE CODE OF STUDENT CONDUCT OF THE VIRGINIA MARYLAND REGIONAL COLLEGE OF VETERINARY MEDICINE" that the contents of this document are written with specific intentions in mind; to provide a means to achieve the four purposes of the code, to promote timeliness, and to assure accurate, just, and fair proceedings.

Without the complete understanding and cooperation of the VMRCVM community, we have but words on paper, but if there is in fact a meeting of the minds as to our desires of, how to accomplish the four purposes initially stated, we then will have a true honor system.

### **Code of Student Conduct Virginia-Maryland Regional College of Veterinary Medicine**

#### **Name, Purpose and Application**

*Name.* This Code shall be known as the Code of Student Conduct of the Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM).

*Purposes.* The purposes of the Code are to:

- Promote ethical and professional standards of personal conduct among students enrolled in the VMRCVM.
- Instill in those students the qualities necessary to maintain the integrity of the profession of veterinary medicine, including the sense of responsibility for one's own actions.
- Promote effective and equivalent opportunities for the study of veterinary medicine, and promote cooperation and mutual respect between students and faculty at the VMRCVM.
- Provide a means for corrective action ensuring that the above three purposes are fulfilled.

*Application*

- This code shall apply to all students enrolled in the professional curriculum at the VMRCVM. Students enrolled in the VMRCVM shall adhere to the principles of this Code when taking courses in other colleges of the university.
- This code shall operate independently of the VPI&SU Honor System.

### **Rules of Conduct**

- *Aid in examination.* Students shall neither give nor receive aid from any unauthorized source during the course of an examination or in preparation for an examination. Students who have completed an examination are to discuss neither the subject of the exam nor any aspect of the exam, which may include but is not limited to length, difficulty, or material covered or not covered, until all students have finished the examination. The use of old exams shall be permitted only when approved by the instructor administering the exam.
- *Misrepresentation or plagiarism.* Students shall in no way misrepresent their work fraudulently, or plagiarize, or unfairly advance their academic status, or be party to another student's failure to maintain academic integrity. Each student is responsible for the content of the work they submit for academic credit, including papers, examinations, laboratory reports, homework assignments, etc. These are assumed to be the work of that individual unless group effort of some sort is specifically allowed by the faculty member assigning such work.
- *Property damage.* A student shall not intentionally damage or deface any item of another student or the VMRCVM, VPI&SU, UMCP, or any other individual associated with the above universities.
- *Theft.* Students shall not appropriate for their own use the property of another student or the VMRCVM, VPI&SU, UMCP, or any other individual associated with the above universities.
- *Animal abuse.* Students shall not intentionally or negligently abuse any animal. All animals shall be treated or handled according to State and Federal guidelines.
- *Improper conduct.* Students shall not engage in any conduct that brings discredit on the VMRCVM or on the profession of veterinary medicine. Students shall conduct themselves in a manner consistent with codes and laws applicable to licensing and good standing in the veterinary profession and the principles of veterinary medical ethics as found in the AVMA Directory.
- *Act as accessory.* A student shall not intentionally aid or abet another student in the performance of any of the foregoing acts or omissions.
- *Failure to report violation.* Failure to report a violation of this Code is in itself a violation.
- It shall also be a violation of the Code for any student, whether or not a member of the Student Code Board, to fail to maintain the confidentiality of its proceedings as provided in Section VILB below.

## **Student Code Board**

*Composition and Term.* The Student Code Board (Student Board) shall consist of two members elected from each class, plus 2 alternates from the senior class, and a chair and a secretary giving a total of 10 voting members. The senior alternates will serve at those times that one of the senior representatives is unavailable. The secretary and chair are selected by the previous year's board as outlined below. The Student Board will appoint two members of the faculty of the VMRCVM to act as nonvoting consultants to the Student Board. Student Board members, officers, and consultants shall serve for the period of two academic years, but are eligible for reelection or reappointment.

*Election of Board Members.* Elections for reappointment will be conducted at the end of the second year. Members of the Student Board from the first-year class shall be elected within one month after their initial enrollment.

Unless otherwise determined by members of a class, procedures for election of the members of the Student Board shall be by simple majority from candidates nominated or volunteering from the floor.

In the event of a vacancy in Board membership, the class from which the vacancy occurs shall fill the vacancy for the un-expired term by electing a student from that class.

Recognizing that the code is strongest when it reflects the support of all the VMRCVM students, all students are encouraged to participate in the management of this code.

*Appointment of Consultants.* Faculty consultants to the Student Board for the next academic year shall be named by the members of the Student Board promptly after their own election.

*Officers.* The officers of the Student Board shall consist of a Chair and a Secretary. These shall be named from among members of the Student Board before the elections. The new officers serve in the year following their selection as officers.

The Chair shall call and preside at all meetings of the Student Board, and shall perform such other duties as may be specified herein or as may be designated by the Student Board.

The Secretary shall keep the minutes and other records of the Student Board, shall perform the duties of Chair in the event of absence, and shall perform such other duties as may be specified herein or as may be designated by the Student Board.

*Responsibilities.* The members of the Student Board shall be responsible for the enforcement of this Code and for discharge of the specific duties of the Student Board specified herein. The faculty consultants shall act as confidential observers at Student Board meetings and hearings, shall advise on matters of Code application, and shall act as liaison between the Student Board and the faculty. They may speak at but not vote in proceedings of the Student Board. Additionally, the faculty consultants shall be responsible for conveying an understanding and appreciation of the Student Code among the faculty, and especially among the new faculty.

## **Faculty Review Board**

*Composition and Term.* The faculty Review Board (Faculty Board) shall consist of the Curriculum Board of the VMRCVM.

*Responsibilities.* The responsibilities of the Faculty Board shall be to review findings and penalties determined by the Student Board and to hear appeals from findings or penalties determined by the Student Board, all as provided in Article VI below.

## **Enforcement Procedures**

*Complaint.* Any member of the VMRCVM student body, faculty, or staff who has reason to believe that a student has committed a violation of this Code shall send a written report to a representative of the Student Board within twenty school days of the initial discovery of the alleged offense. This representative shall immediately transmit the report of alleged violation to the Chair of the Student Board. Any violation discovered during the summer must be reported within twenty school days of the beginning of the fall session. Within five school days of the Chair's receipt of the report of alleged violation, the Chair will provide the accused student with a written summary of the reported violation and a copy of Appendix I of this code (Student's Rights to Procedural Due Process).

*Investigation.* Upon receipt of a report of alleged violation, the Chair of the Student Board shall appoint two students of the Student Board and one faculty advisor to investigate the matter. The two students shall be from different classes and not from the same class as the accused. The chair of the student board shall not be one of the two investigators.

- The investigators shall promptly conduct a confidential investigation of the alleged violation by interviewing all individuals whom they believe may possess facts bearing upon the incident. They shall also examine any documents or records that they deem pertinent. They shall interview the accused.
- The investigators shall complete their investigation as promptly as possible, having due regard for the right of the accused student to assemble and present any relevant evidence.
- If the investigators determine that there is insufficient evidence that a violation has occurred, they shall so report in writing to the Chair of the Board. In such event, the Chair shall declare the matter closed and shall so notify the accused student.
- If the investigators determine that there is sufficient evidence that a violation has occurred, they shall so report in writing to the Chair of the Student Board, specifying the particular provision or provisions of the Code which they believe have been violated and summarizing the evidence upon which their conclusion is based. Thereupon, the Chair shall (1) immediately notify the accused student in writing of the investigators' conclusion and provide the student with a copy of the investigative report, and (2) call a meeting of the Student Board for the purpose of hearing the matter, such meeting to take place not more than ten school days after [her/his](#) receipt of the investigators' report, having due regard for the right of the accused student to prepare for the hearing.

- The accused or any member of the Board may petition to change the time of the hearing to a later date provided there is just cause. Just cause shall be determined by a majority vote of the Board members present, excluding the student investigators.

*Hearing.* The following provisions shall govern a hearing of the Student Board called to determine if a violation of the Code has occurred:

- A quorum of the Student Board for the hearing shall consist of at least one of the two investigators and at least six of the eight remaining members of the Board. The Secretary shall make a written record of the hearing and cause the hearing to be tape-recorded. The presence of a witness shall be limited to the presentation and discussion of their testimony. Unless otherwise requested by the accused student, the hearing shall remain closed to the public. The accused student may have presented at the hearing members of immediate family or significant others, without having to request a public hearing. Any such individual(s) present at the hearing shall be there strictly in an observatory role. They will not participate in the procedure in any way and will also be advised of the strict confidentiality of the matter being heard before the Honor Board.
- Should the accused student request a public hearing, it is not the duty of the Honor Board to in any way promote or advertise the hearing. Additionally, it is never the responsibility of the members of the Board to disclose any information regarding the hearing or the case involved, except in those instances where such information is requested by law enforcement officials, as outlined in Section VII.C. of the Code.
- The investigator(s) shall present the evidence developed during the course of their investigation, and shall respond to questions concerning the evidence put to them by other members of the Student Board or by the accused student or the student's advisor. The investigators may call any witnesses, and they are responsible for having the witnesses available during the hearing. The individual originally reporting the alleged violation must also present the facts forming the basis for this allegation and shall respond to questions by members of the Student Board or by the accused student.
- The accused student may then present any evidence or statement the student believes relevant to the inquiry. The accused may call any witnesses, and is responsible for having the witnesses available during the hearing. The accused will be given the opportunity to respond to any questions by members of the Student Board, including the investigator(s).
- Both the investigators and the accused shall be responsible for having the witnesses available during the hearing, but either party may petition the Board to recess during the hearing in order to obtain additional witnesses or evidence. The Board, excluding the investigators, shall vote as to just cause for recess.
- Following presentation of the evidence, the members of the Student Board shall retire to reach a decision, out of the presence of the accused and the investigators, on whether the accused student is guilty of a violation. The Student Board shall make its decision based solely on the evidence presented at the hearing. A decision of guilty shall require the concurrence in a written ballot of at least 2/3 of a quorum of the Student Board members, not including the investigators.

- The Chair shall promptly announce the decision of the Student Board as to the guilt or innocence of the accused. If the decision is that of innocent, the matter shall be at an end. If the decision is that of guilty, then the accused student or advisor shall be entitled to present evidence or other information believed pertinent to determining the severity of the penalty to be imposed by the Student Board.
- Thereupon, the Student Board shall retire to determine the penalty out of the presence of the accused and the investigators. According to the severity of the violation, the Student Board may:
  1. issue a warning (first offense only)
  2. recommend academic penalty, after consultation with course leader
  3. recommend a constructive penalty in the form of public service and/or restitution congruent with nature of offense. Evidence of compliance with penalty must be presented the Board by accused within specified period; if unsatisfactory Board may exercise option (4) or (5) below
  4. recommend that the student should be suspended from VMRCVM for a specified period of time
  5. recommend that the student should be expelled from the VMRCVM.

An affirmative vote (written ballot) of at least 2/3 of the Student Board members present shall be required for assessment of any penalty other than expulsion; a unanimous vote of those present shall be required for the penalty of expulsion. In the event that a unanimous vote is not achieved following motion for expulsion, a revote is allowed to assess a lesser penalty and still requires a 2/3 majority to carry.

- The Chair shall promptly announce to the accused student the decision of the Student Board as to the penalty to be assessed.

If the penalty is a warning, the warning shall be administered by the Student Board and a record of the proceedings shall be kept on file by the Secretary.

### **Review by Faculty Board**

*Jurisdiction.* The Faculty Board shall have jurisdiction to review actions of the Board in the following circumstances:

- The Student Board shall have made an adverse finding against the accused student, and shall have imposed any penalty except a warning. In such event, the Chair of the Student Board shall cause all records of its proceedings to be forwarded to the Faculty Board within two school days after the Student Board chair has informed the student of the penalty.
- The Student Board shall have made an adverse determination against the accused student, and the student wishes to appeal. In such event, the student shall notify the Chair of the Student Board of their desire to appeal within five school days after the Student Board has acted. The Chair of the Student Board shall promptly forward the notice of appeal and the records of its proceedings to the Faculty Board.

*Hearing.* Within five school days after receiving the records of proceedings as aforesaid, the Faculty Board shall, with due notice to the Chair of the Student Board and the accused student, convene to hear the matter. The following procedures shall apply:

- The only persons entitled to appear before the Faculty Board is the Chair of the Student Board and the accused student and advisor.
- The Faculty Board shall hear the matter on the basis of the records of proceedings before the Student Board, and on any presentations concerning those proceedings that the Chair of the Student Board or the accused student or advisor wish to make. Except in the case of evidence determined by the Faculty Board to have been discovered after the Student Board hearing (see number [31 below), the Faculty Board shall make its determinations only on the basis of the evidence before the Student Board, as reflected in the record of proceedings before it.
- If the Faculty Board determines that some evidence exists discovered after the Student Board hearing, it shall return the matter to the Student Board, which shall reconvene within seven school days to determine the need for a new hearing.
- If the Faculty Board decides the weight of the evidence supports the finding by the Student Board of a violation or violations, then the finding shall be upheld. Otherwise, the matter shall be dismissed by the Faculty Board, in which event the matter shall be at an end.
- If the Faculty Board upholds the Student Board finding of a violation or violations, it shall review the penalty assessed by the Student Board. The Faculty Board shall either confirm the penalty assessed by the Student Board or shall at its discretion impose any reduced (not increased) penalty authorized by this Code.
- Actions of the Faculty Board shall be by 2/3 majority of a minimum quorum of Board members. The action of the Faculty Board on the matter shall be final.

### **Records and Confidentiality**

*Records.* In the event the investigators, Student Board or Faculty Board dismiss an allegation of violation against an accused student, all records relating to the matter shall be promptly destroyed. In the event that a finding of violation is finally upheld, such records shall be retained on a confidential basis by such Boards. The names of violators will be promptly expunged from the record upon the graduation of those violators.

#### *Confidentiality.*

- The matter of any investigation is confidential and limited to the Student Code Board, up to the point where the code prescribes the involvement of others (e.g., the Faculty Board or the student body). Any information or correspondence involving a possible code violation received by any member of the VMRCVM community should be forwarded only to the chairman of the Student Code Board.
- Proceedings of the Boards, and identity of persons appearing before them, shall be kept confidential. In the event of a final adverse determination against an accused student, the Student Board shall publicly announce the occurrence and the nature of the VI violation and the penalty assessed. The accused student's name shall not be made public. Statistics of cases and dispositions of cases may be periodically made public.

*Disclosure to Law Enforcement officials.* Nothing herein shall prevent the members of the Boards from disclosing any information in their possession when required by state or federal law.

### **Miscellaneous**

*Distribution of Code.* A copy of the Code will be distributed to all incoming VMRCVM students, any other students operating under the Code, and all VMRCVM faculty members at the beginning of each school year.

*Notice to First-Year Students.* It shall be the duty of the Chair of the Student Board or designate to summarize and explain the Code to the entering first-year students before the end of the second week of the fall semester.

*White Cards.* All incoming first-year students shall, prior to matriculation, return a form issued by the Student Honor Board that states that the student has reviewed and understands the conditions of the Student Code.

*Old Exams.* Each Class' Student Code board representatives shall be responsible for establishing and implementing a system for the proper usage (e.g., allowance of instructor) and equal accessibility to old exams. Note: use of "Koofers" is prohibited.

### **Amendments and Retirement**

This code may be amended at any time by a majority vote of all students operating under the Code. This Code may be retired at any time by a majority vote of all students operating under the Code.

### **Procedure for Amendment or Retirement**

*Amendment.* In any request for amendment to the Code, a petition must be presented to the Chair of the Student Board, with the signatures of not fewer than 10% of the students operating under the Code. The Chair shall then present the petition to the entire student body for consideration, and shall be responsible for the voting procedure. This petition shall be presented to the student body within two weeks after the Chair has received it. If the petition meets the approval of the student body, it shall be forwarded to the VMRCVM Faculty Board for consideration. If the petition meets the approval of the VMRCVM Faculty Board, it shall become an amendment.

*Retirement.* To retire the code, a petition must be presented to the Chair of the Student Board, with the signatures of not fewer than 25% of the students operating under the code. The chair shall then present the petition to the entire student body for consideration, and shall be responsible for the voting procedure. This petition shall be presented to the student body within two weeks after the chairman has received it. If the petition meets the approval of the student body, the code shall be retired without further procedure.

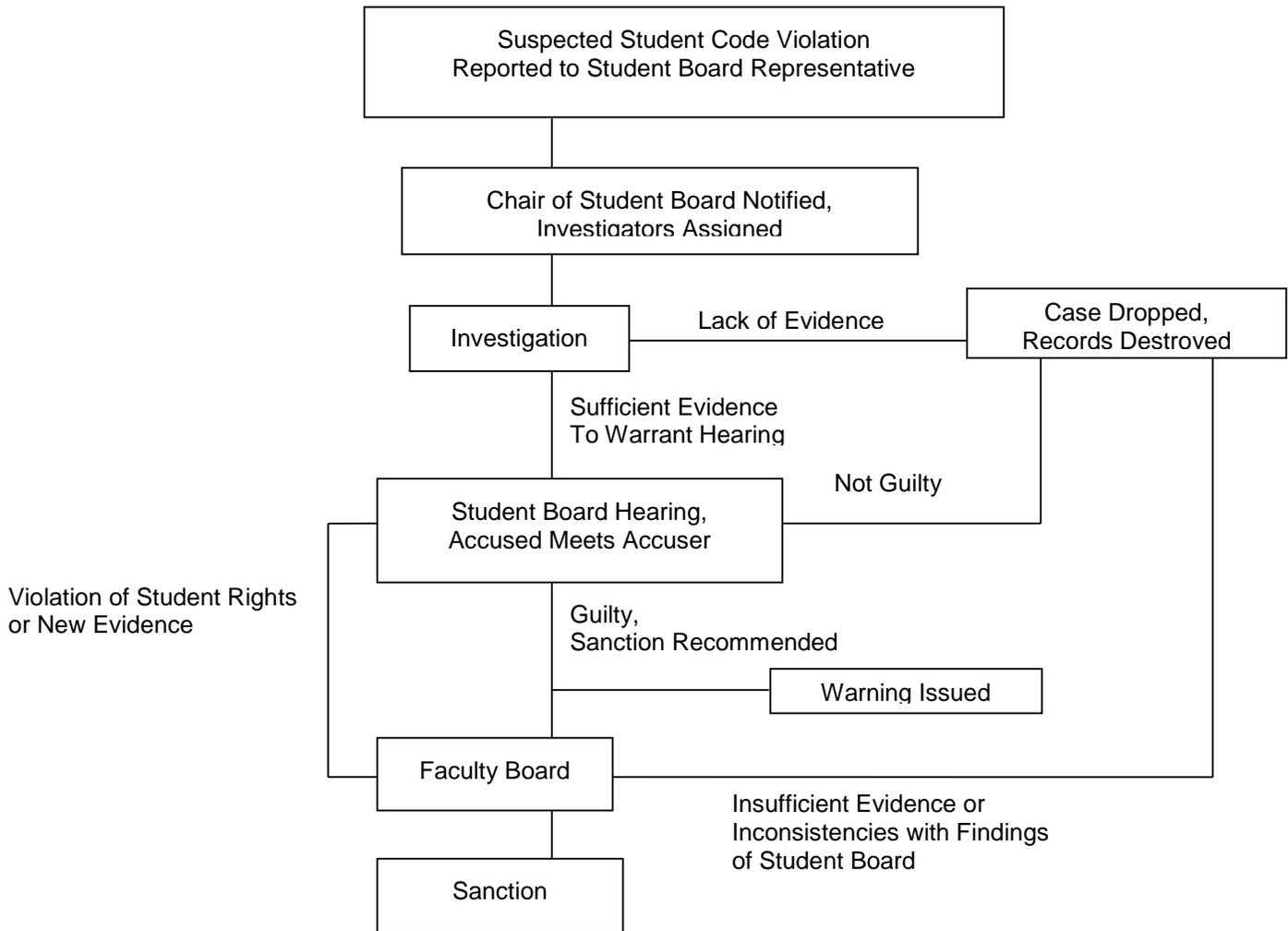
### **Student's Right to Procedural Due Process**

No student shall be denied the right to procedural due process. Due process shall include:

- The student's right to a written statement of the charges against them.
- Considered that the accused is innocent until proven guilty.
- The opportunity for a hearing.

- Timely notice of the time, place, and nature of the hearing.
- The right to question witnesses.
- The right to confront accusers in a hearing.
- The right to testify and present evidence and witnesses in own behalf.
- The right to decline to testify against oneself.
- The right to an appeal.
- The right to access submitted evidence and hearing transcripts in which they are accused.
- The right to be informed promptly of the outcome of a completed Board hearing as well as any penalties assessed.
- The right to be accompanied by an advisor of choice at any of the procedures of the Student Code of Conduct Board. This adviser must be from within the University community.
- The right to consult privately with the advisor (as in I.) at any point during the proceedings.

### Student Honor Code Flow Chart



**RESOLUTION TO APPROVE MASTER OF ARTS DEGREE  
IN DATA ANALYSIS AND APPLIED STATISTICS**

Documents included:

1. Resolution to Approve Master of Arts Degree in Data Analysis and Applied Statistics
2. Degree Proposal for Master of Arts Degree in Data Analysis and Applied Statistics
3. Degree Proposal Presentation – slides

**RESOLUTION TO ESTABLISH THE MASTER OF ARTS DEGREE  
IN DATA ANALYSIS AND APPLIED STATISTICS**

**WHEREAS**, one of the main goals of the university is the education and training of students to be quantitatively adept and ready to meet the needs of industry, government, and academics in an era of unprecedented data abundance and previously unimagined data sources; and

**WHEREAS**, the demand for applied statistics education and training among students majoring in many master's and doctoral programs across the university has been increasing; and

**WHEREAS**, the ever-growing abundance of data in science, industry, and business requires employees with extensive statistical knowledge in various specialized topics; and

**WHEREAS**, expert analyses in the U.S. and elsewhere point to a shortage of trained quantitative scientists and scholars in the social sciences, humanities, physical sciences, medicine, and other fields; and

**WHEREAS**, the Department of Statistics has the capacity to respond to the demand for quantitatively trained scholars from a variety of fields by offering a master of arts in data analysis and applied statistics;

**NOW, THEREFORE BE IT RESOLVED**, that the master of arts degree in data analysis and applied statistics be established, effective fall, 2016.

**RECOMMENDATION:**

That the resolution to establish a master of arts degree in data analysis and applied statistics be approved.

June 1, 2015

**Virginia Tech Degree Proposal**  
**Master of Arts in Data Analysis and Applied Statistics**  
**(CIP: 27.0304)**

**Type of degree action (circle one):**  New  Spinoff  Revision  Discontinuance

**Program description**

The Department of Statistics and College of Science at Virginia Tech request approval for a new Master of Arts (M.A.) in Data Analysis and Applied Statistics (DAAS) to commence in the fall semester of 2016. Other programs and departments sponsoring this request include the Education Research and Evaluation Program (EDRE), the Departments of Psychology, Fish and Wildlife Conservation, Forest Resources and Environmental Conservation, Geography, Economics, Human Development, Sociology, Psychology, Biological Sciences, and the Genetics, Bioinformatics, and Computational Biology program.

Due to the continually increasing demand for individuals educated and trained in the analysis of data, the Department of Statistics has seen more applications for admission than ever before and our graduate program continues to grow and now is at its largest size in its 65 year history. Among those applying are a group of students who wish a more applied-oriented degree in statistics rather than our current theoretically-oriented M.S. degree. Indeed, among the approximately 170 annual applications for admission to our graduate program, only approximately 50% of these applicants meet our mathematical requirements of having successfully completed two full years of calculus. This fact suggests that the other approximately 50% of these applicants, those rejected for admission due an inadequate mathematical background, would be interested in our DAAS program.

The M.A. DAAS degree will be distinctly different from the M.S. Statistics degree currently offered by the Department of Statistics in that the latter requires advanced calculus (Calculus IV) for admission into the graduate program. In addition, two mathematical statistics courses (Probability and Distribution Theory, and Statistical Inference) are core requirements for the M.S. in statistics degree. These two courses provide the mathematical framework that supports the other core and elective courses that the student must complete for the M.S. degree in statistics. The department's current statistics degree has a strong mathematical foundation. Such a foundation better prepares our students for the study of advanced statistical theory required for Ph.D. studies but is not intended to be appropriate for students seeking an application-focused degree.

Our proposal is to offer a curriculum that provides a broad variety of applied statistical tools to students, without the emphasis on statistical theory steeped in mathematics. These courses are currently offered by the Department of Statistics and by other departments at Virginia Tech. The M.A. DAAS degree will be structured so that certain courses that emphasize the fundamentals of statistics, are required. Electives in specialized topics in statistics can then be chosen by the student. Thus, the degree will offer sufficient depth in the fundamentals of contemporary applied statistical methods and give students an understanding of how these methods are applied in different fields.

It is anticipated that students seeking admission to the M.A. DAAS degree are those wishing to expand their statistical knowledge beyond the material presented in graduate service courses, tackling more specialized topics, whether they are taught statistical methodology by the Department of Statistics or by other programs/departments on campus. The Statistics Department is fully prepared to take on the qualified students who seek the M.A. DAAS degree alone or seek an M.S. degree and/or Ph.D. in another discipline, and desire to complement their

training with the M.A. DAAS degree. The applied statistics emphasis of the M.A. DAAS will empower students to perform more statistically sophisticated research, improving the quality of their theses/dissertations, and leading to papers published in higher level journals than would be possible without such courses.

### **Curriculum summary**

The proposal offers a curriculum featuring a broad variety of applied statistical tools for non-statistics graduate students, forgoing the traditional emphasis on statistical theory steeped in mathematics. The courses in the proposed curriculum are currently offered by the Department of Statistics and by other departments at Virginia Tech (no new courses are needed). The M.A. DAAS degree will be structured so that certain courses, that emphasize the fundamentals of statistics, are required (see core below). A student can choose electives in specialized topics in statistics with their particular research interests in mind. Thus, the degree will offer sufficient depth in the fundamentals of contemporary statistical methods while providing flexibility that allows students to build degree programs suitable for their needs.

The program requires 33 credit hours of coursework (21 hours from the core and 12 hours of electives). The core requirements will be based on courses from four topic areas (see table below): Data Analysis, Design of Experiments or Study Design, Regression Analysis, and Statistical Theory, and also a professional development course in consulting.

Table 1. Core courses for the DAAS degree (21 credits)

<b>Topic Area</b>	<b>Staffing</b>	<b>Course</b>
Statistics in Research I and II (Data Analysis)	Statistics	STAT 5615/16 (6 credits)
Experimental Design: Concepts and Application	Statistics	STAT 5204G (3 credits)
Advanced Methods of Regression Analysis	Statistics	STAT 5214G (3 credits)
Theoretical Statistics	Statistics	STAT 5105G (3 credits)
Effective Communication in Statistical Consulting	Statistics	STAT 5024 (3 credits)
Project and Report	Statistics	STAT 5904 (3 credits)

In addition to the core, 12 credit hours must be completed from the following list of electives, with approval from the individual student's guidance committee:

Table 2. Restricted Elective courses for the DAAS degree (12 credits)

Department	Approved electives
Statistics	STAT 5106G, 5514G, 5504G, 5524G, 5474, 5664
Agricultural and Applied Economics, Economics	AAEC/ECON 5125, 5126, 5946, 6554
Educational Research & Evaluation	EDRE 5504, 5644, 6654, 6664, 6794, 6634, 6605, 6606, 6694
Fisheries & Wildlife	FIW 5514, 5214, 6114, 6514
Forest Resources & Environmental Cons.	FOR 5494, 5224
Geography	GEOG 5034, 5314
Human Development	HD 6514, 6524
Psychology	PSYC 5134, 5315, 5316, 6014
Public Administration and Public Affairs	PAPA 5214, 6514, 6524
Political Science	PSCI 5115, 5116, 5124
Sociology	SOC 5204, 5214, 6204

To complete the requirements for the M.A. in DAAS, the student must submit and successfully pass a final project and report (STAT 5904). The project, possibly related to the student's research, will illustrate an M.A. level command of statistical techniques. The topic for the project will be determined by the student's DAAS committee and evaluated by this committee on a pass/fail basis. The student will present the completed project to the committee in both written and oral format. A majority vote by the committee members will determine the result. Should the student not pass the final project and report, they will be required to take the exam a second time, although not in the same semester. The student may only take the exam twice. Failing the project and report a second time results in dismissal from the program.

The DAAS project should be presented and evaluated in the semester in which the student plans on receiving the M.A. degree. Completion of the 33 credits in the student's Plan of Study and the passing of the final project and report would complete the DAAS M.A. degree requirements

### **Relevance to university mission and strategic planning**

One of the main goals of the university is the training of students to be quantitatively adept and ready to meet the needs of industry, government and academics in an era of unprecedented data abundance and previously unimagined data sources. This is expressed in the current strategic plan, *A Plan for a New Horizon*:

“Our goals are to ensure competency in data analysis and computational methods as a component of general education for all students and to develop an appropriate infrastructure for e-learning and high-performance computing.”

The M.A. in DAAS aligns with the university's mission by training students in the quantitatively-based techniques of knowledge discovery, and will accomplish this with a constant eye on the real problems of science and society. This academic focus aligns with Virginia Tech's mission: the discovery and dissemination of new knowledge, through teaching and learning, research and discovery, and outreach and engagement. Knowledge discovery is intimately connected with the university's commitment to create, convey, and apply knowledge to expand personal growth and

opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

With regard to graduate education, the strategic plan indicates a focus on graduate education that is quantitative and the university will increase enrollment in quantitatively oriented programs. One of the institution's principal strategies (Virginia Tech, 2012, page 11) focuses on the goal to:

“Increase graduate enrollment toward a target of an additional 1,000 students, mostly at the doctoral level in science, technology, engineering, mathematics, and health sciences (STEM-H), broadly defined to include associated subject areas, such as STEM related entrepreneurship, science and technology policy, and ethics.”

The M.A. in DAAS is timely addition to the curriculum as it advances the university's strategic objective to increase the number of graduate students in STEM-H areas. The M.A. DAAS will offer students more opportunities to enroll in quantitative courses, especially outside of their home department, and will create an opportunity for a quantitative degree in support of their research. By focusing on analysis and interpretation of data rather than the mathematics underlying the methods, the program will better prepare students for the design of research studies, analysis of data collected in these studies, and proper interpretation of results.

### **Justification for the proposed program**

The proposed M.A. DAAS degree program is a response to well-documented trends in science: collecting, processing, and analyzing large amounts of information and cross-disciplinary work. These trends have led to a shortage in and a need for master's level graduates with training in applied statistics and data analysts. The M.A. DAAS provides education and training that will address this need and lead its graduates to excellent job opportunities. Our logic is based on the following two arguments.

#### *1. There is an increased demand for applied statisticians-*

According to Hillary Clinton, “Data not only measures progress, it inspires it.” Given that data are the raw material of knowledge, the ability of institutions of higher education to produce master's level graduates with the requisite skills to gather, examine, and interpret data in meaningful ways is crucial to advances in almost every domain of life. “We're rapidly entering a world where everything can be monitored and measured,” said Erik Brynjolfsson, an economist and director of the [Massachusetts Institute of Technology](http://www.massachusettsinstituteoftechnology.edu)'s Center for Digital Business. “But the big problem is going to be the ability of humans to use, analyze and make sense of the data.” ([http://www.nytimes.com/2009/08/06/technology/06stats.html?\\_r=0](http://www.nytimes.com/2009/08/06/technology/06stats.html?_r=0)).

A number of articles in scientific and popular media have noted the increase in demand for statisticians (for example, Kollipara, 2014). The demand is often attributed to the growth of the internet. A March 2013 Wall Street Journal article quotes the chief economist of Google, Hal Varian, (<http://blogs.wsj.com/numbers/the-upbeat-stats-on-statistics-1216/>). “Until 2003, Google hadn't hired a statistician. Now it has dozens,” Varian said, “working on quantitative projects throughout the company in improving the company's namesake search engine, helps its advertisers advertise better, and studying customer behavior.” It is clear that the growth of the internet and connections with mobile devices has generated large amounts of data.

In addition to the internet, a tremendous amount of data result from other sources such as sensors. For example, data on gene sequencing information for cancer research, and sensor and location data to optimize the handling of food shipments used to be expensive to collect and is now

inexpensive to collect, resulting in an abundance of data to analyze. This over-abundance of data opens the door for opportunities in the physical and social sciences that did not exist before. Statistics has become the *lingua franca* of the scientific community. ([http://www.nytimes.com/2009/08/06/technology/06stats.html?\\_r=0](http://www.nytimes.com/2009/08/06/technology/06stats.html?_r=0)).

The demand for data analysis results, in the widespread use of statistical analysis to make informed decisions in business, healthcare, environment, and other science policy arenas. Statisticians are needed in the pharmaceutical industry, actuarial, and other areas ([http://sciencecareers.sciencemag.org/career\\_magazine/previous\\_issues/articles/2014\\_03\\_04/cared.it.a1400058](http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2014_03_04/cared.it.a1400058) ). As the U.S. population ages, pharmaceutical companies are developing new treatments, medical devices and medical technologies. Biostatisticians (i.e. applied statisticians who focus on medical studies) have an important role in the conduct of the clinical trials necessary for companies to obtain approval for their products from the Food and Drug Administration (<https://collegegrad.com/careers/statisticians> ). Government agencies are expected to employ additional statisticians to improve the quality of the data available for policy analysis, census data collection and analysis, and for healthcare purposes. The occupation will see growth in research and development in the physical, engineering, and life sciences. Here the role of the statistician is to design tests, evaluate quality of products, and provide computational support. (<https://collegegrad.com/careers/statisticians>).

In financial services, “there has been serious demand for people well trained in data analysis and statistics, and it has been increasing” (Kahn, WSJ, 2013 article). One reason Kahn cites for expecting continued growth is “how new statistics is. It’s still just penetrating into civilizations. It’s still in its adolescence. There are dozens — hundreds — of areas in civilization where the understanding of statistics is going to have a transformative influence.” (<http://business.time.com/2011/11/21/nine-jobs-of-the-near-future/slide/26029-2/>)

## 2. *There is a need for master’s level graduate training in applied statistics*

The rise in available “big” data has led to important advances. In addition, expectations are high for the use and analysis of large data sets. Graduate training in applied statistics is needed to respond to these increased expectations. Along with the opportunities, come potential problems. (<http://bits.blogs.nytimes.com/2014/03/28/google-flu-trends-the-limits-of-big-data/>). Cheerleaders for big data have made a number of claims about the value of automatic analysis of data. In Wired magazine ([http://archive.wired.com/science/discoveries/magazine/16-07/pb\\_theory](http://archive.wired.com/science/discoveries/magazine/16-07/pb_theory)), Chris Anderson (2008), claims that the scientific method is no longer required; that if a sufficient amount of data are collected valid results will be clearly observed. “Google's founding philosophy is that we don't know why this page is better than that one: If the statistics of incoming links say it is, that's good enough. No semantic or causal analysis is required.” Anderson is also quoted as saying “with enough data, the numbers speak for themselves”.

A different and less optimistic conclusion is being reached by scholars and practitioners of science, statistics, and computer science. As noted by machine-learning guru Michael Jordan of Berkeley, “the overeager adoption of big data is likely to result in catastrophes of analysis comparable to a national epidemic of collapsing bridges.” (<http://spectrum.ieee.org/robotics/artificial-intelligence/machinelearning-maestro-michael-jordan-on-the-delusions-of-big-data-and-other-huge-engineering-efforts>).

Jeff Leek, a John Hopkins applied statistician, notes that it is not just data from the internet that can have erroneous analyses. He provides a number of examples of fundamental analytical errors in genomic science and economics. Leek states,

“a team of scientists led by Anil Potti created an algorithm for predicting the response to chemotherapy. This solution was widely praised in both the scientific and popular press. Unfortunately the researchers did not correctly account for all the sources of variation in the data set and had misapplied statistical methods and ignored major data integrity problems. The lead author and the editors who handled this paper didn't have the necessary statistical expertise, which led to major consequences and cancelled clinical trials.”

(<http://simplystatistics.org/2014/05/07/why-big-data-is-in-trouble-they-forgot-about-applied-statistics/>)

Another example of a flawed study is that of economists Reinhart and Rogoff (Cassiday 2013). They published a paper that claimed that GDP growth was slowed by high governmental debt. The paper reached considerable prominence and was cited by Paul Ryan as part of his “Path to Prosperity”. Later it was discovered that, in addition to other problems, there was an error in an Excel spreadsheet the economists had used to perform the analysis ([http://en.wikipedia.org/wiki/Growth\\_in\\_a\\_Time\\_of\\_Debt](http://en.wikipedia.org/wiki/Growth_in_a_Time_of_Debt)). As noted by Leek, “the primary failing was a lack of sensitivity analysis to data analytic assumptions that any well-trained applied statisticians would have performed.” The New York Times article by Gary Marcus and Ernest Davis (2014) described several addition problems with expectations concerning big data and the analysis of internet data.

As highlighted by Leek’s blog title: they forgot about **applied** statistics.

Many of the difficulties with big data have been recognized for a number of years by applied statisticians and identification of these difficulties argues for better and advanced training in statistics. The challenges of analysis of big data are explored in courses in applied statistics as well as in quantitative courses in other fields where case studies are used to support learning (for example, Tabachnick and Fidell, 2013, is a popular text used in statistics courses in psychology). In fact, many of the same issues were discussed in the popular book (Huff, 1954) “How to Lie with Statistics” that was published in 1954! As described by Hahn and Doganaksoy (2012),

“Applied statisticians bear primary responsibility for everything from helping ensure the right data are collected to analyzing the data (or directing such analyses) and reporting the findings. They interact closely with other technical staff and management and, ideally, are integral members of the project team.”

These examples illustrate the need for the M.A. in Data Analysis and Applied Statistics. In particular, the M.A. DAAS will educate and train students in the essentials of data preparation, cleaning, analysis, and interpretation. We need a program that provides a cross-disciplinary platform for education and knowledge, not just about the language of statistics, but also that of other areas of the physical and social sciences. An academic degree program, provides the rigor and experience required for well-educated and trained applied statisticians in a variety of fields. A certificate program, in which several courses are bundled, is not sufficient to address the in-depth needs of Virginia Tech’s students. A recent blog post outlines considerations for master’s programs in statistics: “**Learn a cognate area.** The greatest weakness I see in many master’s and Ph.D. graduates in statistics, both in industry and in academia, is that they often have very little subject-matter knowledge.” <http://stats.stackexchange.com/questions/25713/things-to-consider-about-masters-programs-in-statistics>. Such advice is also echoed in a talk and publication by Gerald Hahn (2000) a prominent industrial statistician (see also Hahn and Doganaksoy, 2011, 2012) as well as by others (Stern et al, 2013). The Department of Statistics provides the requisite rigorous experience through quantitative application courses from the natural and social sciences.

Finally, a Ph.D. in statistics is worthwhile in academics and research areas, and yet, is not always necessary. The Ph.D. is designed for theoreticians. The master's degree will open many doors, especially when statistical education and training is linked to application in the social and physical sciences. Our focus on application, rather than theory, will be advantageous for the analysis of data and also the communication of results. The M.A. DAAS will produce a "statistical scientist" rather than a theoretical statistician. The degree's linkage to courses in other departments will help students learn multiple disciplinary vocabularies and create extra opportunities. The M.A. DAAS will provide solid statistical training that will help a student get a *position* and a *promotion*.

### **Student Demand**

Students (n=200) in the fall 2014 semester course, STAT 5615, Statistics in Research, were asked if they would be interested in pursuing the M.A. in DAAS, if it were currently available to them. Of the 111 students who responded to the question, 42 (38%) were very interested and 22 (20%) were moderately interested, indicating considerable interest in the degree and a potential for a considerable class of students for the program. The majority of the students surveyed were in their first year of graduate study (survey questions and responses are reproduced in Appendix C).

An additional indicator of interest in the program is the increase in graduate teaching of statistics. A measure of this interest is the fall enrollments for three classes that form the core of the program. The table below provides final enrollments in the three classes.

Table 3. Graduate enrollment in core statistics classes in fall semesters (last 5 years)

Course	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
STAT 5615	198	157	200	206	230
STAT 5204G	11	27	16	25	29
STAT 5214G	12	14	19	20	20

The table indicates a steady and possibly increasing enrollment in these classes. Prior to 2010, the Department of Statistics only taught the STAT 5204G and STAT 5214G once per year. Additional sections of these classes were added starting in 2011 to accommodate the increased interest in the course material at the undergraduate and graduate levels. The Department of Statistics intends to maintain a minimum enrollment of 20 students by the target year of the program (2019-2020), graduating nine students per year.

### **Employment Demand**

All indications are that strong training in applied statistics will benefit our graduate students in obtaining jobs. Employment demand was evaluated through web-based job searches, the Bureau of Labor Statistics (BLS), and the Virginia Employment Commission (VEC) and is summarized in Tables 4 and 5. The tables provide information about two highly relevant labor categories: 1) statisticians and, 2) survey researchers, both of which require master degrees. Although no categories exist for applied statisticians, the growth in the need for statisticians is expected to result from more widespread use of statistical analysis to make informed business, healthcare, and policy decisions, clearly all areas related to training in applied statistics. It is also noted that technological advances are expected to increase the demand for statisticians, especially associated with "big data". As data processing continues to become less expensive and more efficient, employers may hire statisticians to take advantage of the new information available.

Likewise, careers in survey research will grow as organizations increase their reliance on data and information acquired through research. Although growth in the need for survey researchers is not as robust as statisticians, projected growth rate of 18% is faster than the national average for all occupations.

Table 4. Degree-related employment projections 2012-2022 (U.S. Bureau of Labor Statistics).

<b>Occupational Title</b>	<b>SOC Code</b>	<b>2012 Employment</b>	<b>2022 Employment</b>	<b>Numeric Change 2012-2022</b>	<b>Percent change</b>
Statisticians ( <a href="http://www.bls.gov/ooh/math/statisticians.htm">http://www.bls.gov/ooh/math/statisticians.htm</a> )	15-2041	27,600	34,900	7400	27%
Survey Researchers ( <a href="http://www.bls.gov/ooh/life-physical-and-social-science/survey-researchers.htm#tab-6">http://www.bls.gov/ooh/life-physical-and-social-science/survey-researchers.htm#tab-6</a> )	19-3022	18,000	21,200	3,200	18%

Table 5. Degree-related employment projections 2012-2022 (Virginia Employment Commission)

<b>Occupational Title</b>	<b>SOC Code</b>	<b>Employment 2012</b>	<b>Projected Employment 2022</b>	<b>Total Change</b>	<b>Percent Change</b>	<b>Annual Percent Change</b>
Statisticians	15-2041	638	836	198	31.03%%	2.74%
Survey Researchers	19-3022	354	389	35	.95%	9.89%

In addition to the job outlooks listed above, we anticipate that students who couple their graduate training in science, social science, humanities, and engineering fields with the M.A. DAAS degree will advantage themselves for jobs as biologists, psychologists, sociologists, fisheries scientists and others where strong quantitative training is highly desired. As indicated by the web page [http://educationportal.com/articles/Bioinformatics\\_Analyst\\_Job\\_Duties\\_Salary\\_and\\_Outlook.html](http://educationportal.com/articles/Bioinformatics_Analyst_Job_Duties_Salary_and_Outlook.html), bioinformatics scientists and bioinformatics analysts with quantitative background can find career opportunities within the federal government, postsecondary schools, scientific research and development, pharmaceutical companies and state government. The BLS stated that there were 91,300 biological scientists in 2008. Of these biological scientists, approximately 40% were employed in some area of government in 2008. The BLS projected that biological scientists will see employment growth of 21% from 2008-2018, which is much faster than the average. The growth in the field is expected to stem from research and development in biotechnology, specifically in the areas of gene identification and sequencing, stated the BLS. Regarding those with master's degrees in statistics, the BLS reports those with a strong background in an allied field such as biology, finance, computer science, or engineering should have the best prospects of obtaining a job related to their field of study. The growth in statistical positions suggests that the stand-alone program will also be desirable. Currently the job market is somewhat limited for students with a B.S. degree in statistics. By adding a master's degree in a relatively short time (possible 3 semesters), the department is providing a relatively cost effective way to obtain a better job. Clearly this has advantages for the student from Virginia who wants to move to a better paying

job without incurring a large amount of debt.

A variety of recent job advertisements are given in Appendix B.

### **Resource Needs/Savings**

The faculty members associated with the M.A. DAAS degree program, span numerous Departments and agree that Virginia Tech is uniquely positioned to offer this degree program with primary support from faculty currently in place in the Department of Statistics. However, the program will need to employ two professors of practice to provide specific statistical expertise by the target year of operation (2019-2020). The Department of Statistics will also hire two graduate teaching assistants by the target year of operation to assist with courses in the core of the degree.

Table 6. Resource requirements for proposed M.A. DAAS degree

<b>RESOURCE</b>	<b>QUANTITY</b>	<b>ESTIMATED COSTS (NA if not applicable)</b>
<b>Faculty</b>	2 (Professors of Practice)	\$85,150.00
<b>Administrative Staff</b>	NA	NA
<b>Graduate Teaching/Research Assistants</b>	2	\$59,960
<b>Space</b>	NA	NA
<b>Library</b>	NA	NA
<b>Equipment</b>	NA	NA
<b>Other</b>	NA	NA

Appendix A  
Support letters from departments

**VirginiaTech**

College of Architecture and Urban Studies

Center for Public Administration and Policy  
104 Draper Road (0520)  
Blacksburg, Virginia 24061  
540/231-5133 Fax: 540/231-7067  
www.cpap.vt.edu

December 5, 2013

Eric P. Smith  
Professor and Chair  
Statistics Department  
Virginia Tech  
Blacksburg, VA 24061

Dear Dr. Smith:

Please accept this letter in support of the proposed program for a Master of Arts degree in Data Analysis and Applied Statistics to be housed in the Department of Statistics, College of Science at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Center for Public Administration and Policy, and we fully support it.

The DAAS degree will be an attractive option for our graduate students, particularly those pursuing a Ph.D. in Public Administration and Public Affairs who wish to gain core competency in Applied Statistics and Data Analysis. The degree program in DAAS is designed to be accessible to graduate students in applied sciences like public administration, while providing essential coursework in statistical theory, applied statistics and data analysis. The M.A. degree in DAAS, together with a Ph.D. in Public Administration and Public Affairs for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits, and set them on solid footing to succeed as researchers, analysts, or consultants in public administration and public policy and related fields.

Several existing courses taught in PAPA are included in the list of electives for the degree, and no new resources will be required to accommodate additional students in these courses. These courses are:

PAPA 6514: Public Administration and Policy Inquiry (3 cr)

PAPA 6524: Advanced Quantitative Methods in Public Administration and Policy (3 cr)

The CPAP faculty endorses the new degree and we look forward to seeing some of our students begin to pursue the degree in the near future.

Sincerely,

A handwritten signature in cursive that reads "Brian J. Cook".

Brian J. Cook  
Professor and Chair

Invent the Future

**VirginiaTech**College of Liberal Arts  
and Human SciencesEducational Leadership and Policy Studies  
219 East Eggleston Hall (0302)  
Blacksburg, Virginia 24061  
(540) 231-5642 Fax (540) 231-9075  
<http://www.soe.vt.edu/elps/index.html>

December 2, 2013

## Letter of Support for Master of Arts in Data Analysis and Applied Statistics

Dr. Eric Smith, Department Head, Statistics Department:

As Program Leader, I am writing to communicate the support of the faculty in the Educational Leadership and Evaluation (EDRE) Program for the Masters of Arts in Data Analysis and Applied Statistics. As an applied degree, the goals and fundamental assumptions of this degree are consistent with the mission of the EDRE Program. We support the inclusion of quantitative EDRE courses in the list of electives for this degree.

I anticipate that two to three of the EDRE doctoral students in the statistics track will opt to pursue the degree each year. Because many students in a variety of degrees take our introductory quantitative courses (6605-6606) and these courses appear in the list of acceptable electives, I expect that students in other degree programs are likely to opt to use EDRE courses as electives for this master's degree. We support the opportunity for additional enrollments in our specialized upper-level methods courses and have no expectation at present of the need for additional resources as a consequence.

Professor and Program Leader, EDRE Program

Invent the Future

**VirginiaTech**

College of Agriculture and Life Sciences

Department of Agricultural and Applied Economics (0401)  
208 Hutcheson Hall, Virginia Tech  
250 Drillfield Drive  
Blacksburg, Virginia 24061  
540.231-6301 Fax: 540.231-7417  
www.agecon.vt.edu

November 11, 2013

Dear Dr. McNamee,

Please accept this letter in support of the proposed program for a Master of Arts degree in Data Analysis and Applied Statistics to be housed in the Department of Statistics, College of Science at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Department of Agricultural and Applied Economics, and we fully support it.

The DAAS degree will be an attractive option for our graduate students, particularly those pursuing a Ph.D. in Economics who wish to gain core competency in Data Analysis and Applied Statistics. The degree program in DAAS is designed to be accessible to graduate students in applied sciences like applied economics, while providing essential coursework in statistical theory, applied statistics and data analysis. The M.A. degree in DAAS, together with a Ph.D. in Economics for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits, and set them on solid footing to succeed as scientists, analysts, or consultants in applied economics and related fields.

Several existing courses taught in Agricultural and Applied Economics are included in the list of electives for the degree, and no new resources will be required to accommodate additional students in these courses. These include

AAEC/ECON 5125: Empirical Research Methods in Economics I (3 cr)  
AAEC/ECON 5126: Empirical Research Methods in Economics II (3 cr)  
AAEC/ECON 5946: Econometric Theory and Practice (3 cr)  
AAEC/ECON 6554: Panel Data Econometrics (3 cr)

Our faculty has embraced the proposed DAAS degree program as a way to increase cross-departmental teaching and learning. The Master of Arts degree in DAAS will provide measurable benefits for graduate students in our department. We enthusiastically endorse the degree proposal and look forward to participating fully in its implementation.

Sincerely,

A handwritten signature in cursive that reads "Steve Blank".

Steven C. Blank, Ph.D.  
Department Head and  
Professor

**VirginiaTech**College of Natural Resources  
and EnvironmentSteve L. McMullin, Interim Department Head  
Fish and Wildlife Conservation  
108 Cheatham Hall (0321)  
Blacksburg, Virginia 24061  
540/231-8847 Fax: 540/231-7580  
<http://www.fishwild.vt.edu/faculty/mcmullin.htm>

December 6, 2013

Eric P. Smith, Professor and Head  
Department of Statistics

Dear Dr. Smith –

I write to express the support of the Department of Fish and Wildlife Conservation for the proposed Master's degree program in Data Analysis and Applied Statistics (DAAS) put forward by the Department of Statistics. In particular, I support the active participation of my department's faculty in activities implementing the proposed degree program. The proposal leverages the talents and energies of our faculty and others, achieving a cross-disciplinary synergy not otherwise available within the respective departments.

The proposed DAAS degree will be an attractive option for a subset of our graduate students in fish and wildlife conservation, particularly to doctoral candidates seeking to achieve and demonstrate mastery of quantitative analyses. Mastery of a wide range of quantitative skills is increasingly valued in our field, especially as we develop more remotely-sensed data and longer time-series, and also as we use information theoretic approaches, simulation modeling, and Bayesian analyses more extensively. Against this background, I note that the proposed degree program is designed to be accessible to our graduate students, providing essential coursework in statistical theory, applied statistics and data analysis. I predict that students holding a Ph.D. in Fish and Wildlife Conservation and an M.A. in Data Analysis and Applied Statistics and will prove competitive for a variety of professional positions in academia, the government sector, and in consulting.

Several courses already offered by the Department of Fish and Wildlife Conservation are appropriately included in the list of electives for the proposed degree. These courses include FiW 5214, FiW 5514, FiW 5984, FiW 6114, FiW 6514, and FiW 6984. No new resources will be required to accommodate additional students in these courses. We anticipate and will value increased interaction among faculty and students across departments, resulting in more formal and informal collaboration among our respective programs.

The Department of Fish and Wildlife Conservation fully supports the proposal for a Master's degree in Data Analysis and Applied Statistics and looks forward to participating in its implementation.

Sincerely,

Steve L. McMullin  
Interim Department Head  
Fish and Wildlife Conservation

Invent the Future

E-mail: ntideman@vt.edu  
Personal line: 540/231-7592  
November 12, 2013

Prof. Eric Smith, Head  
Department of Statistics

Dear Prof. Smith:

This letter is in support of the proposed program for a Master of Arts degree in Data Analysis and Applied Statistics, to be housed in the Department of Statistics, College of Science at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Department of Economics, and we fully support it.

The DAAS degree will be an attractive option for our graduate students, particularly those pursuing a Ph.D. in Economics who wish to gain core competency in Applied Statistics and Data Analysis. The degree program in DAAS is designed to be accessible to graduate students in applied sciences like Economics, while providing essential course work in statistical theory, applied statistics and data analysis. The M.A. degree in DAAS, together with a Ph.D. in Economics for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits and set them on solid footing to succeed as scientists, analysts, or consultants in Economics and related fields.

Several existing courses taught in Economics are included in the list of electives for the degree, and no new resources will be required to accommodate additional students in these courses. These are:

AAEC/ECON 5125: Empirical Research Methods in Economics I (3 cr)  
AAEC/ECON 5126: Empirical Research Methods in Economics II (3 cr)  
AAEC/ECON 5945/5946: Econometric Theory and Practice (3 cr)  
AAEC/ECON 6554: Panel Data Econometrics (3 cr)  
ECON 4304 Introduction to Econometric Methods (3 cr)

I should note that AAEC/ECON 5125/5126 and 5946 are already required (Core) courses in the joint AAEC/ECON Ph.D. program and that AAEC/ECON 5945 (Time Series Analysis) and AAEC/ECON 6554 (Panel Data Analysis) are already offered as optional Field Courses in this joint Ph.D. program.

ECON 4304 is a relatively advanced undergraduate econometrics course. Although the course eschews linear algebra altogether, it is possible that some version of it could be cross-listed as 5304 at some future time. Although not part of the degree program, ECON 4984 "Advanced Econometric Methods" is being offered as a Special Studies course for the first time in Spring Term 2014; it is designed as a direct follow-on to ECON 4304, which is a pre-requisite for it. In future years we plan to seek formal approval for this course (which would involve a new course

number) and to propose a more advanced version of this sequence, to be numbered ECON 5304/5305; this sequence would fit even more comfortably in the DAAS curriculum.

Sincerely,

A handwritten signature in black ink that reads "T. Nicolas Tideman". The signature is written in a cursive style with a horizontal line underneath it.

T. Nicolas Tideman, Head  
Department of Economics

# {I!VirginiaTech

College of  
Natural Resources and Environment

Department of  
Forest Resources and Environmental Conservation  
313 Cheatham Hall (0324)  
310 West Campus Drive  
Blacksburg, Virginia 24061 U.S.A.  
540-231-5483 Fax: 540-231-3698  
Email: frec@vt.edu

November 11, 2013

To Whom It May Concern:

Please accept this letter in support of the proposed program for a Master of Arts in Data Analysis and Applied Statistics (DAAS) to be housed in the Department of Statistics, College of Science, at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Department of Forest Resources and Environmental Conservation (FREC), and we fully support it.

The DAAS M.A. will be an attractive option for FREC graduate students, particularly those pursuing a Ph.D. in Forestry who wish to gain core competency in Data Analysis and Applied Statistics. The degree program in DAAS is designed to be accessible to graduate students in applied sciences like Forestry, while providing essential coursework in statistical theory, applied statistics, and data analysis. The M.A. in DAAS, together with a Ph.D. in Forestry for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits and set them on solid footing to succeed as scientists, analysts, or consultants in forestry and related fields.

Several existing courses taught in FREC are included in the list of electives for the degree, and no new resources will be required to accommodate additional students in these courses. Our faculty has embraced the proposed DAAS M.A. program as a way to increase cross-departmental teaching and learning. We look forward to the interactions between students and faculty across disciplines and expect that new opportunities for synergies and collaboration will arise from this program.

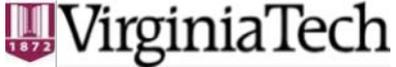
The Master of Arts in DAAS will provide measurable benefits for graduate students in the Department of Forest Resources and Environmental Conservation at Virginia Tech. We enthusiastically endorse the degree proposal and look forward to participating fully in its implementation.

Sincerely,



**Janaki**

Professor and Department Head



College of Natural Resources  
and Environment

Department of Geography  
115 Major Williams Hall (0115)  
Blacksburg, Virginia 24061  
540-231-7557 Fax: 540-231-2089  
email: geog@vt.edu  
www.geography.vt.edu

Friday, December 06, 2013

Eric P. Smith, Professor and Head  
Department of Statistics

Dear Dr. Smith –

I write to express the support of the Department of Geography for the proposed Master's degree program in Applied Statistics and Data Analysis (ASDA) put forward by the Department of Statistics. In particular, I support the active participation of my department's faculty in activities implementing the proposed degree program. Statistical coursework from our department deals with applications of statistics with spatial data, and is of great interest to many on campus, and a perfect fit for this new program. The analysis of Spatial Data course has been a huge success for us in teaching our students how to apply spatial techniques to their research data, and the Advanced Spatial Analysis course is, as of this spring, being adapted to include a great deal more spatial data application in ArcGIS. Clearly, Geography sees the value in applied statistics.

The proposed ASDA degree will be an attractive option for our more analytically inclined graduate students in the Geospatial and Environmental Analysis PhD. and for those interested in the geospatial science field in general. Mastery of a wide range of quantitative skills has long been a significant part of training in the geospatial sciences, and that trend is only accelerating. Many of our graduate students have found the mathematical aspects of statistical theory very difficult, yet are adept at interpreting results in applied situations. This degree will support their skills and interests perfectly. I am confident that those students who obtain the PhD. in Geospatial and Environmental Analysis following an M.A. in Applied Statistics and Data Analysis will prove competitive for a variety of professional positions in academia, the government sector, in the GIS industry and in consulting.

Two courses already offered by the Department of Geography are appropriately included in the list of electives for the proposed degree. No new resources will be required to accommodate additional students in these courses. We anticipate and will value increased interaction among faculty and students across departments, resulting in more formal and informal collaboration among our respective programs.

The Department of Geography fully supports the proposal for a Master's degree in Applied Statistics and Data Analysis and looks forward to participating in its implementation.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Laurence W. Carstensen Jr.' with a stylized flourish at the end.

Laurence W. Carstensen Jr.  
Professor and Head  
Department of Geography

*Invent the Future*



College of Science

Robert S. Stephens, PhD  
 Department of Psychology  
 A University Exemplary Department  
 109 Williams Hall (MC 0436)  
 890 Drillfield Drive  
 Blacksburg, Virginia 24061  
 540/231-6304 Fax: 540/231-3652  
 @

December 5, 2013

Eric Smith, Professor and Head  
 Department of Statistics  
 Virginia Tech

Dear Dr. Smith:

I write in support of the proposed program for a Master of Science degree in Data Analysis and Applied Statistics (DAAS) to be housed in the Department of Statistics, College of Science at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Department of Psychology, and we fully support it.

The DAAS degree will be an attractive option for a subset of doctoral graduate students in psychology who are increasingly taking additional statistics and methodology courses beyond those required and offered by our department. The degree program in DAAS is designed to be accessible to graduate students in applied sciences like psychology, while providing essential coursework in statistical theory, applied statistics and data analysis. The M.S. degree in DAAS, together with a Ph.D. in psychology for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits, and set them on solid footing to succeed as scientists, analysts, or consultants in psychology and related fields.

Existing courses taught in psychology are included in the list of electives for the degree. No new resources will be required to accommodate additional students in these courses. These include:

PSYC5134: Advanced Psychometric Theory (3 cr)  
 PSYC5315: Research Methods (3 cr)  
 PSYC5316: Research Methods (3 cr)  
 PSYC6014: Quantitative Topics in Industrial and Organizational Psychology (3 cr)

Our faculty embraces the proposed DAAS degree program as a way to increase cross-departmental teaching and learning. We look forward to the interactions between students and faculty across disciplines, and expect that new opportunities for synergies and collaboration will arise from this program. The Master of Science degree in DAAS will provide measurable benefits for graduate students in our department. We enthusiastically endorse the degree proposal and look forward to participating fully in its implementation.

Sincerely,

Robert S. Stephens, Ph.D.  
 Professor and Chair

Invent the Future

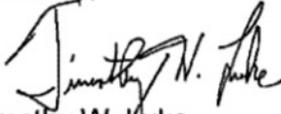
December 3, 2013

Eric P. Smith Professor  
and Chair Statistics  
Department Virginia  
Tech Blacksburg, VA  
24061

Dear Dr. Smith:

The Department of Political Science supports inclusion of PSCI (GIA) 5115: Research Methods (3 cr), PSCI (GIA) 5116: Research Methods II (3 cr) and PSCI 5124: Advanced Research Issues (3 cr) for inclusion in the proposed new Master of Arts degree in Data Analysis and Applied Statistics to be housed in the Department of Statistics, College of Science at Virginia Tech. Our department supports this proposal, and we do not foresee this action requiring new resources.

Sincerely,



Timothy W. Luke  
University Distinguished Professor  
Chair, Department of Political Science

From: Ryan, John  
Sent: Wednesday, November 13, 2013 9:16 AM  
To: Smith, Eric  
Subject: support for MS

Dear Dr. Smith

Please accept this letter in support of the proposed program for a Master of Arts degree in Data Analysis and Applied Statistics to be housed in the Department of Statistics, College of Science at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Department of Sociology and we fully support it.

The DAAS degree will be an attractive option for our graduate students, particularly those pursuing a Ph.D. in sociology who wish to gain core competency in Applied Statistics and Data Analysis. The degree program in DAAS is designed to be accessible to graduate students in applied sciences like sociology, while providing essential coursework in statistical theory, applied statistics and data analysis. The M.A. degree in DAAS, together with a Ph.D. in sociology for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits, and set them on solid footing to succeed as scientists, analysts, or consultants in sociology and related fields.

Several existing courses taught in our department are included in the list of electives for the degree, and no new resources will be required to accommodate additional students in these courses. These include

SOC 5204: Data Analysis (3 cr)  
SOC 5214: Research Methods (3 cr)  
SOC 6204: Survey Research Methods (3 cr)

Our faculty has embraced the proposed DAAS degree program as a way to increase cross-departmental teaching and learning. We look forward to the interactions between students and faculty across disciplines, and expect that new opportunities for synergies and collaboration will arise from this program.

The Master of Arts degree in DAAS will provide measurable benefits for graduate students in our department. We enthusiastically endorse the degree proposal and look forward to participating fully in its implementation.

Sincerely,

John Ryan

John Ryan  
Professor and Chair  
Department of Sociology  
Virginia Tech  
560 McBryde Hall – MC0137



# VirginiaTech

College of Liberal Arts  
and Human Sciences

Department of Human Development  
366 Wallace Hall (0416)  
295 W. Campus Drive  
Blacksburg, Virginia 24061  
540/231-4794 Fax: 540/231-7012  
www.humandevlopment.vt.edu

Professor Eric Smith, Department Head  
Department of Statistics  
Virginia Tech  
CAMPUS

December 3, 2013

Dear Professor Smith:

Please accept this letter in support of the proposed program for a Master of Arts degree in Data Analysis and Applied Statistics to be housed in the Department of Statistics, College of Science at Virginia Tech. The degree proposal has been developed in cooperation with faculty in the Department of Human Development, and we fully support it.

The DAAS degree will be an attractive option for our graduate students, particularly those pursuing a Ph.D. in Human Development who wish to gain core competency in Applied Statistics and Data Analysis. The degree program in DAAS is designed to be accessible to graduate students in applied social sciences, while providing essential coursework in statistical theory, applied statistics and data analysis. The M.A. degree in DAAS, together with a Ph.D. in Human Development for those who choose to pursue dual degrees, will provide our graduates with an immediate advantage in their career pursuits, and set them on solid footing to succeed as scientists, analysts, or consultants in Adult Development, Child Development, Family Studies, Marital and Family Therapy, and related fields.

Several existing courses taught in Human Development are included in the list of electives for the degree, and no new resources will be required to accommodate additional students in these courses. These include: HD 5514: Research Methods (3 cr); HD 6514: Advanced Research Methods (3 cr); and HD 6524: Current Topics in Advance Research Methods (3 cr; co-enroll with HD 6514).

Our faculty has embraced the proposed DAAS degree program as a way to increase cross-departmental teaching and learning. We look forward to the interactions between students and faculty across disciplines, and expect that new opportunities for synergies and collaboration will arise from this program. The Master of Arts degree in DAAS will provide measurable benefits for graduate students in our department. We enthusiastically endorse the degree proposal and look forward to participating fully in its implementation.

Sincerely yours,

Anisa M. Zvonkovic, Ph.D., Professor and Department Head, Human Development

Invent the Future

Appendix B  
Sample job advertisement

Statistical Analyst

Location: KBM Group - Harrison, NY  
Job Code: 4630  
# of openings: 1

Description  
Statistical Analyst  
Company Background

KBM Group, a fast paced, growing database marketing services company with offices located in Harrison, NY and Louisville, CO, has a great opportunity for a Statistical Analyst in our Harrison office. KBM Group is part of the WPP organization.

Position

The Statistical Analyst (the “Analyst”) is directly responsible but not limited to developing predictive models related to the co-op and other marketing databases. The analyst should become familiar with the utilization of transaction data, in addition to household level and Census level data. The individual is required to assist with the coordination of the planning, development and execution of the modeling effort and be responsible for its documentation.

Responsibilities

- Develop Regression/Tree based models to support the database marketing efforts of co-op members and clients.
- Provide analytical services to clients and I-Behavior staff on an ongoing basis.
- Participate in the development of protocols and systems for the processing of model development, scoring and deployment within the ‘rules’ of the co-op environment.
- Develop and execute quality assurance procedures related to all aspects of the duties pertaining to providing analytic services.
- Interact with Client Services and Programming staff, ensuring accuracy of modeling applications.

Requires

- Some experience as a data analyst/modeler, preferably dealing with large amounts of transaction data.
- Masters in Applied Mathematics, Statistics or Econometrics and/or five years work experience required.
- Experience with SAS or comparable statistical software required
- Excellent communication and presentation skills.
- Experience/knowledge with experimental test design for comparing campaign tests results and the ability to recommend sufficient universe sizes for testing purposes.

2/4/2015 Careers Center Statistician  
Location USVAAlexandria  
Experience (Years) 0  
Posted Date 1/16/2015 Category All Research and Analysis  
Close Date 2/13/2015

## Statistician

### Overview:

The Operational Evaluation Division (OED) has an immediate career opening for a Statistician to support the Department of Defense's (DoD) assessment of the operational effectiveness, suitability, survivability, and lethality of Major Defense Acquisition Programs. IDA takes great pride in the high caliber and timeliness of its analyses, which are produced in an atmosphere that encourages independent thinking and objective results. Work at IDA is conducted in a team environment and often involves a multidisciplinary approach.

### Responsibilities:

The Statistician, in collaboration with IDA colleagues, will support and advise mid and senior level civilian and military DoD officials regarding the operational and live fire test and evaluation of Major Defense Acquisition Programs. The Analyst will be required to evaluate survivability, lethality, and force protection for a variety of DoD programs including personal protective equipment, aircraft, land and expeditionary vehicles, and naval vessels. The position involves experimental design and statistical analysis focused on observed test results (including small sample sizes) evaluated in the context of scientifically based insights and supporting modeling and simulation activities. Close interaction with DoD officials responsible for the planning, development, and execution of tests is required. Strong scientific and technical skills, particularly in the areas of statistical and quantitative analyses, are required as well as the ability to speak and write clearly, think analytically, and work independently. Travel is required.

### Qualifications:

Candidates must have an advanced technical degree in Statistics, Industrial Systems Engineering, Applied Mathematics, or equivalent training (MS is required; PhD preferred).

Candidates must have demonstrated applied statistical skills; prefer candidates with expertise in design of experiments, small sample data analysis, uncertainty quantification, process control, computer experiments, quality assurance, or Bayesian methods.

Practical statistical experience in engineering design, operational testing, or survivability testing of military or similarly complex systems is desired for PhD candidates and is required for MS candidates. DoD test experience is a plus.

Candidates must have strong computational skills in current statistical analysis and simulation software.

Candidates are encouraged to submit a cover letter outlining how their skill set, experiences, and education align with the defined responsibilities. Upload as one document with resume.

Candidates selected will be subject to a security investigation and must meet eligibility requirements for access to classified information as required.

U.S. Citizenship is required.

IDA is an equal opportunity employer committed to providing a working environment that is free from discrimination on the basis of race, color, religion, sex (including pregnancy and gender identity), sexual orientation, national origin, age, disability, status as a protected veteran, marital status, genetic characteristic or any other legally protected condition or characteristic.

Location US-VA-Richmond Category Research and Development

## Statistician

More information about this job:

Options:

Overview:

Apply statistics and interact effectively with R&D scientists and engineers to understand variability in test method & study results and advise them in making statistically relevant conclusions.

Responsibilities:

- Understand statistical analysis methods that are to be applied to properly analyze data. Some statistical analysis/data modeling methods are to include
  - General Linear Models – including multiple comparisons,
  - Generalized Linear Models,
  - Partial Least Squares,
  - Principal Components Analysis,
  - Logistic Regression,
  - Random/Fixed (Mixed) Models, and
  - Neural Network Models.
- Will be technically proficient in Design of Experiment (DoE/RSM/EVOP) methods.
- Perform large/small sample statistical analysis, perform distribution free statistical analysis, and generate test plan sample sizes to identify significant differences in the study factor data.
- Understand process improvement methods such as Statistical Process Control, Multivariate Statistical Process Control, Six Sigma, and Lean Manufacturing.
- Will be self-motivated to learn new methods, to learn about the factors being analyzed, to keep up-to-date technically, and to apply new knowledge to the job.

Qualifications:

**EDUCATION & EXPERIENCE MINIMUMS:**

- Minimum 3 years of job related work experience
- Masters Degree in Statistics or related discipline that has a strong emphasis on data analysis
- ASQ Certifications (CRE, CQE, SSBB) is a plus
- Automotive, chemistry/chemical, or petroleum additive related academic background or work experience is a plus

**SKILLS/ABILITIES:**

- Must have excellent verbal and written communication skills.
- Can independently apply logic and reasoning to problems, develop and evaluate options, and implement solutions.
- Has experience with computer software packages such as:
  - SAS, Minitab, JMP, Statistica, ProMV/ProBatch, SIMCA , Microsoft Excel, R, etc.
  - Programming languages such as VB or C
  - Database programs (Access, SQL, etc.)
  - Microsoft Office applications

All qualified applicants will receive consideration for employment without regard to the individual's race, color, sex, national origin, religion, age, disability, genetic information, status as a military veteran or any other characteristic protected by applicable law.

UNIVERSITY OF OREGON  
HUMAN RESOURCES

## Research Informatics Analyst: Data Scientist

### College of Arts and Sciences

Posting: 14485

Location: Eugene

Closes: Open Until Filled

#### Job Context:

The University of Oregon College of Arts and Sciences seeks to form a scientific software consulting team to support the UO research community in the use of high-performance computing systems. We have already hired experts in high-performance scientific computing, parallel performance, and visualization, and wish to hire a fourth member of that group. In particular, we are seeking someone with expertise in informatics and numerical analysis to work on advancing data-intensive research on campus. The successful candidate will help transform the process of research and discovery on campus by collaborating with domain science researchers on data science challenges.

CASIT Research Support is a team of interdisciplinary research support staff committed to advancing the U of O's research mission. Our strategy takes a collaborative approach involving joint programs with methods researchers (in computer science, statistics, and applied mathematics) and domain scientists (in the life, physical, and social sciences). The successful candidate will join our team and engage in research that will advance both domain and data science methodologies, involving new platforms, new algorithms, new methods, and new applications. The Research Informatics Analyst will provide the following services:

- Work with the research support team to target the analytics research and educational needs of the university
- Develop new analytical methods, tools, and software development as needed
- Meet with faculty and researchers to discuss big data problems, identify collaboration opportunities, and recommend solutions
- Provide education, guidance, and training to faculty and graduate students on basic tools and techniques
- Prepare and deliver presentations and publications on significant results, both internally and externally
- Manage, mentor and train junior methodology staff interns
- Perform other related duties as required or assigned

Core competencies and skill sets that are required for this position as a Research Informatics Analyst include the following:

1. Exceptional math and analysis skills
  - a. familiarity analyzing scientific data
  - b. demonstrated proficiency in critical thinking
  - c. knowledge of statistics
  - d. attention to detail
2. Superior coding skills
  - a. must be comfortable in a UNIX environment
  - b. proficiency with one or more programming languages (C/C++, Java, Python, Fortran)
  - c. ability to work with packages such as R, Matlab, Mathematica
3. Strong organizational and time management skills
4. Excellent customer service skills and professionalism
5. Ability to work both independently and in a collaborative problem solving environment

The ideal candidate will combine computational programming skills with an understanding of data analysis techniques to develop customized advanced analytical tools and solutions for big data problems. As a point of contact for data science problems across campus, the position requires a candidate with excellent communication skills (both verbal and written) to facilitate collaboration with researchers across disciplines, as well as coordination within the team and with IT and administrative professionals. In addition, the candidate must be able to succeed under minimal supervision, be familiar with the research and scientific workflows, exhibit excellent organizational skills and have a strong interest in learning. The University of Oregon is committed to creating a more inclusive and diverse institution and seeks candidates with demonstrated potential to contribute positively to its diverse community.

#### Qualifications & Requirements:

##### Minimum Qualifications:

- M.S., or Ph.D. in applied math, statistics, physics, computational biology, computer science or related field
- Exceptional math and analysis skills
- familiarity analyzing scientific data
- demonstrated proficiency in critical thinking
- knowledge of statistics
- attention to detail
- Superior coding skills
- must be comfortable in a UNIX environment
- proficiency with one or more programming languages (C/C++, Java, Python, Fortran)
- ability to work with packages such as R, Matlab, Mathematica
- Strong organizational and time management skills
- Solid interpersonal skills and the capacity to work effectively on diverse teams
- Ability to work both independently and in a collaborative problem solving environment
- Demonstrated success in data analysis related projects (publications, software, etc)

## Desired Qualifications:

- Domain expertise in biology, economics, psychology, physics, geology, etc.
- Knowledge and experience with data management, analysis and data format standards
- Background in information theory, machine learning, and/or high performance computing
- Experience with open-source software

Background Check Statement: Criminal background check required for the position

Employment Beginning: January 5, 2015

Appointment Percentage: 12-month; full-time; 100%

Salary: Competitive salary based on qualifications and experience

## Benefits:

In addition to the above mentioned salary, this position has an excellent benefits package including health, dental, insurance, retirement plan, employee tuition rates (transferable to immediate family members under specific circumstances) and excellent vacation and sick leave provisions.

## Application Procedures:

To ensure consideration, please submit application materials by November 19, 2014. This position will remain open until filled.

Complete applications must include the following:

- A letter of application addressing your qualifications and interest in the position
- A current resume/CV
- The names, addresses, phone numbers and email addresses of three references that can speak to your qualifications for this position

In addition, please provide answers to the following questions:

1. One aspect of this position is to act as a research advisor, guiding scientists towards best practices, etc. A possible scenario would be that a scientist comes to you and says, "we've just developed a new wiz-bang widget that collects massive amounts of data, what data format should be used to store our data and how do we go about analyzing it?" In terms of your background and experience, please describe what questions you would ask them regarding their data storage and analysis needs and how you would then guide them towards answers their original question.
2. Detail your most successful data analysis projects. How many people were you working with and how did you manage communication on that team? Include a discussion of the field and area of science as well as the different techniques that you used. Be explicit in describing your role on the project, the problems you were faced with, what kinds of programming languages and techniques you used to solve these problems, and how you interacted with the team.
3. Describe your workflow when starting a new data analysis project. What are your preferred go-to tools and techniques? How do you develop lines of communication with domain experts and how do you decide what methods to use for a particular problem?
4. Have you experienced data sets too large to work with on a typical desktop/laptop? How did you deal with that? What are your experiences with large-scale computing resources (such as a supercomputer or cloud computing)?
5. Have you ever worked with graduate/undergraduate students or others, in an advisory/manager/mentor-type role? If yes, describe your communication and leadership style. If no, describe your interactions with leaders/mentors in your life and how you facilitated good communication with them.

The application materials should be packaged as a single PDF file, using the position number and applicant's last name as the document name, and uploaded to: <https://casitjobs.uoregon.edu/>

Incomplete or improperly submitted applications may be excluded from consideration.

Review of applications will begin November 20, 2014.

The University of Oregon is an equal opportunity, affirmative action institution committed to cultural diversity and compliance with the ADA. The University encourages all qualified individuals to apply, and does not discriminate on the basis of any protected status, including veteran and disability status.

14485: Research Informatics Analyst: Data Scientist Page 3 of 3

11/25/2014

## Appendix C Student Survey

1. Current Status				
#	Answer		Response	%
1	Freshman		0	0%
2	Sophomore		0	0%
3	Junior		5	5%
4	Senior		9	8%
5	First Year Graduate		39	35%
6	Second Year Graduate		42	38%
7	Other		16	14%
	Total		111	100%

Other
3rd year PhD
3rd year graduate
Sixth Year Graduate
3rd year graduate
First Year PhD
3rdv year phd
Third year graduate
3rd year graduate
PhD
Returning Graduate Student
Third year PhD
Third year Graduate-PhD
third year graduate
non degree seeking

Statistic	Value
Min Value	3
Max Value	7
Mean	5.50
Variance	0.98
Standard Deviation	0.99
Total Responses	111

## 2. Major/ Minor

### Text Response

Geography  
 Math/Statistics/Actuarial Science  
 Civil Engineering  
 ME  
 Computer Engineering  
 Animal Science  
 FIW  
 Mechanical Engineering  
 Molecular Virology, PhD student  
 Fish and Wildlife Conservation  
 power electronics  
 Coastal Engineering  
 Marketing  
 ECE  
 Forestry  
 HORT  
 Statistics, Economics/Actuarial Science  
 Computer Science  
 Fish and Wildlife Conservation  
 Animal and Poultry Science  
 dairy science  
 Civil Engineering  
 Computer Science  
 Business Information Technology  
 mechanical engineering  
 Forestry  
 Biological Sciences  
 Statistics  
 Plant Physiology  
 Mechanical Engineering  
 Clinical Psychology  
 Sociology  
 Computer Science  
 Computer Science  
 Environmental Design and Planning  
 animal and poultry science  
 Applied Computational Mathematics and Statistics  
 ACIS  
 Civil and Environmental Engineering  
 Statistics and Psychology  
 industrial engineering  
 Statistics  
 Animal and Poultry Sciences  
 Biological Systems Engineering  
 Math major stat minor  
 Animal & Poultry Science  
 Plant Pathology, Physiology and Weed Science  
 Industrial and Systems Engineering

ME
Computer Engineering
Mechanical Engineering
Computer Science and Applications
Hospitality Management
food science
Agricultural and Applied Economics
Biological Sciences
Mechanical Engineering
ISE
Marketing
Statistics
Electrical Engineering
Electrical Engineering
Electrical Engineering
GBCB
Finance and Psychology (double)
Industrial and Systems Engineering
Urban and Regional Planning
Food Science & Technology
Mechanical Engineering
Horticulture
Mechanical Engineering
GBCB
Civil Engineering
Computer Engineering
mechanical engg
Mechanical Engineering
Geography
Electrical Engineering
Computer Science
Biological Sciences
ece
Electrical Engineering
Hospitality management
Hospitality Management
CSES
Crop and Soil Environmental Science
Biological Science
mathematics/ statistics
Ph.D. Forestry
Business Economics
ISE
CEE-EWR
Industrial and Systems Engineering
Economics/Statistics
Minor
Accounting
Crop & Soil Environmental Science
Industrial and Systems Engineering
Accounting

## Natural Resources

Statistic	Value
Total Responses	108

#	Answer	%
1	Very Interested	38%
2	Moderately Interested	20%
3	Mildly Interested	16%
4	Mildly Uninterested	10%
5	Moderately Uninterested	5%
6	Very Uninterested	11%
	Total	100%

Statistic	Value
Min Value	1
Max Value	6
Mean	2.58
Variance	2.85
Standard Deviation	1.69
Total Responses	111

#### 4. Whether you are interested in pursuing a MS in DAAS at Virginia Tech or not, what do you think about the possibility of offering such an opportunity for students who are interested?

##### Text Response

I think it would be a great idea!

Seems like a very relevant and interesting new degree option

stellar

Such an opportunity will be excellent for people who are interested in statistics

Fantastic idea

Great Idea!

Yes it would be a good plan

It would offer graduate students an opportunity to greatly strengthen their statistical knowledge.

good chance

It's of significance for research ability

Very cool

I think it would be very useful especially for those of us in the hard sciences

Seems like a great idea

I think it would be very necessary to offer this degree in order to keep up with the advancing technology in the fields of statistics, big data, and research.

I think it would be extremely beneficial. It would drastically improve the students' education.

Not a problem if the resources are available.

to apply statistics method in industrial cases, like dairy industry

I think it is a great idea, and the classes would be beneficial on an as-needed basis.

I strongly recommend such a program, since data analysis has extensive applications in various fields.

Yes, definitely. So far, the probability is about 90%.

seems like a good idea

It would become a big opportunity for students because understanding how to analyze data is in high demand in the job market at this time.

It's a great idea

It's a very good idea. I only deal with statistical analysis a little but towards the end of my time here I'm beginning to wish I had a better understanding of statistical analysis tools.

I think it would be a very good opportunity for students in psychology, as it would be a great asset in the job market.

I think it is a great opportunity to apply statistical tools in real world applications

I think this will be a great opportunity for those who are.

Necessary

I think that this would be an amazing opportunity for students and also very useful because over the past few years degrees in applied mathematics and statistics is becoming desired in the work force and any opportunity to further your education is great.

Excellent

I think it is a valuable option for many students and would help drive the incorporation of more statistic focused work.

great idea. many opportunities for the future employment

it should be offered!!!

I believe that would be an excellent opportunity.

It would be a very appropriate degree with potential application and relevance in different fields. It is something that is lacking in most research designs and data interpretations...

Yes I have interested in get this ms. This degree is more functional and more help with further job

Not a high possibility

It is important to offer a diverse selection of majors and possible degrees to students.

Good idea!

It's great.

I think it is a great opportunity. It would provide students the ability to look at data (no matter what it may be or to what field it pertains) and be able to look at it and explore what it is telling the scientist.

Having the ability to take data and dig into it rather than just looking at it and drawing conclusions is very important and is an expanding factor in studies.

This is a great idea, and highly needed.

Excellent opportunity to gain knowledge in upcoming area.

I'm very interested in pursuing the MA in DAAS since it would be a big plus to my research in Agricultural Economics. And I think lots of students with major other than Statistics will find the knowledge on Statistics being very helpful when doing empirical study.

great idea!

Excellent opportunity

It would be beneficial for students who need statistical tools for their research

Sounds great!

Help you get better jobs down the road

It is a very important area of study and this degree program will offer a great opportunity to those interested.

No

Awesome

Statistical understanding is extremely important for experimenters

Very likely.

I think it is very worthwhile for those who know in advance that they want to pursue a career in research

If faculty capable of conferring the degree are already at Virginia Tech, why not offer it?

I think it is a good idea and that it would have a significant demand from across very different majors and fields.

Great

It is very good to have such a major here

its a good idea

I think it's a very good idea.

Good opportunity

Stats is very important for research, it will definitely help students. Getting a degree in Stats when working on something else is a bonus.

Stats are a transferable skill, so it'd probably be a good option since jobs in academia are limited.

It would be great. I thin it is essential.

Great Idea!

It is a great idea.

It is a good idea

I think it's a good idea, very practical

Sounds like a great program for interested parties.

I think it would be very helpful for some students and provide long-term benefits.

Great.

I think the degree would be an excellent opportunity for those who wish to add Statistics to their skill set without doing theoretical statistics.

I think it sounds good.

It would be a beneficial field.

Great opportunity

It would be a great opportunity if there was enough interest from students.

I think it's a good idea having a more applied curriculum.

Makes sense

I would definitely suggest that a MA in DAAS be offered. It is a great idea and would benefit a large variety of students who would like to increase their knowledge in the field of Statistics.
It sounds like a great oppurtunity.
Good
I think it would be great especially if it was offered online or partially online
it is a good idea
I am not interestied in this degree.
Great opportunity!
It is a great idea.
It is a good idea
it sounds like a great opportunity as statistics are the essential to almost every research discipline out there
Possibly useful for those wishing to strengthen their statistical qualifications
It sounds like a great program!

Statistic	Value
Total Responses	91

# DEGREE PROPOSAL

## Master of Arts (M.A.) Data Analysis and Applied Statistics

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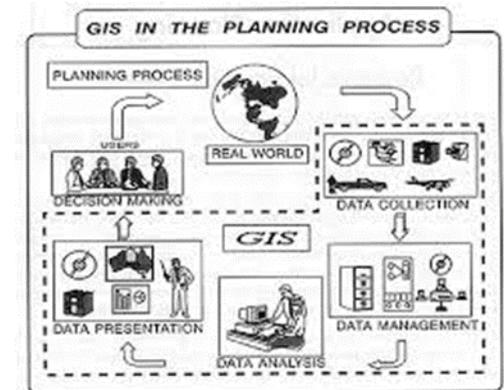
Eric P. Smith, Ph.D.  
Professor and Department Head

Department of Statistics



# Background

- Increased need exists for graduate students trained in the **analysis of data**
  - Shortage of statistically trained scientists and practitioners
  - Need for statisticians with backgrounds in natural/social sciences and work-related skills
  - Better training in statistical methods will lead to better jobs
- What is required is a program in statistics, with coursework from experts in applied statistics as well and from quantitative faculty from other departments



# Goals

- Offer an **applied** statistics graduate degree
  - 1) To provide a degree that focuses on the **application** of statistical methods (our MS has a strong emphasis on the theory behind the methods)
  - 2) To better connect the degree program with **quantitative researchers** in the social and natural sciences at Virginia Tech
  - 3) To meet interest and demand for **applied statistical training** in a broad range of industrial and high-tech markets





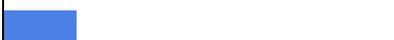
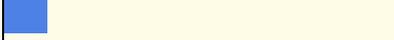
# Goal 2: Increase Collaboration with Departments Doing Applied Research

- Collaborators (number of courses)
  - Agricultural and Applied Economics (4)
  - Economics (4)
  - Educational Research & Evaluation (9)
  - Fisheries & Wildlife (4)
  - Forest Resources & Environmental Cons. (2)
  - Geography (2)
  - Human Development (3)
  - Psychology (4)
  - Public Administration and Public Affairs (2)
  - Political Science (1)
  - Sociology (3)



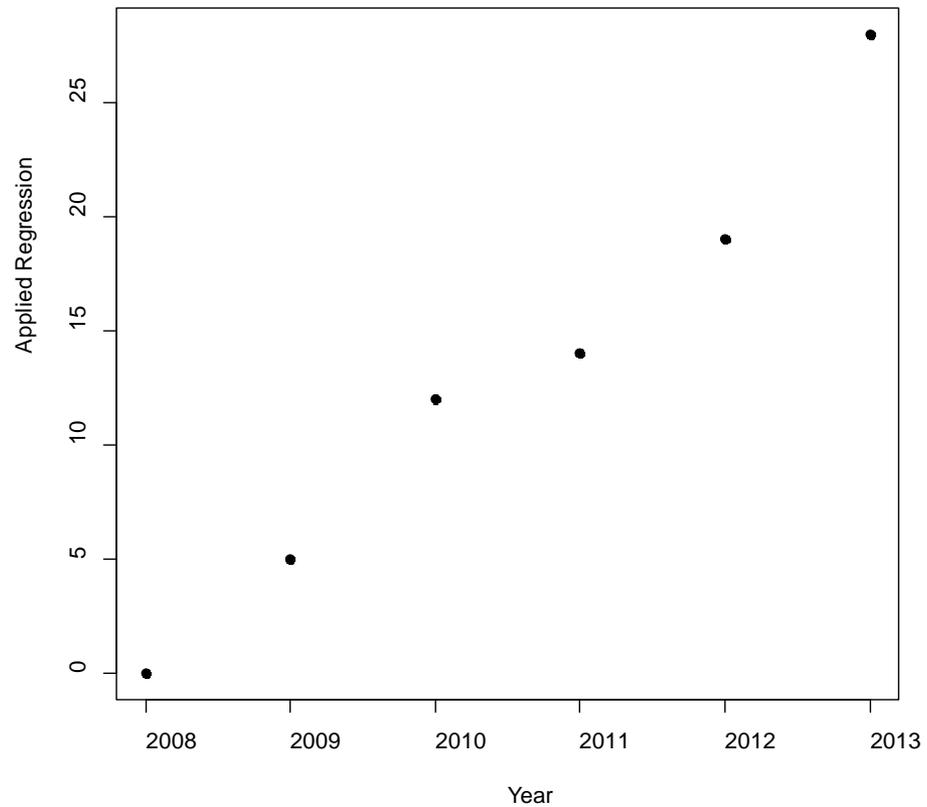
# Goal 3: Meeting Student Interest and Market Demand

If Virginia Tech offered a Master of Arts (M.A.) in Data Analysis and Applied Statistics (DAAS), would you be interested in pursuing the degree?

Answer		Response 2014	%	Response 2013	%
Very Interested		32	29%	42	38%
Moderately Interested		20	18%	22	20%
Mildly Interested		25	23%	18	16%
Mildly Uninterested		10	9%	11	10%
Moderately Uninterested		12	11%	6	5%
Very Uninterested		10	9%	12	11%
Total		109	100%	111	100%

# Student Interest

- Increased enrollment in statistics courses
- (Example: STAT 5214G – Applied Regression introduced in 2009)



# Market Demand



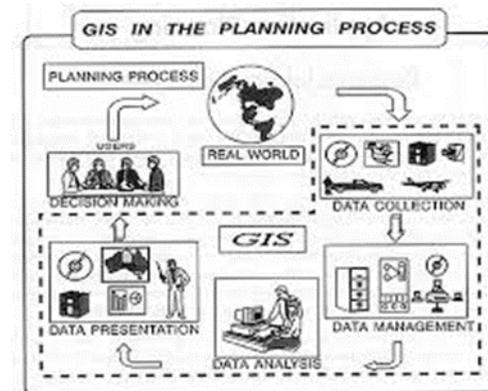
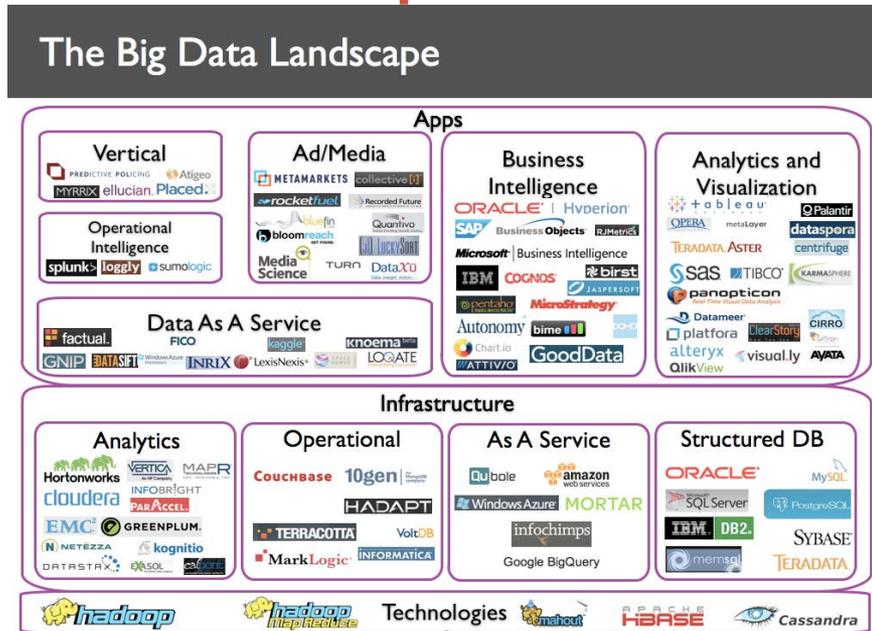
## Quick Facts: Statisticians

<a href="#"><u>2012 Median Pay</u></a>	\$75,560 per year \$36.33 per hour
<a href="#"><u>Entry-Level Education</u></a>	Master's degree
<a href="#"><u>Work Experience in a Related Occupation</u></a>	None
<a href="#"><u>On-the-job Training</u></a>	None
<a href="#"><u>Number of Jobs, 2012</u></a>	27,600
<a href="#"><u>Job Outlook, 2012-22</u></a>	<b>27% (Much faster than average)</b>
<a href="#"><u>Employment Change, 2012-22</u></a>	7,400

In the 2010-2020 report the job growth was estimated as 14.1%

# Job Opportunities - - examples

- **SRA International, Fairfax, VA**
  - Create and apply appropriate statistical analyses of large molecular datasets
- **PNC, Tysons Corner, VA**
  - Develop and enhance retail credit risk models
- **Aveshka, Arlington, VA**
  - Design, develop, and implement statistical methodologies
- **Apex Systems Inc., Washington, DC**
  - Statisticians contribute to advancement of applied measurement and psychometrics, social science and policy evaluation
- **BB&T, Charlotte, NC**
  - Use experimental design techniques to ensure marketing and sales campaigns are designed properly



# Who is our Target Audience?

- Undergraduate students who are quantitative and have a social or natural science background
- Students and professionals who desire online training and degrees
- Accelerated undergraduate to graduate degrees
- Undergraduate statistics majors
- We expect to enroll 20 per year



Questions?

# Funding

- Assumptions:
  - 20 students per year
  - \$593 per credit hour (in-state)
- Revenue
  - \$213,480
- Expenses
  - Professor of practice \$85,000 (including fringe, request 2)
  - Teaching assistants (2 @ 23000)
  - Total: \$208,000

**RESOLUTION TO REVISE SEXUAL VIOLENCE AND RELATED DEFINITIONS IN  
UNIVERSITY POLICIES TO COMPLY WITH STATE LEGISLATION AND TITLE IX  
REGULATIONS**

Documents included:

1. Resolution to Revise Sexual Violence and Related Definitions in University Policies to Comply with State Legislation and Title IX Regulations
2. Presentation – slides

**RESOLUTION TO REVISE SEXUAL VIOLENCE AND RELATED DEFINITIONS IN UNIVERSITY POLICIES TO COMPLY WITH STATE LEGISLATION AND TITLE IX REGULATIONS**

**WHEREAS**, Virginia Tech is committed to a safe and equitable learning and working environment; and

**WHEREAS**, Virginia Tech is committed to preventing sexual violence and responding to complaints in a sensitive and comprehensive manner; and

**WHEREAS**, Virginia Tech is committed to compliance with all federal and state laws prohibiting discrimination and harassment based on sex; and

**WHEREAS**, sexual harassment including sexual violence is a form of sex discrimination prohibited by Title IX of the Education Amendments Act of 1972; and

**WHEREAS**, Federal requirements pursuant to the Violence Against Women Act Reauthorization of 2013, and its implementing regulations, have extended requirements for institutional response involving incidents of sexual assault, dating and domestic violence and stalking to employees; and

**WHEREAS**, sexual assault, dating and domestic violence and stalking are considered forms of sexual harassment including sexual violence prohibited by Title IX of the Education Amendments Act of 1972; and

**WHEREAS**, additional guidance from the U.S. Department of Education, Office for Civil Rights and the Virginia legislature require that definitions and statements be included in university policies;

**NOW, THEREFORE BE IT RESOLVED** that the university adopts the following definitions and statements for all appropriate policies.

**Sexual violence** – physical sexual acts perpetrated against a person’s will or where a person is incapable of giving consent due to the victim’s use of drugs or alcohol, or is unable to give consent due to an intellectual or other disability. Sexual violence includes rape, sexual assault, sexual battery, and sexual coercion.

- Sexual Assault – actual or attempted sexual contact with another person without that person’s consent.
- Sexual Battery – intentional touching of another person’s intimate parts without the person’s consent; or other intentional sexual contact with another person without that person’s consent.
- Sexual Coercion – using physical or verbal aggression or pressure to force or attempt to force a person to touch another person’s intimate parts without that person’s consent.

- Rape – penetration, no matter how slight, of (1) the vagina or anus of a person by any body part of another person or by an object, or (2) the mouth of a person by a sex organ of another person, without that person's consent.

**Incapacitation** – includes but is not limited to being asleep, drugged, intoxicated, or unconscious.

**Gender-based harassment** – acts of verbal, nonverbal, or physical aggression, intimidation, or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.

**Sexual Exploitation** – an act or acts committed through non-consensual abuse or exploitation of another person's sexuality for the purpose of sexual gratification, financial gain, personal benefit or advantage, or any other non-legitimate purpose. The act or acts of sexual exploitation are prohibited even though the behavior does not constitute one of the other sexual misconduct offenses.

**Domestic violence** – a pattern of abusive behavior that is used by an intimate partner to gain or maintain power and control over the other intimate partner. Domestic violence can be physical, sexual, emotional, economic, or psychological actions or threats of actions that influence another person. This includes any behaviors that intimidate, manipulate, humiliate, isolate, frighten, terrorize, coerce, threaten, blame, hurt, injure, or wound someone.

**Dating violence** – acts of physical or sexual abuse committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim.

- The existence of such a relationship shall be determined based on the reporting party's statement and with consideration of the length of the relationship, the type of relationship, and the frequency of interaction between the persons involved in the relationship.
- Dating violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse, but does not include acts covered under the definition of domestic violence.

**Stalking** – repeatedly contacting another person when the contact is unwanted. Additionally, the contact may cause the other person reasonable apprehension of imminent physical harm or cause substantial impairment of the other person's ability to perform the activities of daily life. Contact includes but is not limited to communicating with (either in person, by phone, or by computer) or remaining in the physical presence of the other person.

**Consent** – knowing, voluntary, and clear permission by word or action, to engage in mutually agreed upon sexual activity. The existence of consent is based on the totality of circumstances, including the context in which the alleged consent occurred. Silence does

not necessarily constitute consent and coercion, force, or threat of either party invalidates consent.

- Consent cannot be given where a person is incapacitated due to drugs or alcohol; or where a person has a disability; or is not of legal age to consent as defined by law.
- Consent to any one form of sexual activity cannot automatically imply consent to any other forms of sexual activity. Consent can be withdrawn at any time.
- Previous relationships or prior consent cannot imply consent to future sexual acts.

**AND, BE IT FURTHER RESOLVED**, that all university policies related to sexual harassment and/or sexual violence be amended to include the following information regarding where an individual can go to file a discrimination or harassment complaint including Title IX:

The Executive Director for Equity and Access  
Title IX Coordinator  
Virginia Tech  
North End Center  
300 Turner St.  
Blacksburg, VA 24061  
Phone: (540) 231-2010  
equityandaccess@vt.edu

**AND, BE IT FURTHER RESOLVED**, that all university policies related to campus safety and security, employee and student conduct, and sexual harassment and/or sexual violence be amended to include the following statement:

We encourage victims of sexual violence, including rape, sexual assault, sexual battery, stalking, and dating and domestic violence, to exercise their right to file a complaint with the Virginia Tech Police Department if the crime occurs on Virginia Tech's property, regardless of the status of the complainant. For crimes occurring away from Virginia Tech's property, victims may contact the local law enforcement in the appropriate jurisdiction.

**AND, BE IT FURTHER RESOLVED**, , that all university policies related to campus safety and security, employee and student conduct, and sexual harassment and/or sexual violence be amended to include the following definition of responsible employee:

"Responsible employee" means a person employed by Virginia Tech who has the authority to take action to redress sexual violence, who has been given the duty of reporting acts of sexual violence or any other misconduct by employees or students to the Title IX coordinator or other appropriate

institution designee, or whom an employee or student could reasonably believe has this authority or duty.

**AND, BE IT FURTHER RESOLVED**, that these changes are to be reflected in documents and statements, including, but not limited to, the following: undergraduate, graduate, and professional student handbooks; faculty handbooks; employee handbooks; and in each place where they appear in publications and websites issued by Virginia Tech entities and affiliated programs.

**RECOMMENDATION:**

That the resolution revising the university's definitions be approved.

June 1, 2015.

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# RESOLUTION TO REVISE SEXUAL VIOLENCE AND RELATED DEFINITIONS IN UNIVERSITY POLICIES TO COMPLY WITH STATE LEGISLATION AND TITLE IX REGULATIONS

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Jack W. Finney  
Vice Provost for Faculty Affairs

Academic Affairs Committee  
Board of Visitors  
June 1, 2015

# Virginia Tech's Goals

- To incorporate definitions of sexual violence in relevant policies.
- To comply with Title IX regulations in all relevant policies.
- To comply with the Office of Civil Rights.
- To comply with the Violence Against Women Act.
- To comply with recent Virginia legislation.

# Why new definitions?

- Extended requirements for incidents of sexual assault, dating and domestic violence, and stalking to employees.
- Additional recent guidance requires definitions and statements in university policies, catalogs, and handbooks.
- § 23-9.2:15 Reporting of Acts of Sexual Violence

# Definitions

- Sexual violence
  - Sexual assault, sexual battery, sexual coercion, rape
- Incapacitation
- Gender-based harassment
- Sexual exploitation
- Domestic violence
- Dating violence
- Stalking
- Consent

# Other changes

- Identify where to go to file a discrimination or harassment complaint.
  - Executive Director for Equity and Access, North End Center
- Encourage victims to file a complaint with the Virginia Tech Police Department for campus incidents and local police for off-campus incidents.
- This information is to be included in:
  - Undergraduate, graduate, and professional catalogs
  - Faculty handbooks
  - Employee handbooks
  - In publications and websites as appropriate
- Define “responsible employees”
  - Code of Virginia
  - Training requirements

# Questions?

**Committee Minutes**  
**BUILDINGS AND GROUNDS COMMITTEE**

**The Inn at Virginia Tech**

**June 1, 2015**

**Closed Session**

**Board Members Present:** Mr. William Fairchild - Chair, Mr. B. K. Fulton, Mr. Mehul Sanghani

**VPI&SU Staff:** Dr. Eleanor Finger, Dr. Betsy Flanagan, Major General Randy Fullhart, Mr. Mark Gess, Ms. Kay Heidbreder, Mr. Larry Hincker, Mr. Rick Hinson, Ms. Angela Kates, Dr. Chris Kiwus, Ms. Leigh LaClair, Dr. Sherwood Wilson

**1. Motion for Closed Session**

**2. Briefing by Legal Counsel:** The Committee met in closed session and received a briefing by Legal Counsel on probable litigation.

**3. Motion to Reconvene in Open Session**

**Open Session**

**Board Members Present:** Mr. William Fairchild - Chair, Mr. B. K. Fulton, Mr. Mehul Sanghani, Ms. Deborah Petrine - Rector

**VPI&SU Staff:** Mr. Whit Babcock, Mr. Frank Beamer, Dr. Malcolm Beckett, Mr. Bob Broyden, Ms. Vickie Chiocca, Dr. Kanitta Charoensiri, Mr. Van Coble, Mr. Joe Crane, Dr. Eleanor Finger, Dr. Elizabeth Flanagan, Chief Kevin Foust, Dr. Dennis Gehrt, Mr. Tom Gabbard, Mr. Mark Helms, Mr. Larry Hincker, Mr. Rick Hinson, Dr. David Hodgson, Mr. Pete Jobst, Ms. Angela Kates, Dr. Chris Kiwus, Ms. Leigh LaClair, Mr. Brian Lee, Ms. Rhonda Mitcham, Ms. Heidi McCoy, Mr. Charles Ruble, Mr. Doug Smiley, Ms. Kayla Smith, Mr. Jason Soileau, Mr. Robert Spieldenner, Dr. Lisa Wilkes, Dr. Sherwood Wilson

**Guests:** Mr. Ben Austin, Ms. Bridget E. Hamil, Dr. Jeff Kirwan, Ms. Rebekah Paulson, Ms. Sarah Umbarger-Wells, Mr. Eric Wetzel

**1. Tour of Indoor Athletic Training Facility and Other Campus Construction Sites:** The Committee toured the Indoor Athletic Training Facility, Pearson Hall, and had a driving tour of other construction sites on campus.

2. **Opening Remarks and Approval of Minutes of the March 30, 2015 Meeting:** The minutes of the March 30, 2015 meeting were approved
- \* 3. **Resolution on Appointment to the Virginia Tech/Montgomery Regional Airport Authority:** The Committee recommended full board approval of a resolution reappointing Sherwood G. Wilson, Vice President for Administration, as the university's representative to the Virginia Tech/Montgomery Regional Airport Authority for a four-year term expiring on August 31, 2019.
- \* 4. **Resolution on Appointment to the New River Valley Emergency Communications Regional Authority:** The Committee recommended full board approval of a resolution reappointing Sherwood G. Wilson, Vice President for Administration, as the Virginia Tech representative to the New River Valley Emergency Communications Regional Authority for a four-year term expiring on August 31, 2019.
3. **Update on Virginia Tech Gas Line Project:** The Committee received an update on the benefits of the ATMOS/Virginia Tech Gas Line Project.
- \* 6. **Resolution to Grant an Easement to ATMOS Energy Corporation for a Natural Gas Distribution Line:** The Committee recommended full board approval of a resolution authorizing the Vice President for Administration, or his successors and/or assigns, to execute any and all necessary documents to create and convey an easement to ATMOS for the installation and maintenance of an eight inch (8") natural gas line on the university main campus.
- \* 7. **Resolution on Demolition of University Building 433E:** The Committee recommended full board approval of a resolution authorizing the demolition of University Building No. 433E, which is a 1,014 gross square foot (GSF) Quonset hut-type structure on university property located at the Glade Road Research Center in Blacksburg. The building was previously used for applied research and office space and is now unoccupied and in poor condition, and is uneconomical to repair.
8. **University Building Official 2015 Annual Report:** The Committee received the fifth annual summary report of activities from the University Building Official (UBO). As set forth in University Policy 5407, the annual report identifies the code enforcement and building permit activities performed during the prior year.
9. **Design Preview/Review for Tidewater Agricultural Research and Extension Center (AREC) Greenhouses:** The Committee approved the design review graphics for two adjacent 1,060 gross square foot greenhouses that will provide expansion for interior controlled environments supporting horticultural, agricultural production and research activities to be located at the Tidewater Agricultural Research and Extension Center (AREC) on Holland Road in Suffolk, Virginia.

- 10. Design Preview/Review for Center for Molecular Medicine and Infectious Diseases (CMMID) Complex Palpation Barn Addition:** The Committee approved the design review graphics for the 2,400 gross square foot (GSF) pre-manufactured building addition to be placed at the north end of the existing 4,070 GSF Center for Molecular Medicine and Infectious Diseases (CMMID) Palpation Barn. The palpation barn addition will provide interior animal care space for the College of Veterinary Medicine programs at the CMMID complex located on the Blacksburg campus. The old barn at CMMID previously used for this function was approved for demolition by the Board of Visitors in June 2014, due to structure failure.
- 11. Design Preview/Review for Health Center Improvements:** The Committee approved the design review graphics for the 5,200 gross square foot (GSF) renovation and addition project of the Schiffert Health Center (“Health Center”) that comprises the north wing of McComas Hall, located on Washington Street at West Campus Drive on the Blacksburg campus. The project includes a 3,500 GSF single-story addition to the north wing of McComas Hall, extending near the west end of the Cassell Lot. Interior improvements will require renovation to 1,700 GSF of existing health center clinic and supporting space. The addition will provide adequate clinic space within the Health Center to meet accreditation standards. Additionally the university’s Campus Alcohol Abuse Prevention Center (CAAPC), which does not currently have a permanent home, is proposed to be located in the Center’s addition with its own exterior entrance.
- 12. Capital Project Status Report:** The Committee received an update on the status of capital projects, including the following projects: Improve Kentland Facilities, Renovate Academic Buildings, Classroom Building, Marching Virginians Practice Facility, and the Upper Quad Residence Halls.

Dr. Wilson and Dr. Kiwus gave a brief update on the progress of the Drillfield Paths committee, charged with exploring (or inventing) and evaluating new materials for the paths. They are working with the Vice President for Research to develop an internal request for proposals (RFP) process. The multidisciplinary team has completed draft plans for construction of test paths, with the goal of field testing materials on the Drillfield by the start of fall semester 2015.

### **Joint Open Session with Student Affairs and Athletics**

**Board Members Present:** Mr. William Fairchild - Chair, Mr. B. K. Fulton, Mr. Austin Larrowe, Ms. Deborah Petrine - Rector, Mr. Mehul Sanghani, Mr. Steve Sturgis, Mr. Wayne Robinson

**VPI&SU Staff:** Ms. Suzie Baker, Dr. Malcolm Beckett, Dr. Cynthia Bonner, Ms. Laurie Brogdon, Mr. Bob Broyden, Mr. Tom Brown, Ms. Vickie Chiocca, Mr. Van Coble, Mr. Joe Crane, Dr. Richard Ferraro, Dr. Eleanor Finger, Dr. Elizabeth Flanagan, Chief Kevin Foust, Mr. Bill Foy, Major General Randy Fullhart, Dr. Martha Glass, Ms. Hunter

Gresham, Mr. Mark Helms, Mr. Larry Hincker, Mr. Rick Hinson, Mr. Byron Hughes, Ms. Kathy Kaplan, Ms. Angela Kates, Ms. Frances Keene, Dr. Chris Kiwus, Ms. Leigh LaClair, Mr. Brian Lee, Ms. Kelsey Lumpkin, Mr. Jonathan Manz, Ms. Heidi McCoy, Ms. Susan Pedigo, Dr. Patty Perillo, Mr. Charles Ruble, Mr. Doug Smiley, Ms. Kayla Smith, Mr. Jason Soileau, Mr. Robert Spieldenner, Dr. Tom Tillar, Ms. Rachael Tully, Dr. Lisa Wilkes, Dr. Sherwood Wilson

**Guests:** Mr. Ben Austin, Mr. Matt Chan, Ms. Bridget E. Hamil, Dr. Jeff Kirwan, Ms. Rebekah Paulson, Ms. Morgan Sykes, Ms. Sarah Umbarger-Wells, Mr. Eric Wetzel, Ms. Glenda Young

1. **Introductions and Opening Remarks:** Dr. Wilson and Dr. Perillo provided introductory remarks to the Committees regarding the impact of enrollment growth. While the planning scope to support the proposed enrollment growth is extensive and ongoing in all facets of both the Student Affairs and Administrative Services divisions, this presentation was particularly focused on planning for student housing, dining, and residential experiences.
2. **Enrollment Growth Impact:** The Committees received a presentation on the impact of enrollment growth on the student residential experience and subsequent impact on the physical campus. Key components included responses to the Provost's Student Experience Task Force, expanding the residential college model, and intentional planning for renovations and growth of the physical campus in relation to the campus master plan.

### **Joint Open Session with Finance and Audit**

**Board Members Present:** Mr. Jim Chapman, Mr. Dan Cook – Staff Representative, Mr. William Fairchild, Mr. Mike Quillen, Mr. Mehul Sanghani, Mr. Horacio Valeiras

**VPI & SU Staff:** Mr. Ben Austin, Mr. Bob Broyden, Mr. Allen Campbell, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Ms. Bridget Hamill, Ms. Mary Helmick, Mr. Tim Hodge, Mr. Hal Irvin, Ms. Angela Kates, Dr. Chris Kiwus, Ms. Sharon Kurek, Ms. Leigh LaClair, Ms. Nancy Meacham, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Terri Mitchell, Ms. Laura Neff-Henderson, Dr. Scot Ransbottom, Ms. Lisa Royal, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Mr. Jason Soileau, Mr. Brad Sumpter, Ms. Sarah Wells, Mr. Eric Wetzel, Dr. Sherwood Wilson

- \* 1. **Approval of Resolution for Lane Electric Substation Expansion:** The Committees reviewed for approval a resolution for Lane Electric Substation Expansion. Virginia Tech Electric Service supplies power to Virginia Tech, the Corporate Research Center (CRC), and approximately 6,000 customers in the town of Blacksburg. As campus and the CRC have grown and more buildings are air conditioned, the load at the Lane Electric Substation becomes critical in the summer. For several years, peak summer demand on the substation has approached the full-load sustained output limit

and has once exceeded the limit. To meet the increasing demand and support for the ongoing development of both campus and the CRC, the university proposes an expansion of the Lane Electric Substation.

The proposed expansion includes the purchase and installation of two 28,000 kVA transformers, two circuit switchers, six distribution reclosers with space for an additional four reclosers, a control house and associated relay, and control equipment. The improvements would alleviate the loading problems at the Lane Substation and service future construction in the Life Sciences area, Special Purpose Housing area, and the second phase of the CRC.

The estimated project costs inclusive of design, construction, and equipment is \$6.5 million. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of the project. This funding plan calls for the use of debt which may be serviced from Electric Service auxiliary revenue. Any cash designated for the project accumulated prior to the issuance of permanent debt may be used directly for project costs and to lower the total debt issuance. The Town of Blacksburg and CRC customers will bear an appropriate portion of the project cost through their electric service rates. This request is for a \$6.5 million authorization for the Lane Electric Substation Expansion project.

The Committees recommended the resolution for Lane Electric Substation Expansion to the full Board for approval.

- \* 2. **Approval of Resolution for Constructing the Health Center Improvements:** The Committees reviewed for approval a resolution for Constructing the Health Center Improvements. In March 2014, the Board of Visitors approved a \$200,000 planning authorization for the Health Center Improvements project. The planning work is nearing completion of schematic designs and will be ready to enter the construction phase this summer. In accordance with the scope of the authorized planning project, the designed solution proposes a 3,500 gross square foot one- story addition to the east wing of McComas Hall and 1,700 square feet of interior renovations of the existing Schiffert Health Center for a total 5,200 gross square foot project.

The proposed addition includes space to house the Campus Alcohol and Prevention Center, expanded infirmary space to ensure separation of wound care cases from Methicillin-resistant Staphylococcus Aureus (MRSA) cases, and an isolation area which could serve to handle highly contagious cases and assist with emergency preparedness. The proposed renovations create three intake rooms, a phlebotomy area, an orthopedic room, a nebulizer room, a dietitian's office, and a biohazard waste storage space.

As with all self-supporting projects, the university has developed a financing plan to support the project. The total project budget is \$3.071 million and

annual debt service is estimated to be \$250,000. The timing of the project request has been coordinated with the 2016 retirement of debt for the original construction of McComas Hall. The funding plan for debt service calls for the redirection of existing Student Health fee revenues when debt on the original McComas Hall project is retired. Thus, student fees will not be increased for this project and the revenue source is sufficient to cover this amount.

This request is for a \$2.871 million authorization supplement to the existing \$200,000 planning authorization for a \$3.071 adjusted total project budget authorization to complete the Health Center Improvements project.

The Committees recommended the resolution for Constructing the Health Center Improvements to the full board for approval.

**\*Requires full Board approval.**

There being no further business the meeting adjourned at 12:10 p.m.

# Virginia Tech Gas Line

Board of Visitors Meeting: *June 1, 2015*

Christopher H. Kiwus, PE, PhD  
Associate Vice President and Chief Facilities Officer

## ABOUT THE GAS LINE

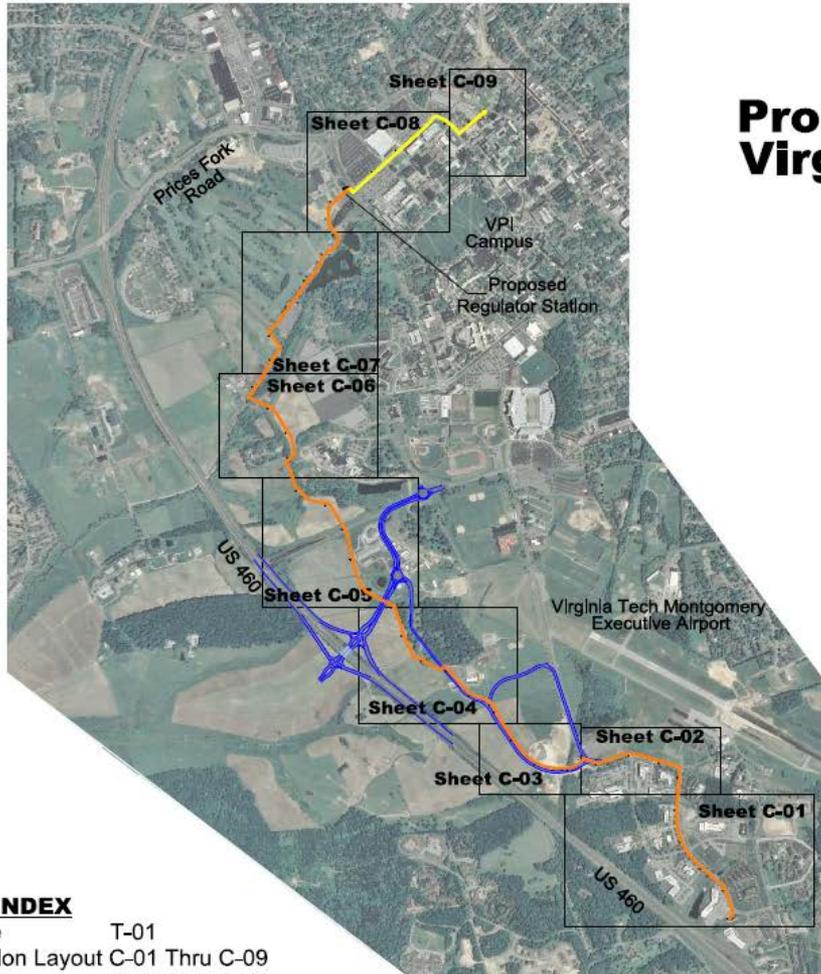
1. Culmination of 2 years of negotiations with ATMOS
2. Approximately 21,500 feet of a combined eight inch (8") steel and eight inch (8") HDPE natural gas pipeline through the Virginia Tech main campus
3. Virginia Tech will retain the fee simple title of all real property involved in the project, but will not acquire ownership of the natural gas line itself
4. ATMOS will be responsible for the installation and maintenance of the gas line

## ABOUT THE GAS LINE

### Benefits of the Gas Line to Virginia Tech:

1. EPA consent order requires removal of existing fuel tanks at the Power Plant
2. Will provide 400 mcf firm supply of natural gas delivery daily to the university
3. The university is currently using three different sources of fuel (natural gas, oil, coal)
  - Natural gas has many advantages regarding: environmental sustainability, efficiency and cost effectiveness
4. Will allow the university to convert existing boilers to gas boilers and provide lower CO2 emissions
5. With firm gas transportation, Facilities staff can negotiate with the designated state vendor to lock in a favorable price, quantity and terms for 10-20 years

# LOCATION MAP



## Proposed 8" Natural Gas Line Virginia Polytechnic Institute Blacksburg, VA

- PROPOSED 8" STEEL PIPE
- PROPOSED 8" HDPE PIPE

### General Construction Notes

1. Maps attempt to show all utilities, but locations shown are not necessarily accurate or correct. Because maps of utilities shown are from different sources, existing locations may actually conflict. Bidders shall keep this in consideration. Contractor is responsible for determining actual physical location before pipeline construction.
2. Before actual pipeline construction, Virginia Tech or its agents shall field mark and maintain as necessary, the lines of rights of way and/or cut and fill, elevations and other necessary indicators relative to new road proposals in the areas of proposed pipeline construction.
3. Before actual pipeline construction, Atmos will field mark proposed pipeline installation based upon Virginia Tech locations provided in Note 2. Generally, proposed pipe lines are 15 feet outside proposed and existing rights of way and outside of any proposed cut or fill areas.
4. Installation Restricted to May 15 thru August 1 for the following areas:  
 Station 140+00 thru 173+44 of 8" Steel  
 Station 0+00 thru 20+00 of 8" HDPE

### SHEET INDEX

Title Page T-01  
 Construction Layout C-01 Thru C-09  
 Detail Page D-01 Thru D-02



<b>Atmos Energy Mid-States</b>			
<small>810 Crescent Centre Drive, Suite 600 Franklin, TN 37067</small>			
REVISIONS			
8" STEEL NATURAL GAS LINE			
REINFORCEMENT			
VIRGINIA POLYTECHNIC INSTITUTE			
NO.	DATE	BY	
1			
2			
3			
4			
5			

**University Building Official 2015 Annual Report  
(Report Period April 1, 2014 – March 31, 2015)**

**BUILDINGS AND GROUNDS COMMITTEE**

**June 1, 2015**

The Restructured Higher Education Financial and Administrative Operations Act of 2005 and the Management Agreement with the Commonwealth of Virginia grant the university the authority to designate its own building official. The Board of Visitors approved a resolution to establish a university building official and building code review unit at its June 20, 2008 meeting and the office was established July 1, 2010. Effective June 3, 2011, the Bureau of Capital Outlay Management (BCOM) formally delegated building official authority for Virginia Tech to the university's building official.

The Committee will receive the fifth annual summary report of activities from the University Building Official (UBO) since the Board approved policies and procedures governing the UBO, including the presentation of an annual report. As set forth in University Policy 5407, the annual report identifies the code enforcement and building permit activities performed during the prior year.

In the last year, the following tasks were completed:

**Major Statistics**

- Number of Plan Reviews for Permit performed: 1,193 (decrease of 179 or 15%)
  - Includes estimates for report reviews due to initial issues
- Number of Permits issued (all permits and all trades): 871 (increase of 65 or 8%)
- Number of Inspections performed (all trades, pass and fail): 3,446 (increase of 561 or 17%)
- Number of Re-inspections due to field failures/rejections (Estimated at 20%): 741 (approximate increase of 164)
- Examples of issues typically found in error in plan review stage:
  - Incomplete documents, details, and drawings
  - Incorrect code references
  - Incorrect or incomplete application of the Virginia Rehabilitation Code
  - Incorrect applications of fire rated assemblies
  - Incorrect application of fire separation distances
  - Failure to account for electrical panel access space
- Examples of issues found in the field include:
  - Water logged and weather exposed insulation and gypsum wall board due to failure to dry in construction
  - Failure to correctly install Hokie Stone
  - Failure to install fire rated wall/floor penetration assemblies in new construction
  - Identification of numerous non-compliant existing wall/floor penetrations in existing facilities
  - Failure to properly place reinforcing prior to concrete placement
  - Improper electrical grounding system installations

*Presentation Date: June 1, 2015*

- The UBO office is required by the Virginia Statewide Building Code to issue permits for and inspect large tents, stages, and amusement devices.
  - Tent and Stage requests permitted and inspected: 38 (increase of 3)
  - Special Events reviewed and inspected: 28 (increase of 14)
- Number of Certificates of Occupancy (CO) Issued: 3
  - Verizon DAS Building at Lane Stadium (08/22/2014)
  - Wildlife Aviary (12/2/2014)
  - Institute for Society, Culture and Environment (ISCE), formerly Wallace Annex (2/15/15) – Revised to reflect Fire Alarm upgrade
- Number of Demolition Permits Issued: 4

## **Staffing**

- The Virginia Uniform Statewide Building Code was updated to the 2012 Edition. UBO staff took required update training.
- The department participated in several classes and code committees to improve staff knowledge and application of the building code, as well as to provide input to the upcoming 2015 code changes.

## **Operations**

- Selected software to improve and manage permit review and inspection work with better connectivity and less paper
- Continued the permitting and inspection of sidewalks and other pavements or slabs, as well as roads not covered by Virginia Department of Transportation
- Continued the permitting and inspection of utility work outside building footprints
- Continued to coordinate the permitting and inspection of cabling and conduit penetrations for Network Communication Services, including the removal of abandoned communication wiring across campus
- Identified several issues of code violations: Resolved or currently working on resolutions to forestall the issue of a State Fire Marshal Office "Notice of Violation" regarding work done without proper permits, plans or authorization
- Continued to coordinate efforts with the local building officials association to assist the campus and community through outreach efforts to contractors and staff regarding the building codes
- Drafted the department Incident Management Program and coordinated with the Office of Emergency Management regarding the UBO's responsibilities in the event of an earthquake, tornado, hurricane, etc.
- Internal Audit conducted an audit of the department, which resulted in the drafting of additional internal procedures and the revision of existing permit and inspection procedures

*Presentation Date: June 1, 2015*

## **DESIGN PREVIEW/REVIEW FOR TIDEWATER AREC GREENHOUSES**

Proposed to be located at the Tidewater Agricultural Research and Extension Center (AREC) on Holland Road in Suffolk, Virginia, each of the two adjacent 1,060 gross square foot greenhouses will provide expansion for interior controlled environments supporting horticultural, agricultural production and research activities. The greenhouses will be constructed of galvanized aluminum frames supporting translucent membrane covers, allowing diffused natural lighting. Large mechanical end-wall ventilators will control interior ventilation and exhaust.

## **Non-Capital Project Information Summary – Tidewater AREC Greenhouses**

### **BUILDINGS AND GROUNDS COMMITTEE**

**June 1, 2015**

**Title of Project:**

Tidewater AREC Greenhouses

**Location:**

The site for the two greenhouses is off Holland Road at the Tidewater Agricultural Research and Extension Center (AREC) in Suffolk, Virginia. The greenhouses are to be adjacent to each other on an existing gravel parking lot, located adjacent to the main administration building for the AREC and near existing agricultural support buildings and existing agricultural fields. A propane tank beside the parking lot will be relocated.

**Current Project Status and Schedule:**

The project is in the working drawings design phase and future design work is planned to continue to August 2015. Construction is planned for completion in December 2015.

**Project Description:**

Each of the two 1,060 gross square foot (GSF) greenhouses will have a translucent membrane cover to provide diffused natural lighting. The floors of the greenhouses will be concrete slab on grade. Large end-wall mechanical ventilating fans will control internal ventilation and exhaust.

**Brief Program Description:**

Each greenhouse will provide on-site controlled environments for expanded agriculture and horticulture research and production.

**Contextual Issues and Design Intent:**

For both greenhouses, galvanized aluminum framing members will support the white color translucent membrane greenhouse coverings. The hollow metal doors will have off-white colored vision panels.

**Architect/Engineer:**

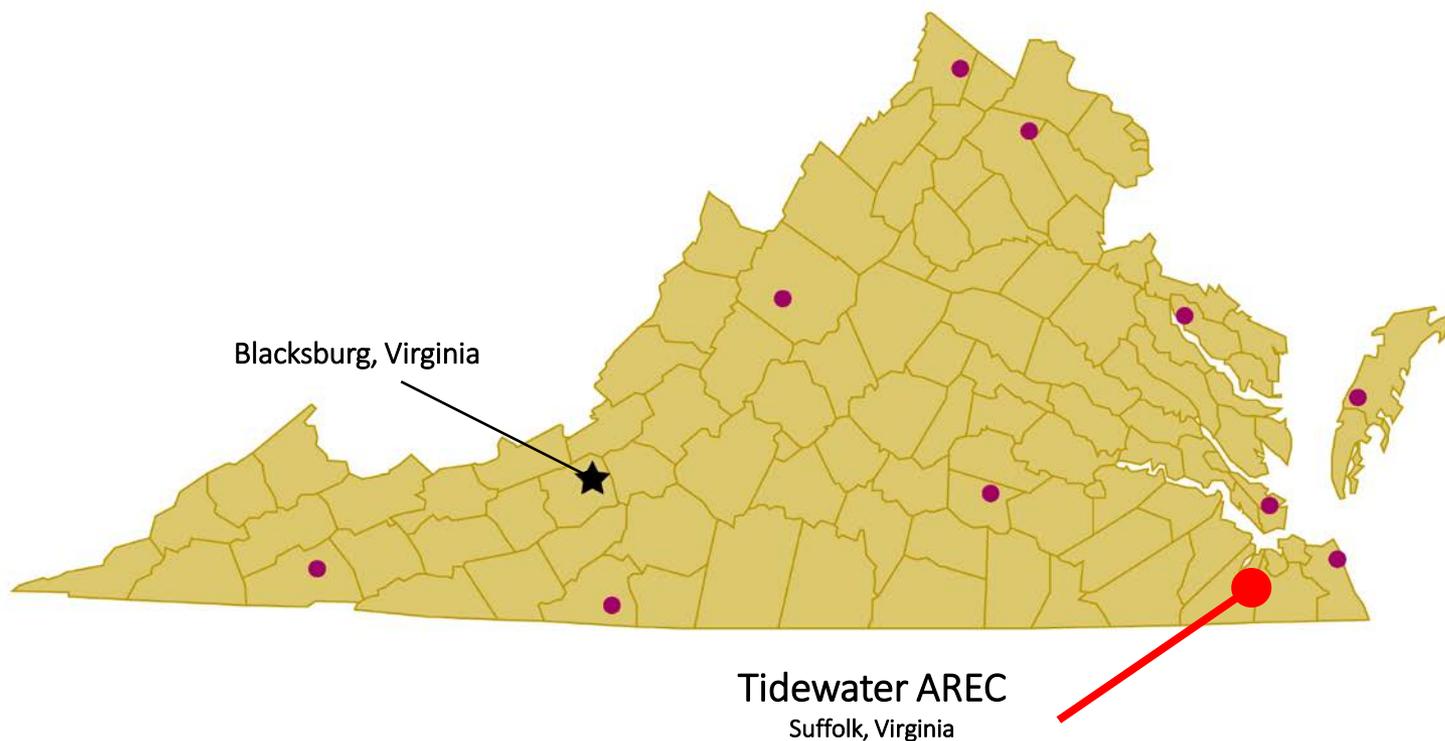
The Structures Group

**Construction Manager:**

TBD

*Design Preview/Review for:*  
**Tidewater AREC Greenhouses**

**Virginia Agricultural Experiment Station**  
*and its*  
**Agricultural Research and Extension Centers**



# BUILDING LOCATION & SITE MAP



# SITE AND REPRESENTATION PHOTOGRAPHS

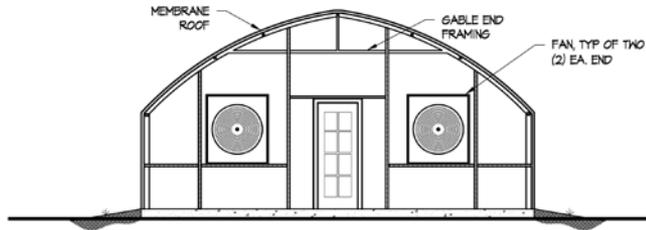


**PROPOSED SITE**

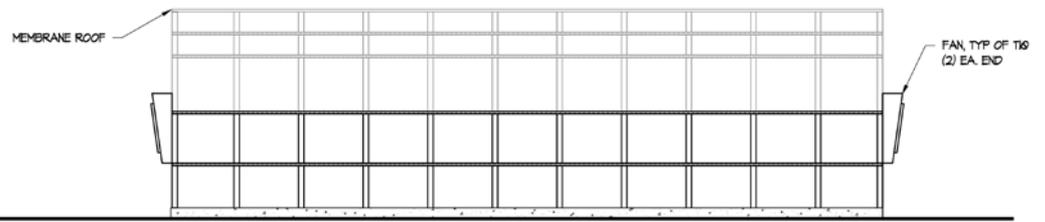


**REPRESENTATION PHOTOGRAPH**

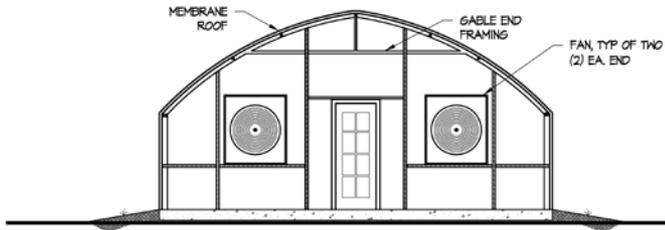
# BUILDING ELEVATIONS



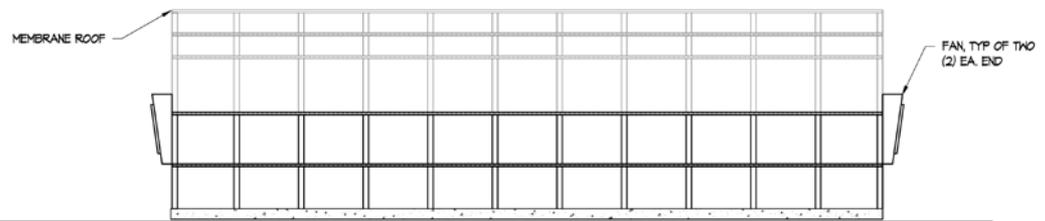
**NORTH ELEVATION**



**EAST ELEVATION**



**SOUTH ELEVATION**



**WEST ELEVATION**

**RECOMMENDATION:**

**That the Design Preview/Review graphics be approved and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion date of December 2015.**

## **DESIGN PREVIEW/REVIEW FOR CMMID PALPATION BARN ADDITION**

Proposed to be located at the Center for Molecular Medicine and Infectious Diseases (CMMID) complex on the Blacksburg campus, this 2,400 gross square foot (GSF) pre-manufactured building addition is to be placed at the north end of the existing 4,070 GSF CMMID Palpation Barn. The addition will match the width and height of the existing barn. The existing barn's north service doors will be removed where the addition connects to the existing barn to allow interior access between the existing barn and the addition. The structure will be a pre-engineered wood post frame system with drilled foundation piers and a concrete slab floor. The palpation barn addition will facilitate interior animal care space available for the College of Veterinary Medicine programs at the CMMID complex. The old barn at CMMID previously used for this function was approved for demolition by the Board of Visitors in June 2014, due to structure failure.

## **Non-Capital Project Information Summary – CMMID Palpation Barn Addition**

### **BUILDINGS AND GROUNDS COMMITTEE**

**June 1, 2015**

**Title of Project:**

CMMID Palpation Barn Addition

**Location:**

The site for the palpation barn addition is within the Center for Molecular Medicine and Infectious Diseases (CMMID) complex on Prices Fork Road at the Blacksburg Campus. The addition is to be located adjacent to the existing agricultural support buildings and existing agricultural fields.

**Current Project Status and Schedule:**

The project is in the preliminary design phase. Future design phases will continue through early summer 2015. Construction is planned to commence summer 2015 and be completed in November 2015.

**Project Description:**

A 2,400 gross square foot (GSF) pre-manufactured addition is to be placed at the north end of the existing 4,070 GSF CMMID Palpation Barn. The existing barn's north service doors at the connection to the addition will be removed to allow interior access between the existing barn and the addition. The structure will be a wood post frame pre-engineered building with drilled foundation piers and a concrete floor slab.

**Brief Program Description:**

The palpation barn addition will facilitate interior animal care space available for the College of Veterinary Medicine programs at the CMMID complex. The old barn at CMMID previously used for this function was approved for demolition by the Board of Visitors in June 2014, due to structure failure.

**Contextual Issues and Design Intent:**

The addition will match the width and height of the existing barn. Exposed fastener vertical ribbed metal wall panels and standing seam roof panels will each match the beige color of the existing barn. Metal double and metal single doors with half glass will match the existing building doors. Large sliding service doors on each side of the addition will match the metal panel service doors on the existing barn. Dark brown colored metal gutters and downspouts will match the color and spacing of those on the existing barn.

**Architect/Engineer:**

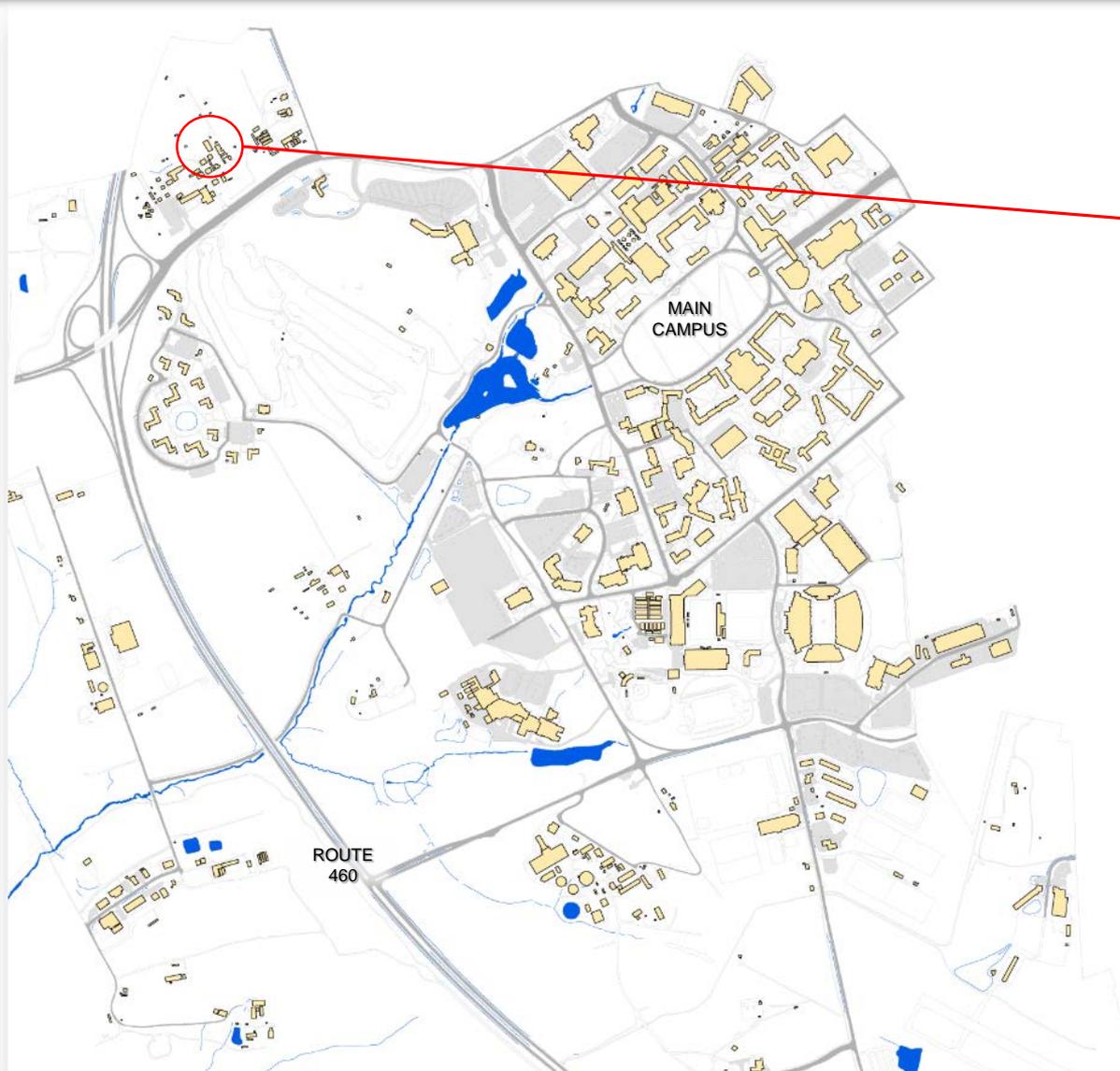
CARBO Inc.

**Construction Manager:**

TBD

*Design Preview/Review for:*  
**CMMID Palpation Barn Addition**

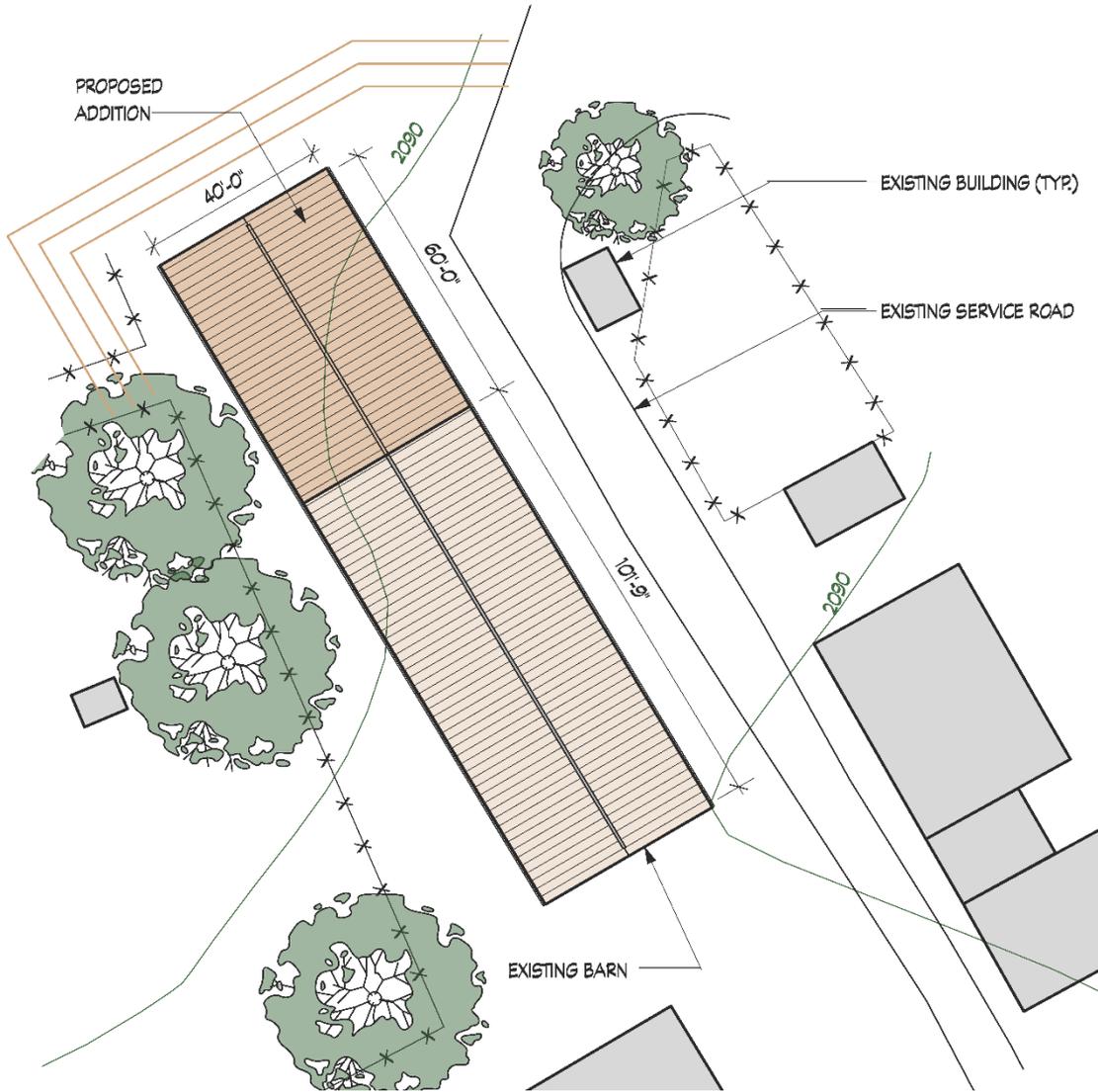
# BUILDING LOCATION & SITE MAP



CMMID Palpation Barn

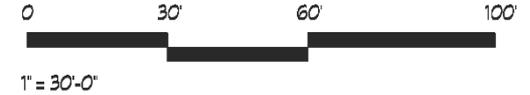
## CMMID PALPATION BARN ADDITION

# SITE PLAN



SITE PLAN

SCALE: 1" = 30'-0"



**TK** THOMAS KOONTZ  
ARCHITECT, PC

CMMID PALPATION BARN ADDITION

1410 PRICES FORK ROAD

## CMMID PALPATION BARN ADDITION

**RECOMMENDATION:**

**That the Design Preview/Review graphics be approved and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion date of November 2015.**

## **DESIGN PREVIEW/REVIEW FOR HEALTH CENTER IMPROVEMENTS**

The Schiffert Health Center (“Health Center”) comprises the north wing of McComas Hall, located on Washington Street at West Campus Drive on the Blacksburg campus. The 5,200 gross square foot (GSF) renovation and addition project includes a 3,500 GSF single-story addition to the north wing of McComas Hall, extending near the west end of the Cassell Lot. Interior improvements will require renovation to 1,700 GSF of existing health center clinic and supporting space. The addition will provide adequate clinic space within the Health Center to meet accreditation standards. Additionally the university’s Campus Alcohol Abuse Prevention Center (CAAPC) does not currently have a permanent home. The CAAPC is proposed to be located in the Center’s addition with its own exterior entrance.

## Capital Project Information Summary – Health Center Improvements

### BUILDINGS AND GROUNDS COMMITTEE

June 1, 2015

**Title of Project:**

Health Center Improvements

**Location:**

The Schiffert Health Center (“Health Center”) comprises the north wing of McComas Hall, located on Washington Street at West Campus Drive on the Blacksburg campus.

**Current Project Status and Schedule:**

The project is in the preliminary design phase. Future design phases will continue through November 2015. Construction is planned to commence January 2016 and be completed in twelve months.

**Project Description:**

The 5,200 gross square foot (GSF) renovation and addition project includes a 3,500 GSF single-story addition of the north wing of McComas Hall, extending near the west end of the Cassell Lot. Interior improvements will require renovation to 1,700 GSF of existing health center space.

**Brief Program Description:**

The number of students using the Health Center has increased over the years and has resulted in cramped conditions within the 16,000 GSF center. The lack of adequate space compromises the university’s ability to meet accreditation standards. In addition to the lack of adequate space for clinical services, the university’s Campus Alcohol Abuse Prevention Center (CAAPC) does not have a permanent home, and is proposed to be located in the Health Center with its own exterior entrance. Four departments will be located in the renovated and expanded portions of the Health Center: the CAAPC, the Emergency Care Unit, the Intake and the Clinical Laboratory with the Phlebotomy Unit.

**Contextual Issues and Design Intent:**

The addition will be clad in Hokie Stone and precast concrete panels, copings and trim, in keeping with the exterior materials on the existing building. Windows will include both punched openings and curtainwall glazing to maximize natural light consistent with health and well-being.

**Architect/Engineer:**

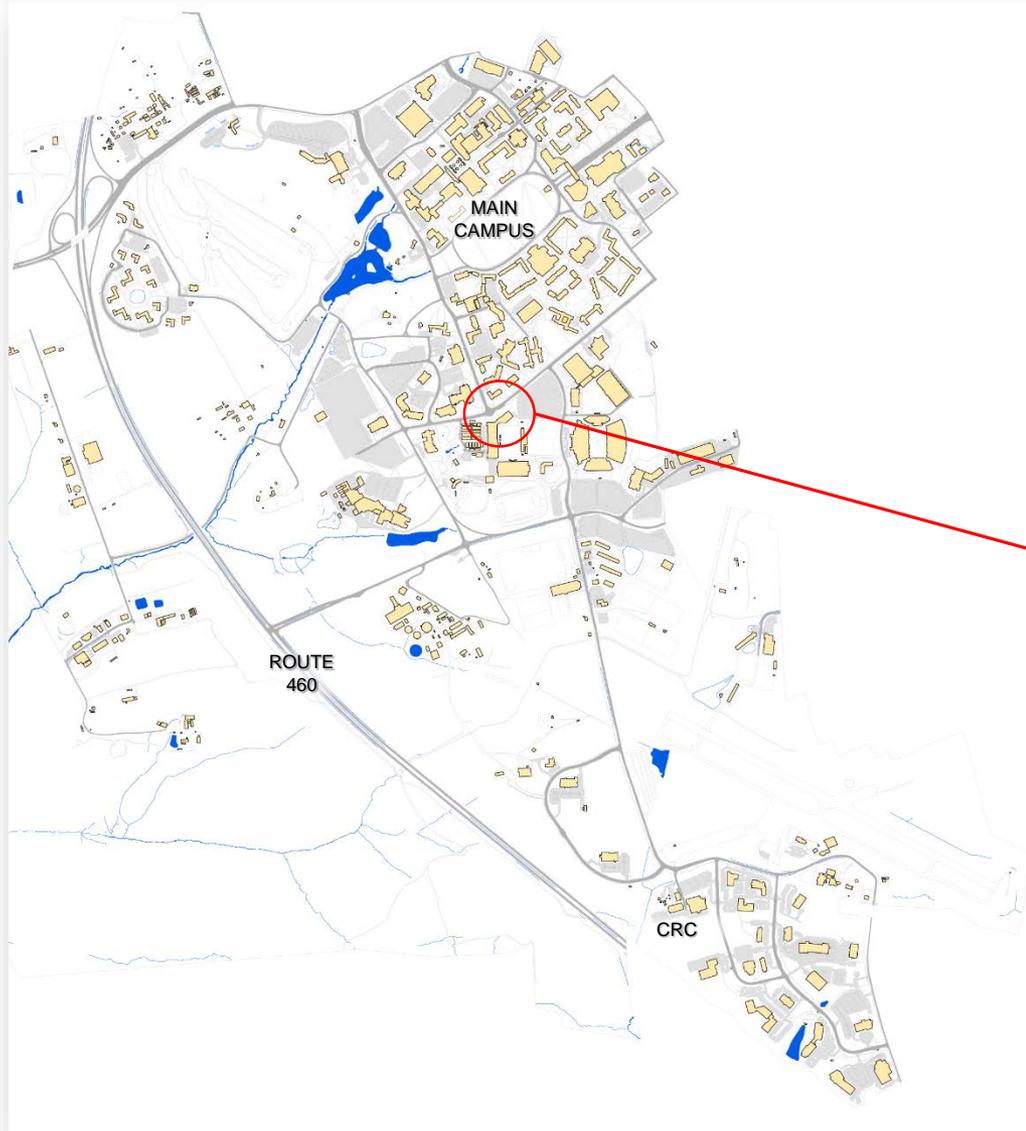
Lord Aeck Sargent

**Construction Manager:**

TBD

*Design Preview/Review for:*  
**Health Center Improvements**

# BUILDING LOCATION & SITE MAP

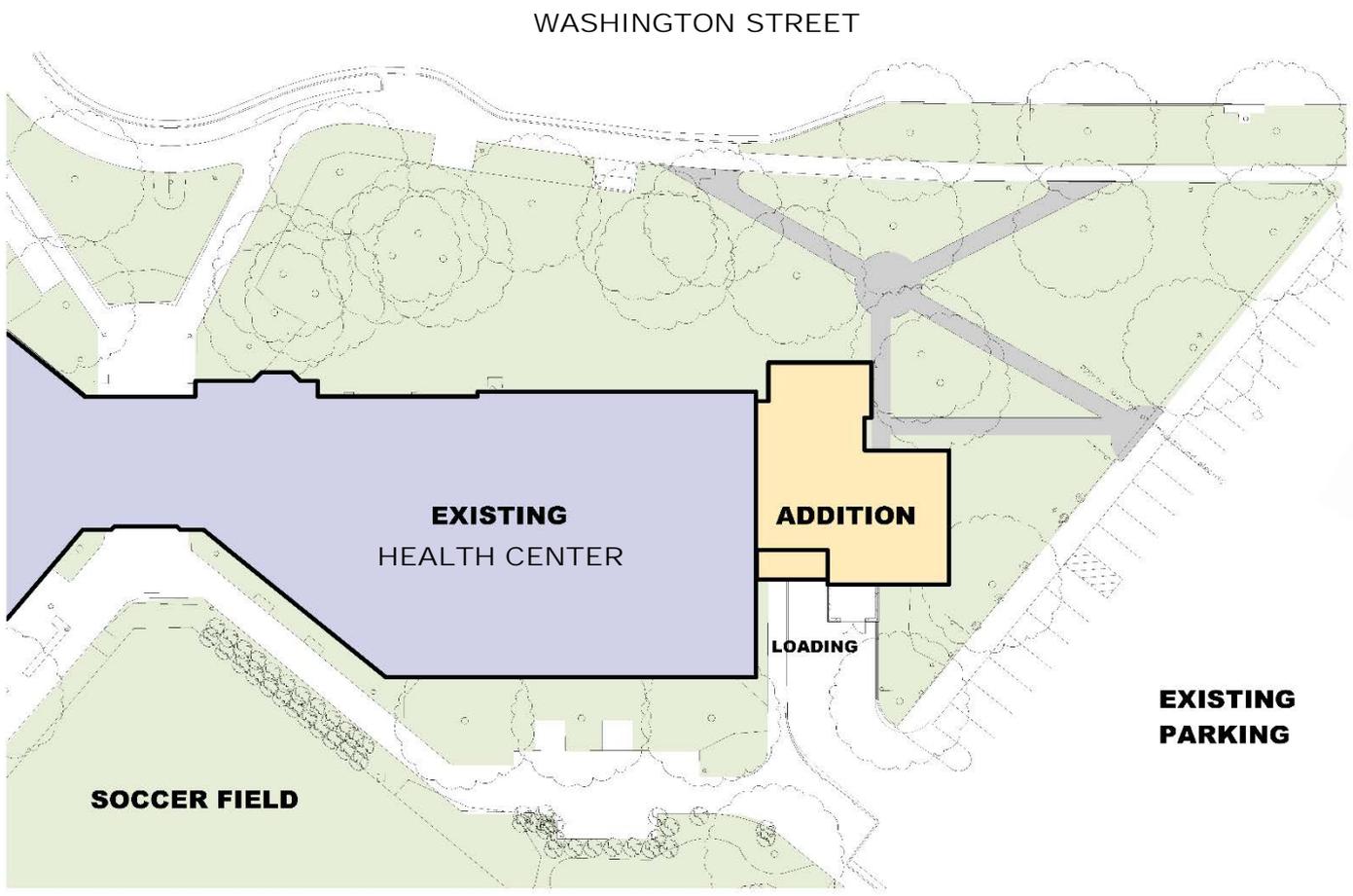


Schiffert Health  
Center at McComas  
Hall

## HEALTH CENTER IMPROVEMENTS

# SITE PLAN

LORD  
AECK  
SARGENT



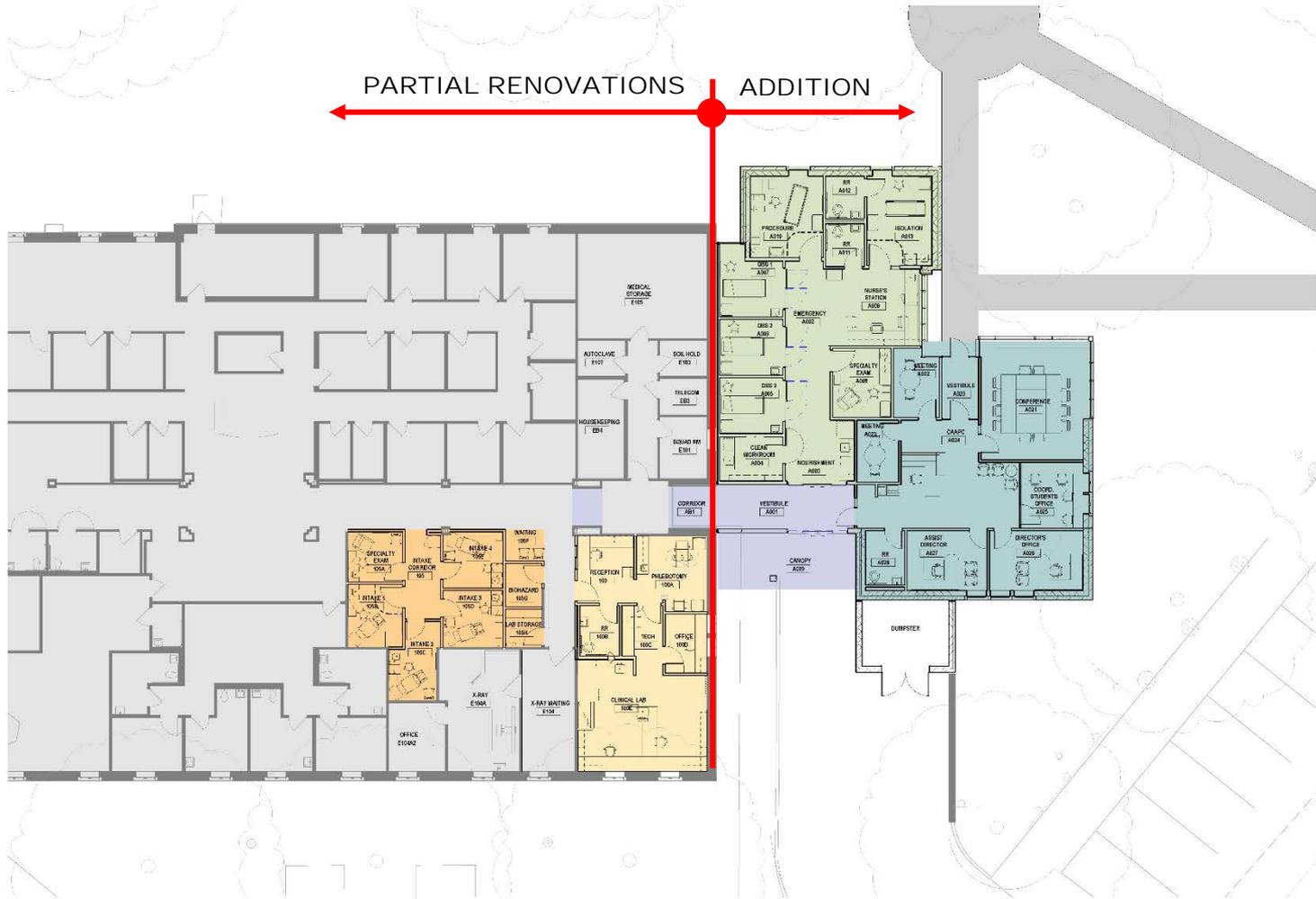
## HEALTH CENTER IMPROVEMENTS

# FLOOR PLAN

LORD  
AECK  
SARGENT

PARTIAL RENOVATIONS

ADDITION



<span style="color: green;">■</span>	EMERGENCY CARE UNIT
<span style="color: blue;">■</span>	CAVPC
<span style="color: yellow;">■</span>	CLINICAL LAB
<span style="color: orange;">■</span>	X-RAY
<span style="color: purple;">■</span>	COMMON/STORAGE
<span style="color: grey;">■</span>	NOT IN SCOPE
1,685 CSF	EMERGENCY CARE UNIT
172 CSF	VISIT SUITE
1,654 CSF	CAVPC
24 CSF	COMMON
67 CSF	CLINICAL LAB
75 CSF	ENTRANCE
91 CSF	CORRIDOR
2,433 CSF	ADDITION
1,867 CSF	RENOVATION
<b>5,000 CSF</b>	<b>TOTAL AREA PROJECT SCOPE</b>

# HEALTH CENTER IMPROVEMENTS

**RECOMMENDATION:**

**That the Design Preview/Review graphics be approved and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion date of January 2017.**

**BUILDING AND GROUNDS COMMITTEE**

June 1, 2015

**Capital Project Status Report**

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
<b>DESIGN</b>						
Airport Hangar Replacement	The proposed hangar project will design, construct, install necessary utilities, and equip a 14,000 gross square foot (GSF) building with the capacity to house two planes and will provide interior office spaces for pilots.	\$2,520,000	\$2,520,000	TBD TBD	TBD	The Design Build Contractor has been selected. The contract has not yet been signed.
Health Center Improvements	This project provides for a 3,500 square foot (SF), one story addition and 1,700 SF renovation of existing space to support the clinical needs of the Schiffert Health Center. The project includes improvements for the Campus Alcohol and Prevention Center and infirmary space.	\$3,268,000	\$2,868,000	Lord, Aeck & Sargent, Inc. Atlanta, GA TBD	TBD	Schematic design complete for review and approval. The Campus Alcohol Abuse and Prevention Center (CAAPC) will be located in the Health Center addition with its own exterior entrance.
Improve Kentland Facilities	The project includes new construction of three buildings totaling approximately 28,900 gross square foot (GSF) including a metabolism research laboratory, an applied reproduction facility, an arena with animal demonstration, and holding spaces for the College of Agriculture and Life Sciences.	\$7,600,000	\$0	Spectrum Design, PC Roanoke, VA TBD	TBD	Schematic design is complete. A Department of General Services funding recommendation of \$9,522,000 has been received. The General Assembly included a \$7,600,000 budget amendment to fund the project for construction. Reconciliation of scope and cost is in progress to advance the preliminary design.
Renovate/Renew Academic Buildings	This project will renovate three existing campus buildings - Sandy Hall, Liberal Arts Building, and the original portion of Davidson Hall. Collectively, these renovations will increase the functionality of three underutilized building assets, address several deferred maintenance issues, and reduce critical space deficiencies. A small addition is planned for Sandy and Liberal Arts Buildings to provide for an elevator, ADA accommodations, and circulation space improvements.	\$30,563,000	\$0	Glavè & Holmes Associates Richmond, VA Grunley Construction Rockville, MD	TBD	Preliminary design is complete. A Department of General Services project funding recommendation of \$30,563,000 has been received. The General Assembly included a budget amendment for this level of funding. Construction documents development has been initiated.
Residential Hall Connectivity	The project provides for installing the necessary components for wireless network transmission speeds up to 850 megabits per second through approximately 2,000 wireless access points in 38 residence halls. The project will also update the residential wired network infrastructure to accommodate the increased demand on the network from wireless devices.	\$4,000,000	\$4,000,000	NA NA	January 15, 2016	This project is being managed by Virginia Tech Network Infrastructure and Services (NI&S). Much of the work is anticipated to be completed by the start of the 2015 Fall Semester. Any remaining work will be completed by the start of the 2016 Spring Semester.
Women's Softball and Track and Field Facility Improvements (Planning)	The purpose of this planning project is for the Athletics program to develop a permanent solution for softball hitting practice and a long-term solution for Rector Field House serviceability for the track and field programs, including accommodating throwing practice. The planning authorization will cover establishing a scope, schedule, delivery method, preliminary design efforts, cost and funding plan for a complete solution.	\$500,000	\$500,000	Cannon Design Arlington, VA TBD	TBD	The A/E is preparing a scope and fee proposal for university review. Once agreed upon, a contract will be developed and executed for this phase of the project.

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
<b>CONSTRUCTION</b>						
Agriculture Programs Relocation	This project for relocation of the Dairy Program from Southgate Drive to Kentland Farm is required to accommodate expansion of the Airport runway and relocation of Tech Center Drive. Planning, design, construction, and financing by the Virginia Tech Foundation, Inc. and a capital lease, back to Virginia Tech, was authorized by the BOV at the May 7, 2013 meeting.	\$14,000,000	\$14,000,000	Thompson & Litton Radford, VA English Construction Company, Inc. Lynchburg, VA	January 30, 2014	Construction progress delayed due to weather. Dairy herd relocation is planned by June 1, 2015 pending certificate of occupancy and permitting by the Virginia Department of Health for milk production and storage. The construction mobilization for the relocation of Tech Center Drive is anticipated in May.
Classroom Building	This project provides for the design and construction of a 73,275 SF academic building which will contain state-of-the-art instructional space to accommodate the unmet demand for multi-discipline general assignment classrooms and labs. The new academic building will include approximately 15 flexible classrooms and 4 laboratory rooms of various sizes and configurations to accommodate multiple teaching methods. The building will provide approximately 1,600 student stations with wireless capability throughout.	\$42,650,000	\$0	EYP Architecture & Engineering Washington D.C. W.M. Jordan Company. Newport News, VA	July 8, 2016	Construction in progress. Site work and utilities underway. Structural steel on site. Perry Street has been temporarily closed and is scheduled to reopen in June 2015. Project is on schedule.
Fire Alarm Systems and Access	This project provides for critical life safety improvements in several educational and general facilities on campus. Fire alarm systems will be installed or expanded in as many campus buildings as funding allows, including Randolph Hall, War Memorial Hall, Food Science and Technology, Norris Hall, Lane Hall, Patton Hall, Litton Reaves Hall, Whittemore Hall, Architecture Annex, and Newman Library.	\$4,900,000	\$0	Multiple A/E Firms Multiple Contractors	Multiple Sub-projects December 1, 2016	Release of construction funding is allocated subject to cost approval by the Department of General Services for each building. Buildings complete: Wallace Annex. Buildings in bidding/construction phase: Food Science and Technology, Architecture Annex, War Memorial Hall, Whittemore Hall, and Lane Hall. Buildings in cost review phase: Litton Reaves Hall, Patton Hall and Randolph Hall. Buildings in design phase: Norris Hall.
Indoor Athletic Training Facility	This project provides for the design and construction of a new indoor multi-sport practice facility large enough to accommodate football punting and kicking practice. The new facility will be located on the site of the existing football practice fields.	\$21,300,000	\$21,300,000	HKS Richmond, VA W.M. Jordan Company Richmond, VA	June 1, 2015	Construction in progress. Foundations and structural steel complete. Roof complete. Precast installation complete. Exterior glazing in progress. Mechanical systems in progress. Painting in progress to be followed by artificial turf installation. Project is on schedule.
Marching Virginians Practice Facility	This project includes new construction of an equipment storage building, a covered open-air practice pavilion, and a soccer-size artificial turf field. The approximately 4,300 GSF building will provide the Marching Virginians with restrooms, lockers, instrument storage space, and a drum line room for percussion instruments. The 4,000 SF pavilion will be attached to the building and will provide a protected area for the Marching Virginians to practice during inclement weather. A lighted, soccer-size artificial turf field will be shared with Recreational Sports.	\$4,750,000	\$4,750,000	Thompson + Litton Radford, VA Snyder & Associates Blacksburg	March 31, 2015	Construction in progress. Athletic field grading ongoing. Building structure complete, roof dried in, close-in in progress. A solution to address unsuitable soil is being priced. Project approximately 90 days behind schedule, with tentative completion in July.

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
McBryde 100 Classroom Renovation	This project provides for a complete renovation of the McBryde 100 auditorium, which is heavily used for large enrollment classroom lectures.	\$2,800,000	\$2,800,000	Westlake, Reed Leskosky Washington D.C.	August 21, 2015	Construction contract awarded. Contractor to start demolition after Commencement for substantial completion by the start of fall semester classes.
				MB Contractors, Inc Roanoke, VA		
South Recreation Field Surface Replacement	This project replaces existing natural turf fields, located on approximately 15 acres adjacent to the airport runway, with synthetic turf covering the size of six soccer fields for multi-sport use. The new fields will enhance the student experience and allow for expansion of the Recreational Sports intramural and club sports programs.	\$4,600,000	\$4,600,000	Gay and Neal Blacksburg	June 27, 2015	Construction is in progress and on schedule.
				Field Turf USA, Inc.		
Unified Communications and Network Renewal Project	This project replaces outdated equipment and upgrades campus communications systems, providing infrastructure and equipment enhancements over a five year period. The project scope includes upgrades to the Internet Protocol (IP) Network, the cable plant, and equipment rooms in buildings throughout campus.	\$16,508,000	\$16,508,000	Multiple A/E Firms	2016	The migration of services from the ROLM telephone system to the new unified communications (UC) system is substantially complete (99%). The ROLM telephone system will be decommissioned in the fall. Enhanced mobility and messaging services are being piloted and will be released as part of the base UC service offering. Requirements gathering and project planning activities for the data center network upgrade are underway. Room construction and electrical and mechanical renovations work has been completed in Whittemore, Pamplin, and Wallace. Cabling, wireless, and building network upgrades have recently been completed in Whittemore and Pamplin.
				Various Contractors		
Upper Quad Residential Facilities	This project provides for the demolition and reconstruction of Brodie and Rasche residence halls to serve the Corps of Cadets. The new residence halls totaling approximately 210,000 GSF will provide over 1,000 beds in double and triple rooms sharing hall community bathrooms. These new residence halls will be constructed at the approximate location of the original Rasche Hall and Brodie Hall. Both buildings will provide double and triple occupancy rooms that meet the residence and in-room storage space needs of the cadets. Both new residence halls will provide dedicated meeting, community, and group spaces, specifically designed to meet Corps program and organization needs. Thomas Hall and Monteith Hall will also be demolished as part of this project.	\$91,000,000	\$91,000,000	Clark Nexsen Charlotte, NC	Pearson - July 31, 2015 Brodie - July 31, 2016	Construction of Pearson Hall (Rasche replacement) is 30 days behind schedule. Mechanical rough-in is also in progress. Site utilities for Pearson Hall are 85% complete. Hokie Stone is in progress. Contract completion date for Pearson Hall is July 31, 2015 with demolition and reconstruction of the Brodie Hall replacement to begin in May. Contractor is developing plans to staff up to bring the project back on schedule.
				Barton Malow Company - Charlottesville, VA		

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
<b>CLOSE-OUT</b>						
Moss Arts Center (Center for the Arts)	This project provided for design and construction of a new 92,000 GSF Performing Arts Center and the renovation of Shultz Hall for a 1,300-seat performance auditorium, a visual arts gallery, creative technologies program, and support spaces.	\$100,087,000	\$72,700,448	Snohetta AS – New York, NY with STV Group, Inc. – Douglasville, PA Holder Construction Company – Atlanta, GA	September 6, 2013	The punch list is progressing for final completion of the construction contract. Project to be closed out June 30.
Renovate Davidson Hall	This project provided for the demolition of the deteriorated and outdated center and rear section additions to Davidson Hall. The original building remains and a new replacement addition of 44,845 GSF was constructed to provide modern laboratory and research space.	\$32,003,099	\$0	Einhorn Yafee Prescott - Washington, DC Barton Malow Company-Charlottesville, VA	January 16, 2014	Building occupied and classes in session. Project to be closed out June 30.
Goodwin Hall (Signature Engineering Building)	This project provided for a new 154,935 GSF state-of-the-art, technology enhanced flagship building for the College of Engineering to include research, classroom, and office space.	\$95,218,249	\$47,609,125	Zimmer Gunsul Frasca Architects LLP Washington, DC Gilbane Building Company – Richmond, VA	April 15, 2014	Construction is complete and building is fully occupied. Lab equipment installation continues.
Human and Agricultural Biosciences Building I (HABBI)	This project provided for a new 93,860 GSF advanced agricultural research laboratory facility.	\$53,759,344	\$0	Lord, Aeck & Sargent, Inc. – Atlanta, GA Skanska USA Building, Inc. - Durham, NC	December 9, 2013	Construction is complete. Project to be closed out June 30.
Chiller Plant I	This project expanded the campus chilled water infrastructure and provided for the design and construction of a new 16,655 GSF chiller plant in the southwest side of campus to serve the new Human and Agricultural Biosciences Building (HABBI) and other buildings in the life sciences precinct.	\$20,097,729	\$8,039,092	Burns and Roe Service Corporation – Virginia Beach, VA The Whiting-Turner Contracting Co. – Baltimore, MD	June 15, 2013	Building construction is complete. Project to be closed out June 30.

# CAPITAL PROJECT STATUS REPORT

Board of Visitors Meeting: *June 1, 2015*

Christopher H. Kiwus, PE, PhD  
Associate Vice President and Chief Facilities Officer

# PROJECTS IN DESIGN

- Airport Hangar Replacement
- Health Center Improvements
- Improve Kentland Facilities
- Renovate Academic Buildings
- Residential Hall Connectivity
- Women's Softball and Track and Field Facility Improvements (Planning)



## IMPROVE KENTLAND FACILITIES

- **Currently under schematic design**
- **General Assembly included budget amendment for funding**
- **Reconciliation of scope and cost in progress to advance preliminary design as a result of less funding received (\$7.6 million vs \$9 million)**

# RENOVATE ACADEMIC BUILDINGS

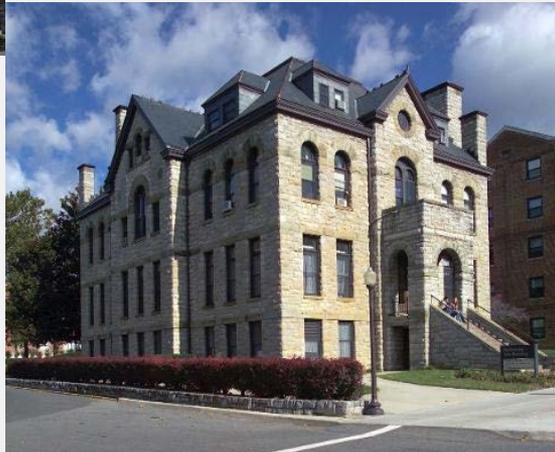
- Will renovate three existing campus buildings: Sandy Hall, Liberal Arts Building, and the original portion of Davidson Hall
- Preliminary design is complete
- Construction documents development has been initiated



Sandy Hall



Davidson Hall



Liberal Arts Building

# PROJECTS UNDER CONSTRUCTION

- Agriculture Program Relocation
- Classroom Building
- Fire Alarm Systems and Access
- Indoor Athletic Training Facility
- Marching Virginians Practice Facility
- McBryde 100 Classroom Renovation
- South Recreation Field Surface Replacement
- Unified Communications and Network Renewal Project
- Upper Quad Residence Halls



# FIRE ALARM SYSTEMS

## Complete

- Wallace Annex

## In construction

- Architecture Annex
- Food Science & Technology Building
- Lane Hall
- War Memorial Hall
- Whittemore Hall

## Preliminary design submitted to DGS for cost review

- Litton Reaves Hall
- Patton Hall
- Randolph Hall

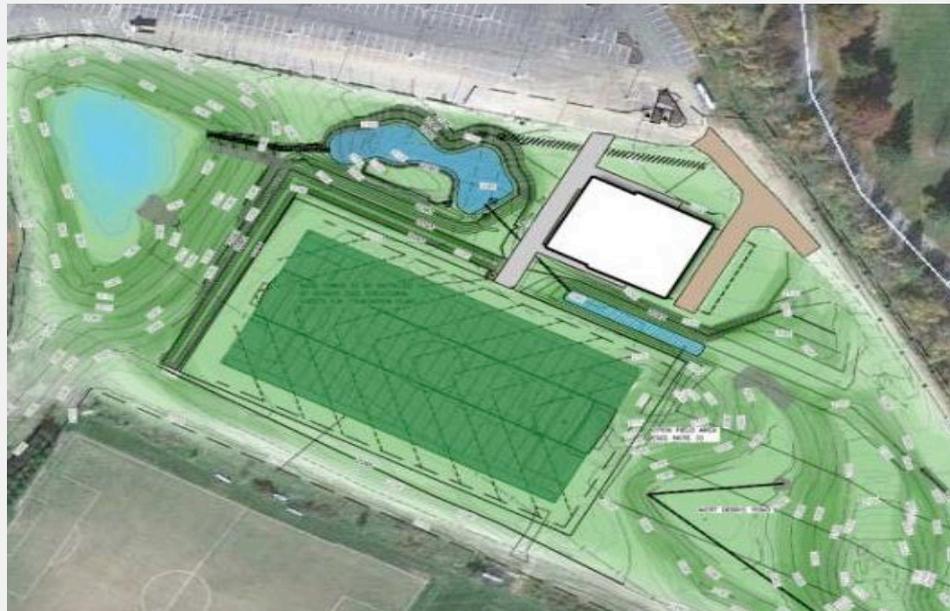
## Preliminary design progressing

- Norris Hall



# MARCHING VIRGINIANS PRACTICE FACILITY

- **Includes new construction of an equipment storage building, a covered open-air practice pavilion, and a soccer-size artificial turf field**
- **Construction in progress**
- **Project approximately 90 days behind schedule, with tentative completion in July**



# MCBRYDE HALL 100 CLASSROOM RENOVATION

- **Includes a complete renovation of the McBryde Hall 100 Auditorium, which is heavily used for large enrollment classroom lectures**
- **Construction contract awarded**
- **Demolition began after Commencement**
- **Substantial completion by the start of fall semester classes**



# SOUTH RECREATION FIELD SURFACE REPLACEMENT

- Replaces existing natural turf fields with synthetic turf covering the size of six soccer fields for multi-sport use
- Project under construction and on schedule
- Contract completion date: June 27, 2015



## UPPER QUAD RESIDENCE HALLS

- Includes the demolition and reconstruction of Brodie and Rasche residence halls to serve the Corps of Cadets
- Construction of Pearson (formerly Rasche) is over 30 days behind schedule
- Targeted completion date for Pearson is July 2015 with demolition and reconstruction of Brodie to follow for completion in July 2016





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FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE  
THROUGH INTENTIONAL DESIGN OF THE PHYSICAL CAMPUS

DR. ELEANOR FINGER

MR. JASON SOILEAU

# Primary Assumptions

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**500 Additional Entering First-Year** Students in Fall 2015, resulting in **2,000 student** net growth over four years.

Possible **growth beyond 2,000** over an eight year period to approximately 29,000 undergraduates by **fall 2022**.

Virginia Tech intends to **house** approximately one third or **up to 2,350** of the new enrollment growth;

The growth will be planned to intentionally strengthen the **Virginia Tech experience** by promoting **diversity and engagement** by facilitating **multi-disciplinary** and **cross-generational** interaction.

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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TASK FORCE ON THE STUDENT EXPERIENCE – CAUTIONARY THEMES

# THEME

The **disparity in quality of spaces** across the campus, and student experiences within them, vary widely, contributing to a **widening gap** between possible **experiences** for students and faculty alike.

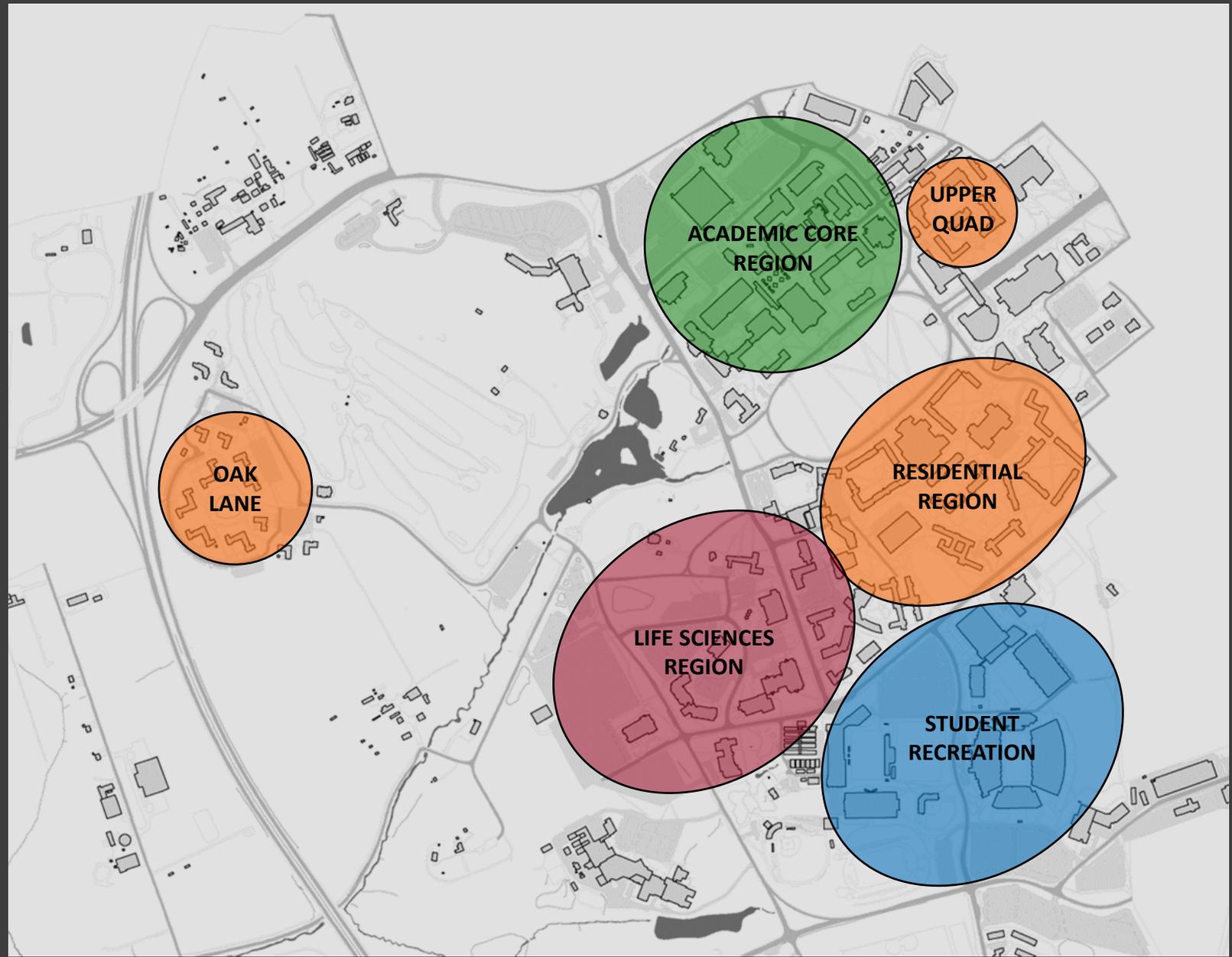
RESIDENTIAL EXPERIENCES – POSITIVE



RESIDENTIAL EXPERIENCES – NEGATIVE

# THEME

**Physical segregation**  
perpetuates silos.



**CAUTIONARY THEMES: LEARNING FROM WHERE WE HAVE BEEN**

# THEME

Our spaces **fail** to consistently **invite** students, faculty, and staff to **gather informally** outside of the classroom.

EFFECTIVE "LINGERING" SPACE

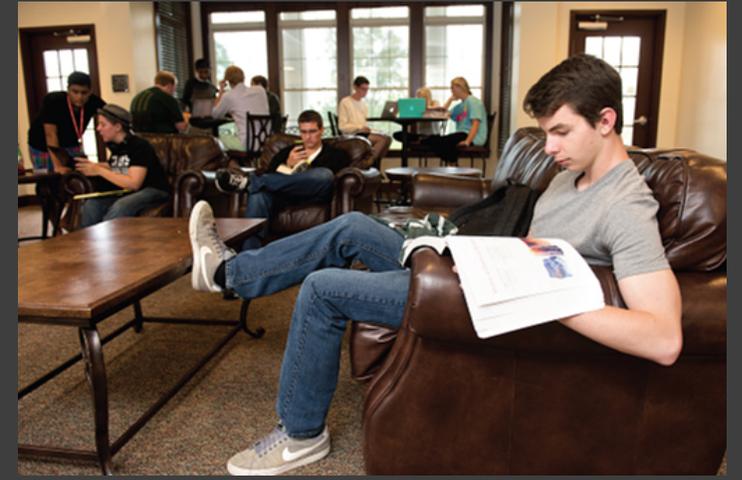


TRANSITIONAL – FAILS TO PROVIDE "LINGERING" OPPORTUNITIES

# THEME

Insufficient attention to the physical infrastructure of student-life facilities risks the erosion of a Virginia Tech strategic advantage.

Planning for these spaces must be done with intention.



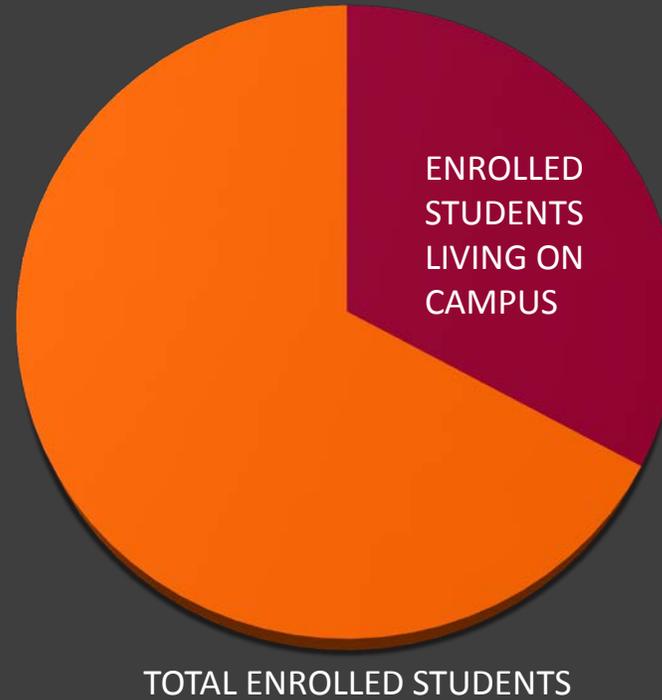
FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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TASK FORCE ON THE STUDENT EXPERIENCE –  
OUR RESPONSE

# IMPERATIVE

Virginia Tech must **preserve its historical** strength as a **residential campus** and re-conceptualize residence halls as **learning spaces** with the unique potential to **integrate academic and student life.**



- Adopt a **comprehensive** residence hall **renovation plan.**
- **Plan for growth** of on-campus population.
- **Incorporate academic spaces** in all residence hall renovations.
- Grow **living-learning and residential college** programmatic initiatives.

# IMPERATIVE

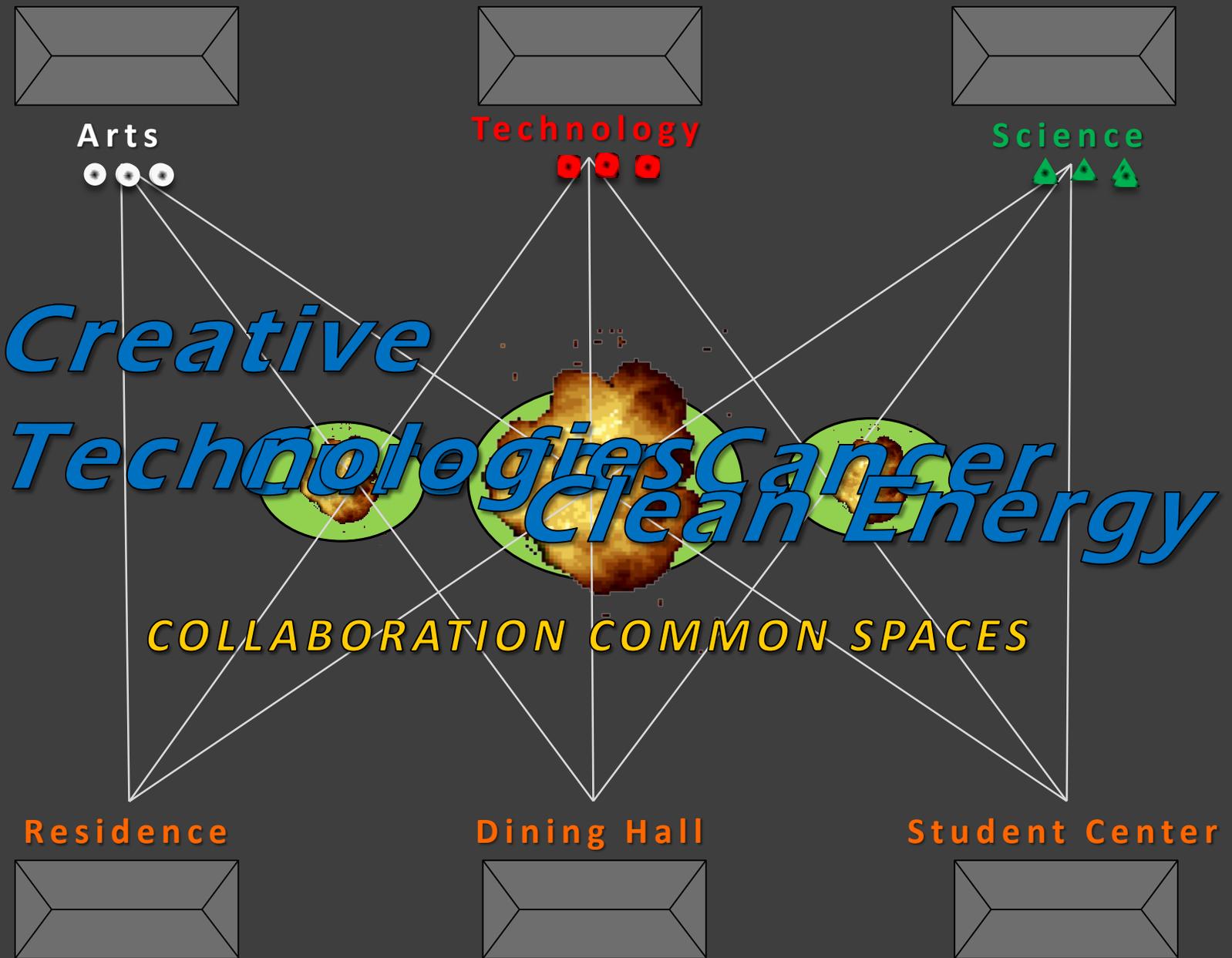
Virginia Tech will **create physical spaces**, both indoors and outdoors, which **support** a culture of **community** and connection for **meaningful interactions** and **relationships** among students, staff, and faculty.



- Implement a Campus Commons Initiative to **create multiple hubs** (or neighborhoods) across campus.
- Create **central gathering spaces for faculty** within “neighborhoods.”
- **Enhance character of outdoor spaces** to facilitate planned and unplanned encounters.

# IMPERATIVE

Virginia Tech will embrace a campus culture that values faculty and staff engagement with students, and seeks to strengthen an infrastructure that facilitates mentorship, inspiring programmatic initiatives, and practical hands-on experiences to enhance classroom learning.



FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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THROUGH THE RESIDENTIAL COLLEGE MODEL

# The Residential College Model

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The community is **multidisciplinary** (students from every discipline are not only welcome, but this diversity is an important part of the learning).

The community is **multigenerational** (students from all classifications, freshman through graduate students are not only welcome, but critical to the experience).

The community is led by an academic faculty member **working and living side-by-side** with student affairs educators.

# The Residential College Model

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The community offers students an **extraordinary opportunity** to live in that same community for the duration of their experience affording unusual possibilities for **mentorship** and **leadership** in the residential environment.

The community, through its physical spaces and programmatic emphases, will celebrate the **intellectual, artistic, social, and contemplative lives** of students in the spirit of Virginia Tech's commitment to educating the whole student.



Community Space



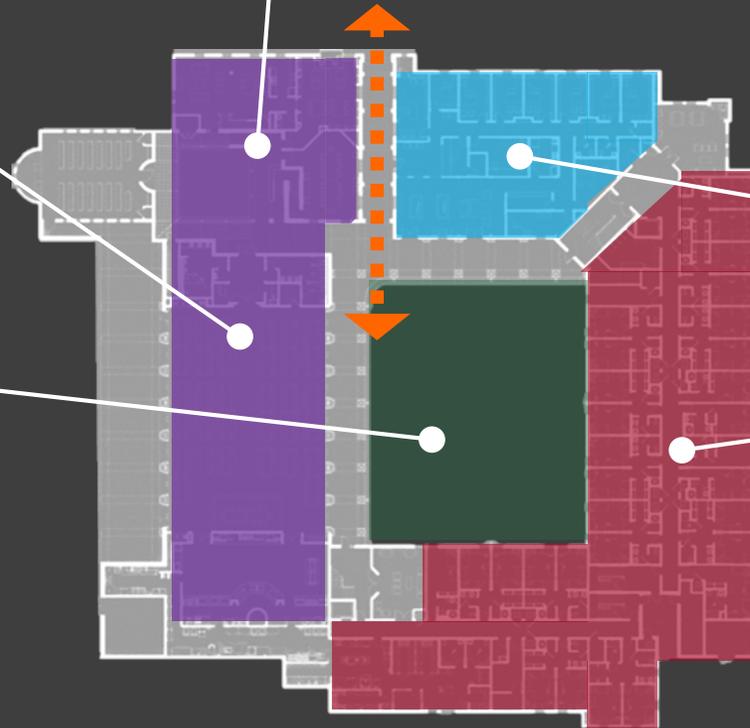
Community Space



Portal



Community Quad Space



Faculty Office Space

Student Living Space

**MIXED USES PROMOTE DIVERSITY AND ENGAGEMENT**

BROOKS COLLEGE FLOOR PLAN

**CASE STUDY: BROOKS RESIDENTIAL COLLEGE AT BAYLOR UNIVERSITY**

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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PLANNING FOR GROWTH ON THE PHYSICAL CAMPUS

Virginia Tech's **beautiful landscape, iconic architecture, and relationship of buildings to open spaces** creates a powerful **"sense of place"**

Any future development should **retain and enhance** these characteristics

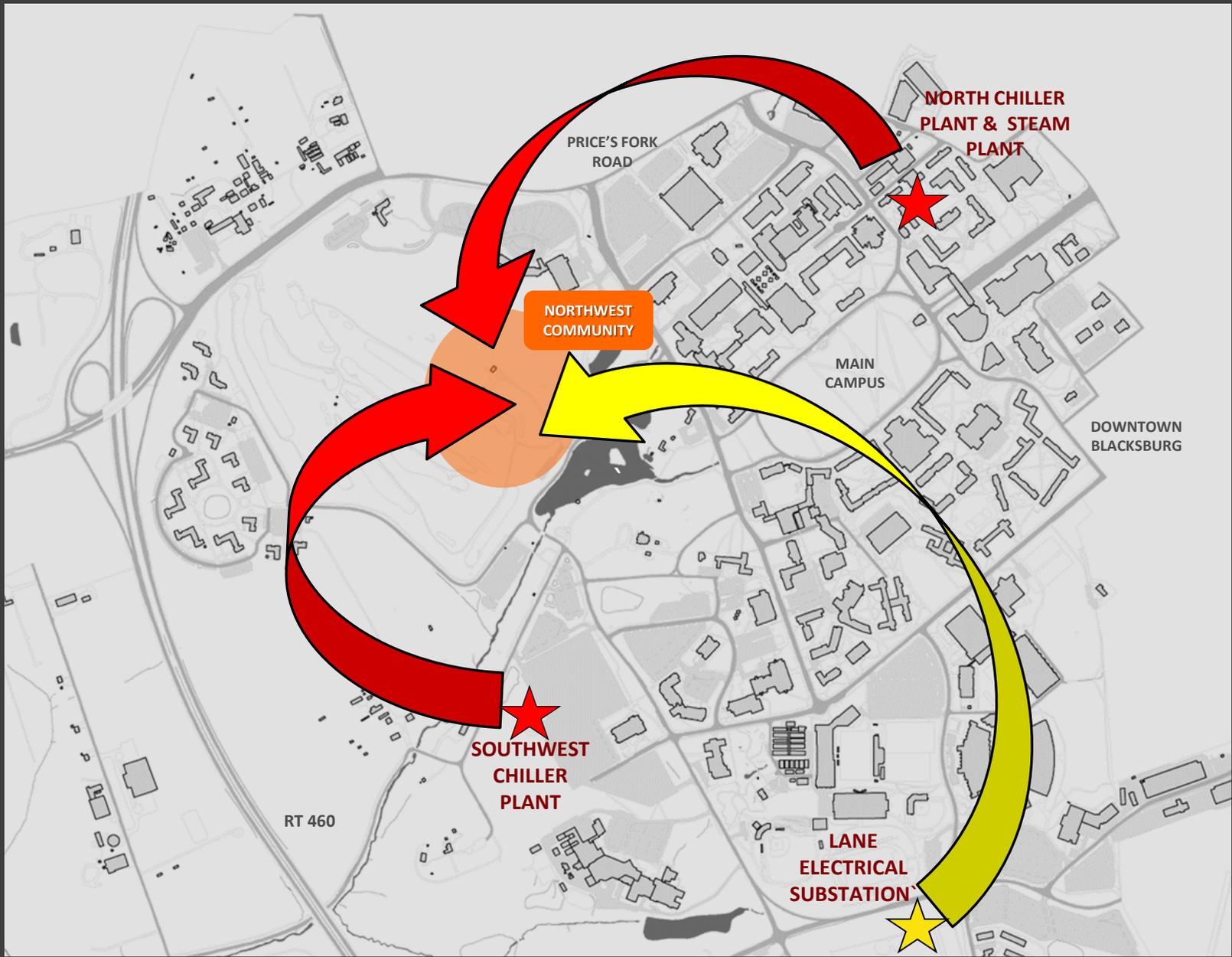


FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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UTILITIES, ROADS, AND PEDESTRIAN INFRASTRUCTURE

-  ALTERNATIVE ENERGY
-  POWER
-  POTABLE WATER
-  STEAM
-  NATURAL GAS
-  CHILLED WATER PIPING
-  HIGH SPEED COMPUTING



**PROVISION OF UTILITY INFRASTRUCTURE TO NORTHWEST COMMUNITY REGION**

## WESTERN PERIMETER ROAD

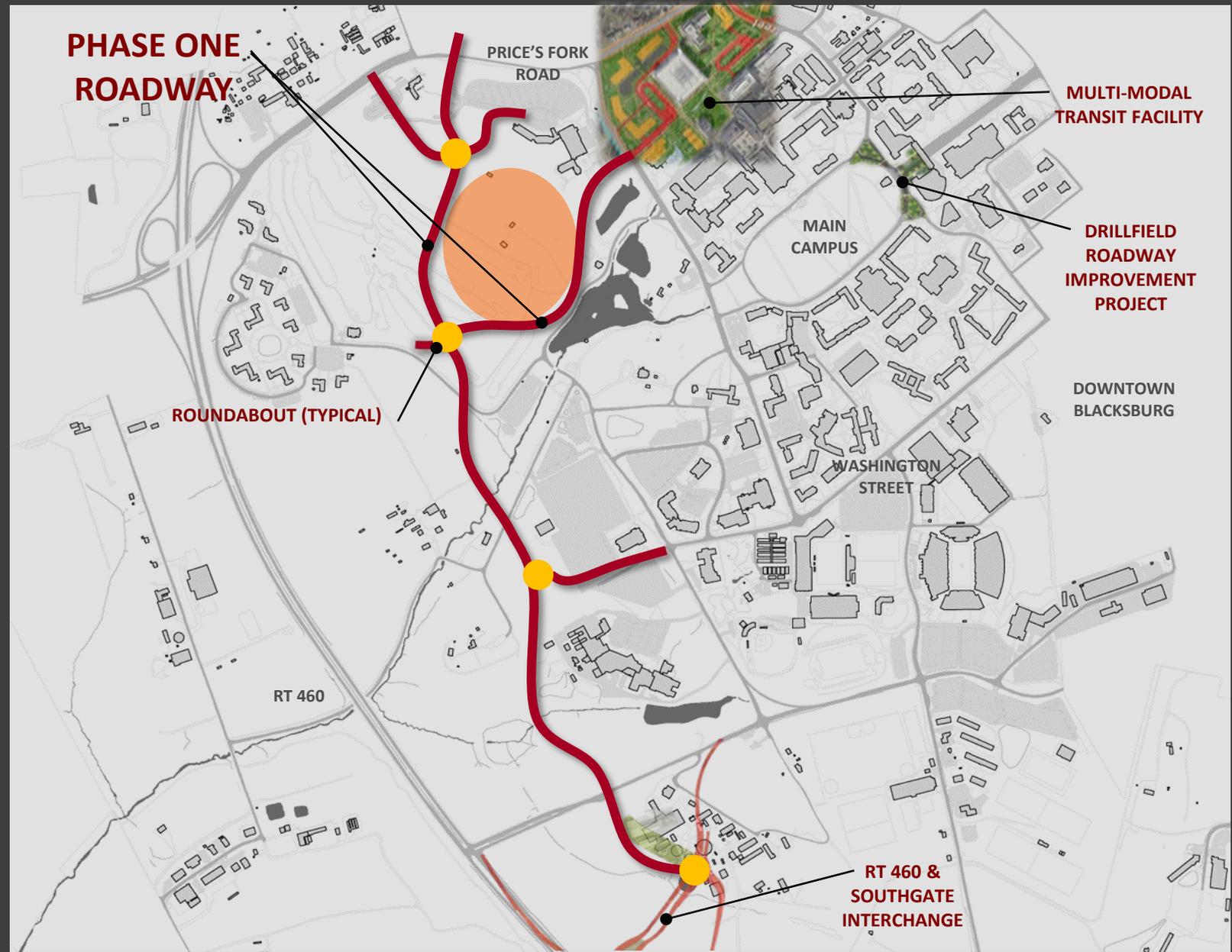
- 4 TRAVEL LANES
- BIKE LANES
- MEDIAN
- LANDSCAPE BUFFER

## PERRY STREET EXTENSION

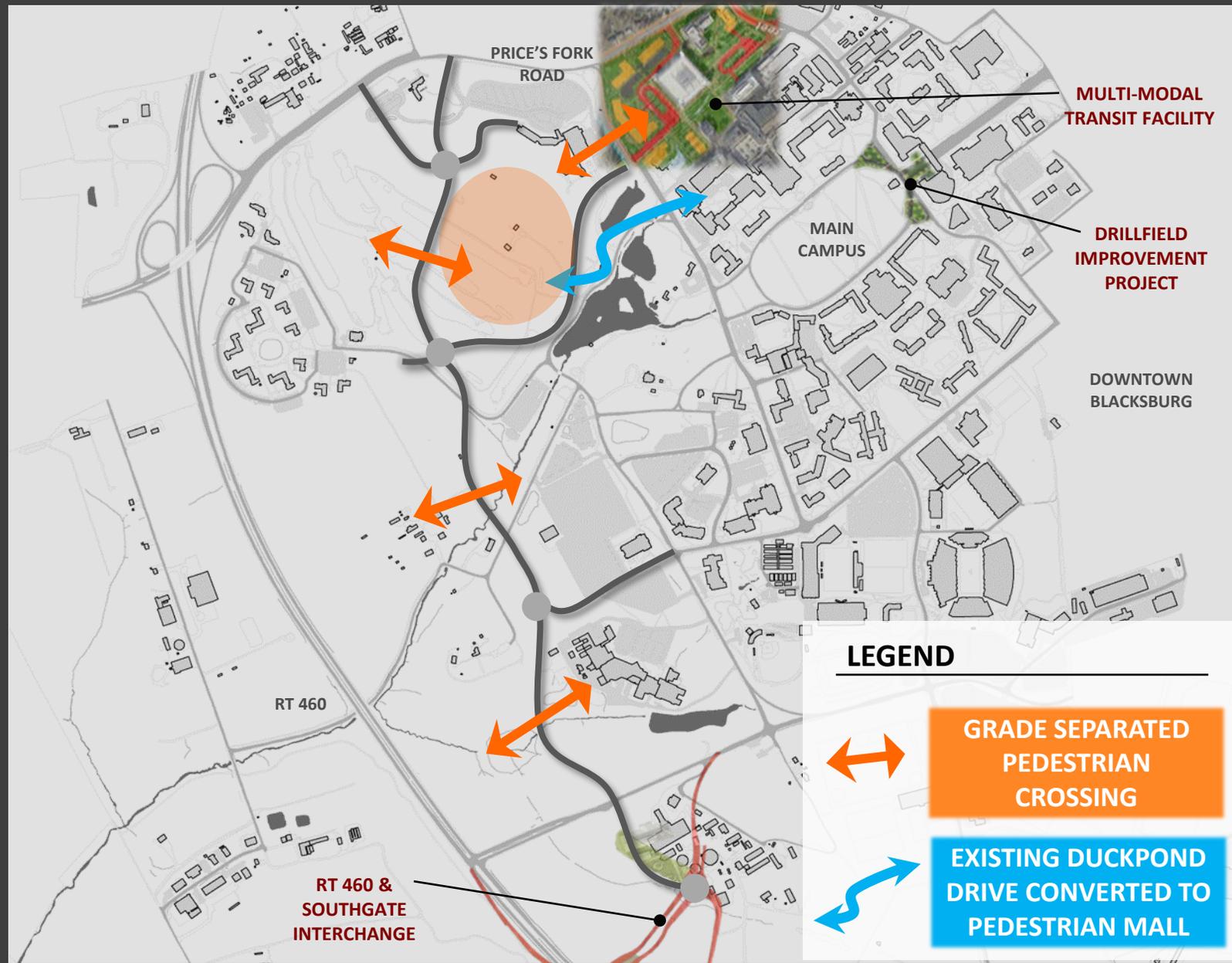
- 2 TRAVEL LANES
- BIKE OR PARKING LANES
- MEDIAN
- LANDSCAPE BUFFER

## WASHINGTON STREET EXTENSION

- 2 TRAVEL LANES
- BIKE OR PARKING LANES
- LANDSCAPE BUFFER



# PROVISION OF ROAD INFRASTRUCTURE TO NORTHWEST COMMUNITY REGION



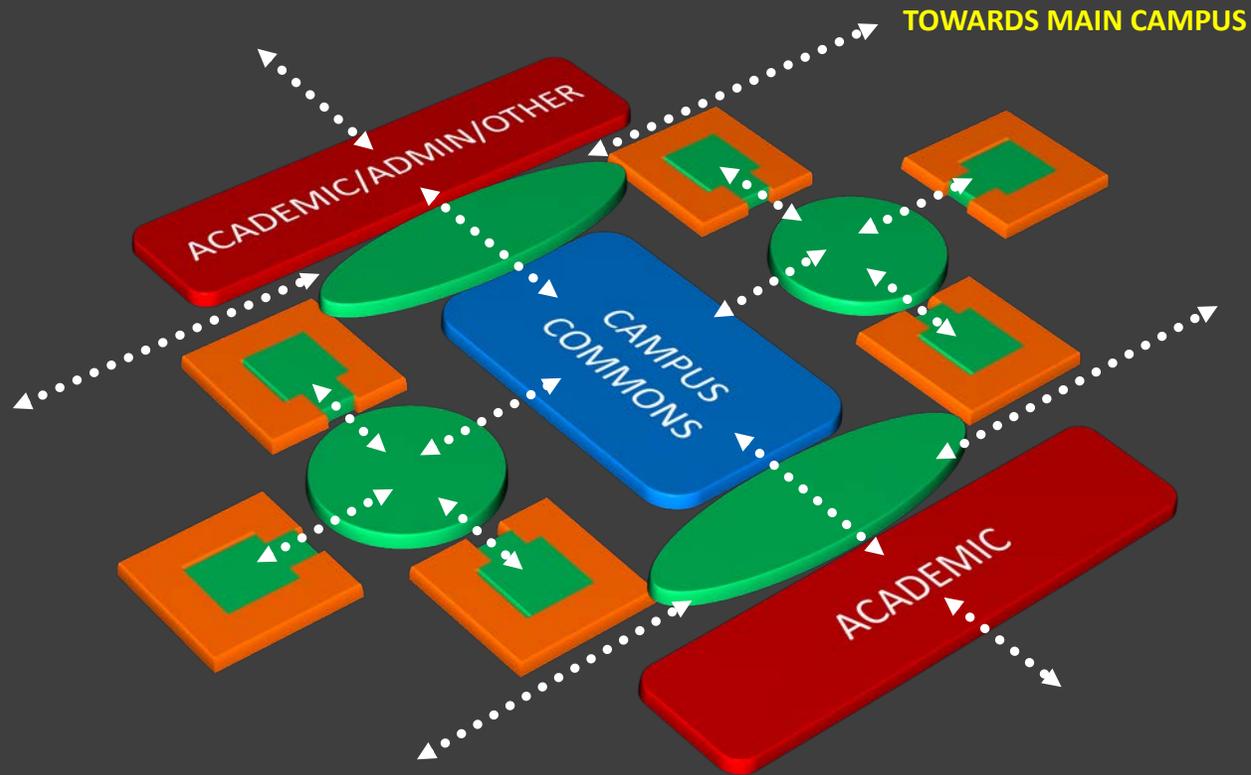
**PROVISION OF PEDESTRIAN INFRASTRUCTURE TO NW COMMUNITY REGION**

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

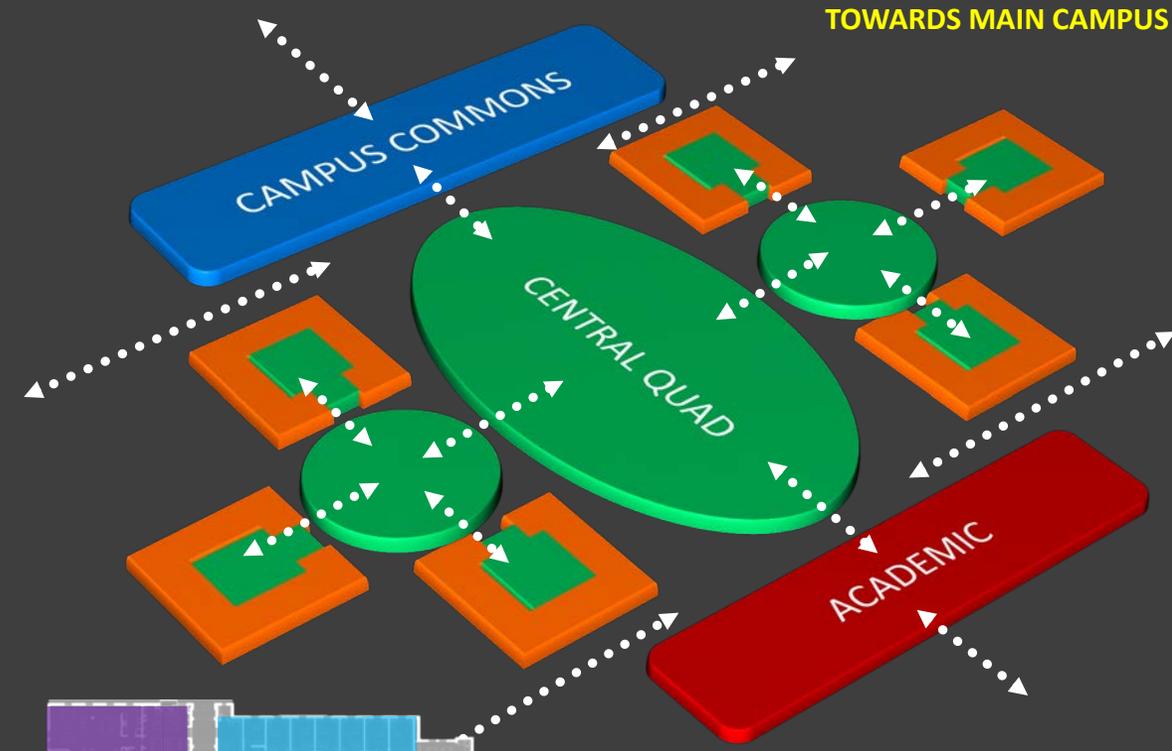
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NORTHWEST COMMUNITY SCHEMATIC DIAGRAMS

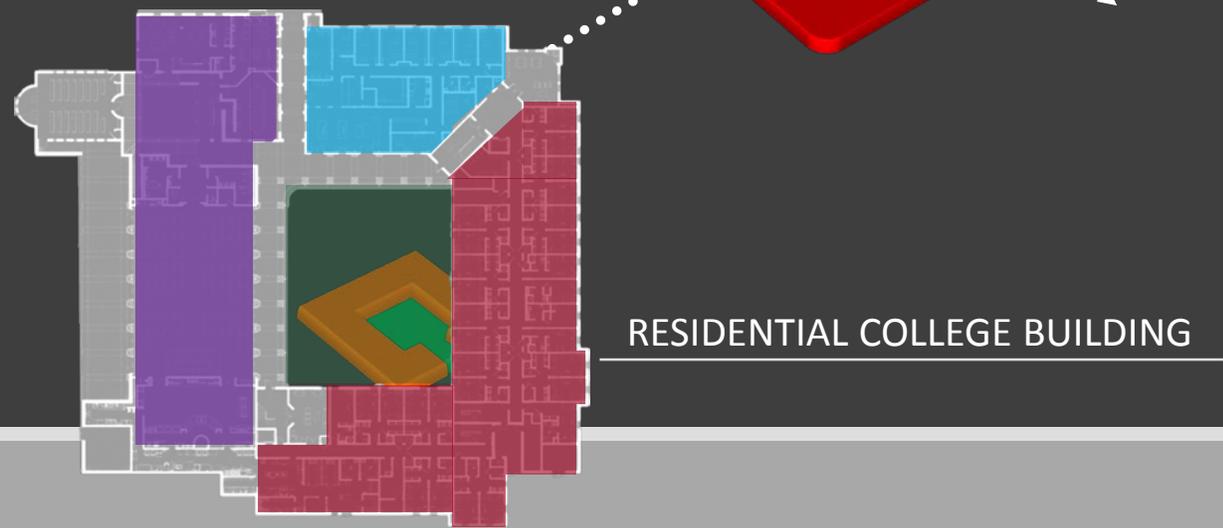
# CONCEPT ONE



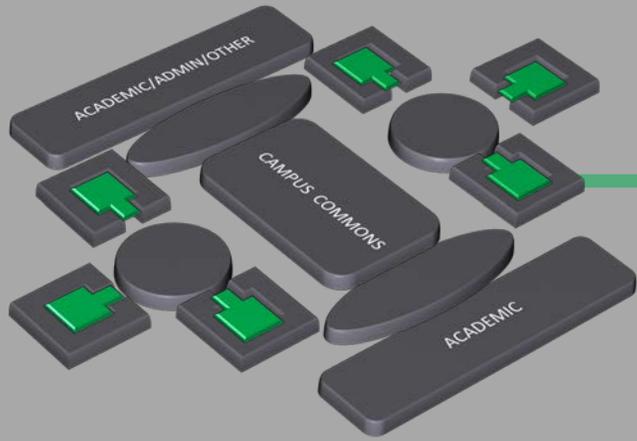
# CONCEPT TWO



PRIMARY DIFFERENCE? → DISTRICT HEARTBEAT

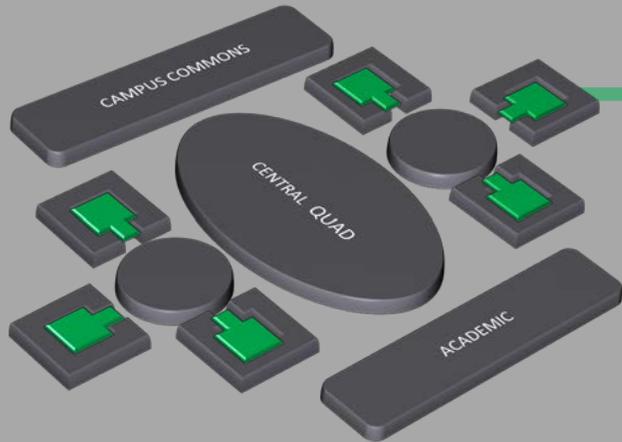


## CONCEPT ONE



Stanford University – Green Library Courtyard

## CONCEPT TWO



Yale University - Saybrook Quad



University of Virginia – Darden School of Business



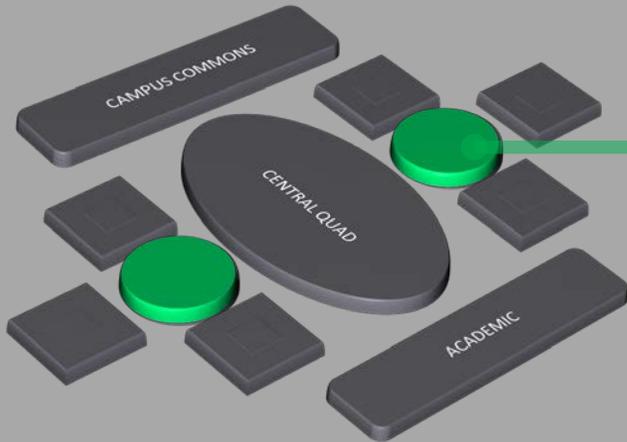
Yale University

## VARIOUS QUAD CHARACTERS

# CONCEPT ONE



# CONCEPT TWO



Stanford University – Science Engineering Quad



Cuyamaca Community College – Student Center



Cambridge University – Peterhouse Old Court

VARIOUS QUAD CHARACTERS

## CONCEPT ONE



## CONCEPT TWO

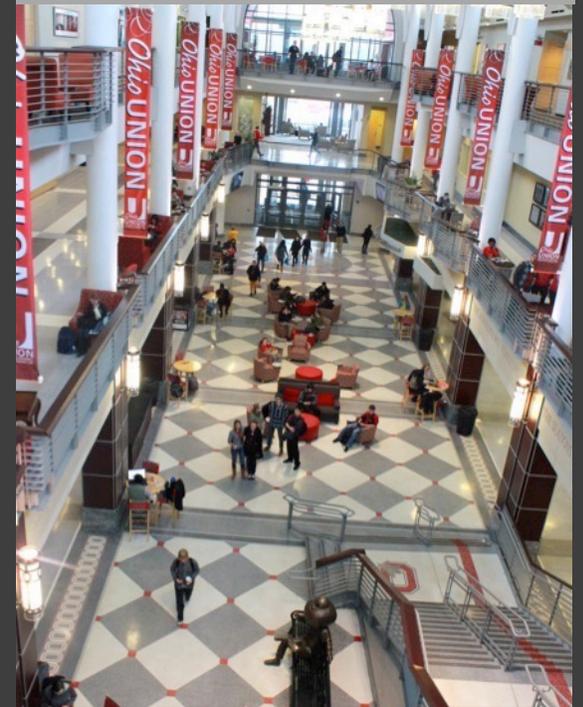


Dining Space

Recreation



Student Union



Mail/Copy/Print & Student Support Services



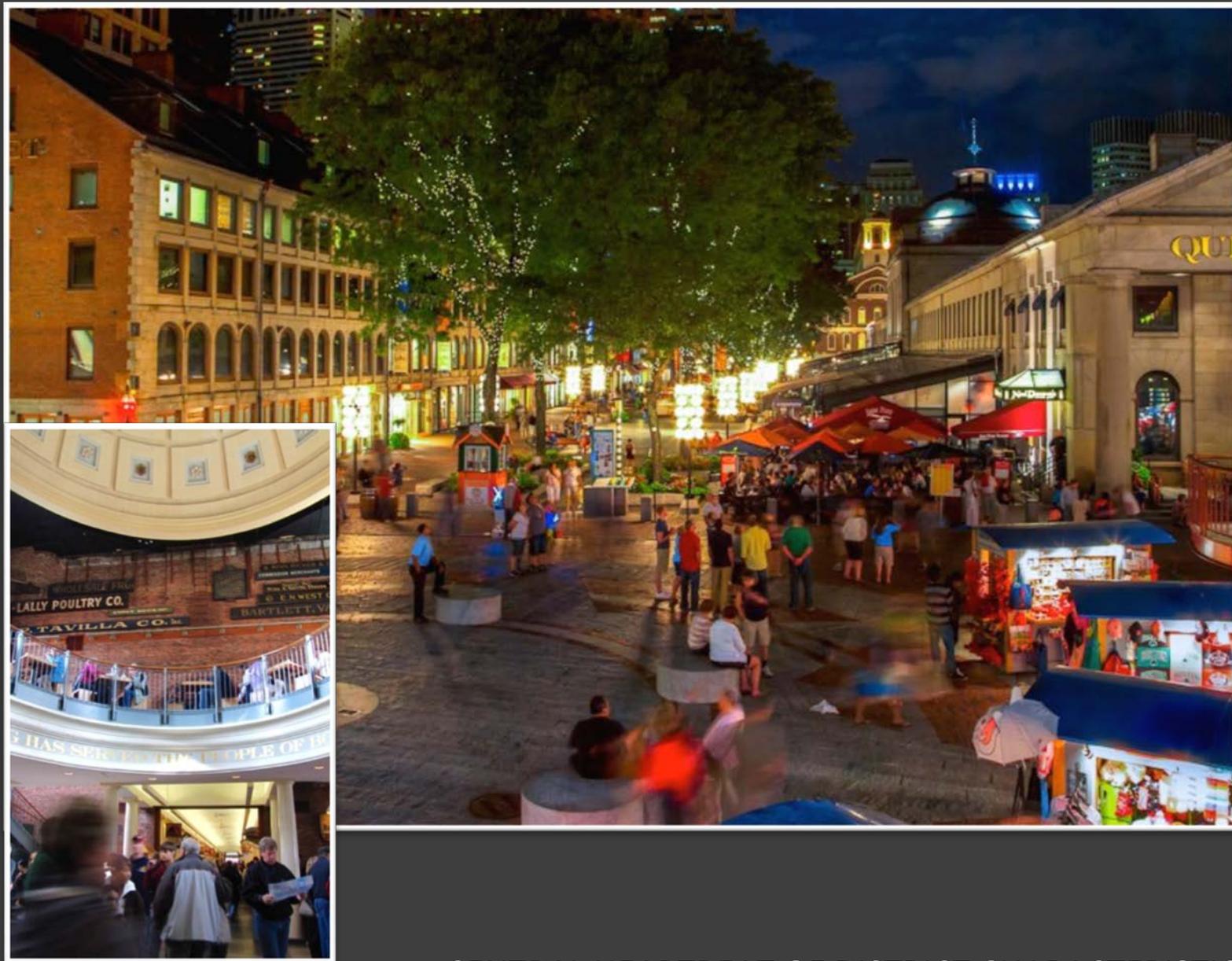
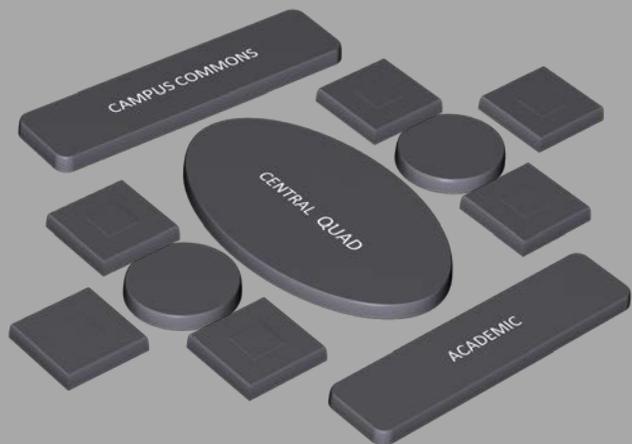
Meeting Spaces

VARIOUS CAMPUS COMMONS USES (SIZE/SCALE NOT REFLECTIVE OF VT COMMONS)

## CONCEPT ONE



## CONCEPT TWO



CENTRAL HEARTBEAT OF DISTRICT CHARACTERISTICS

# CONCEPT TWO



Oxford University – Keble College Chapel



Stanford University – The Oval



University of Washington – The Quad



University of Virginia – The Lawn

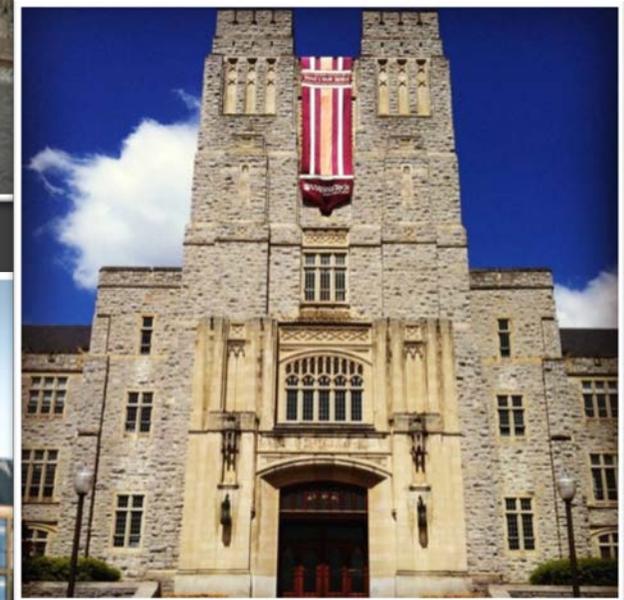
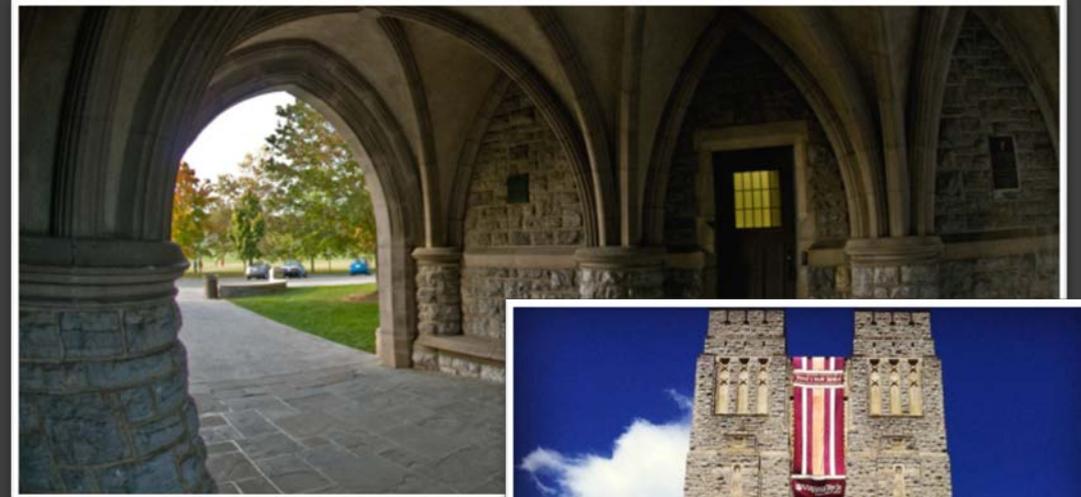
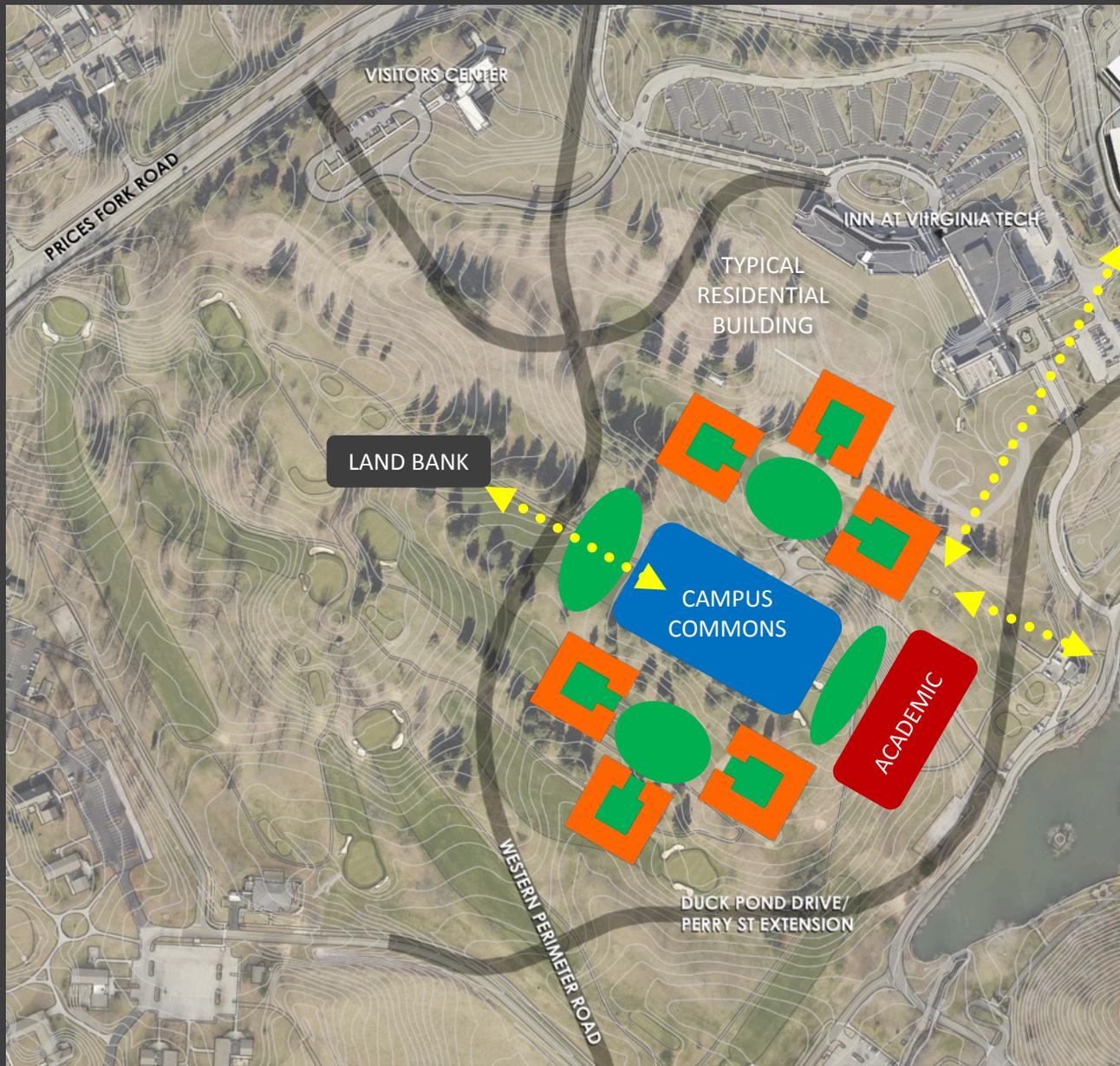
VARIOUS QUAD CHARACTERS

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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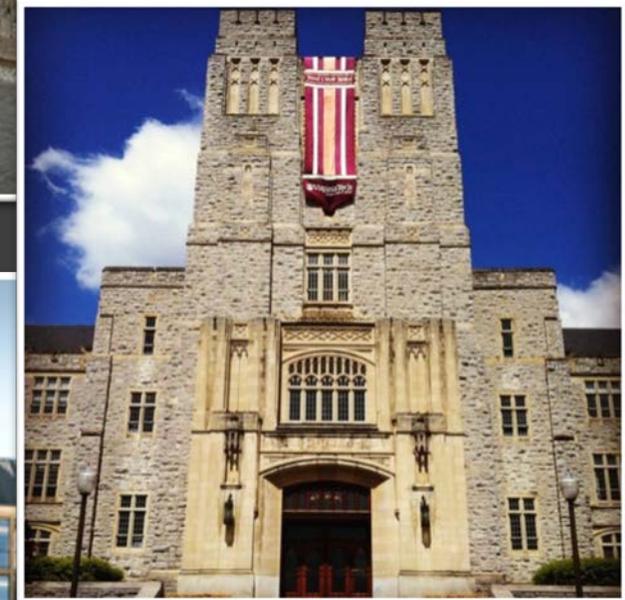
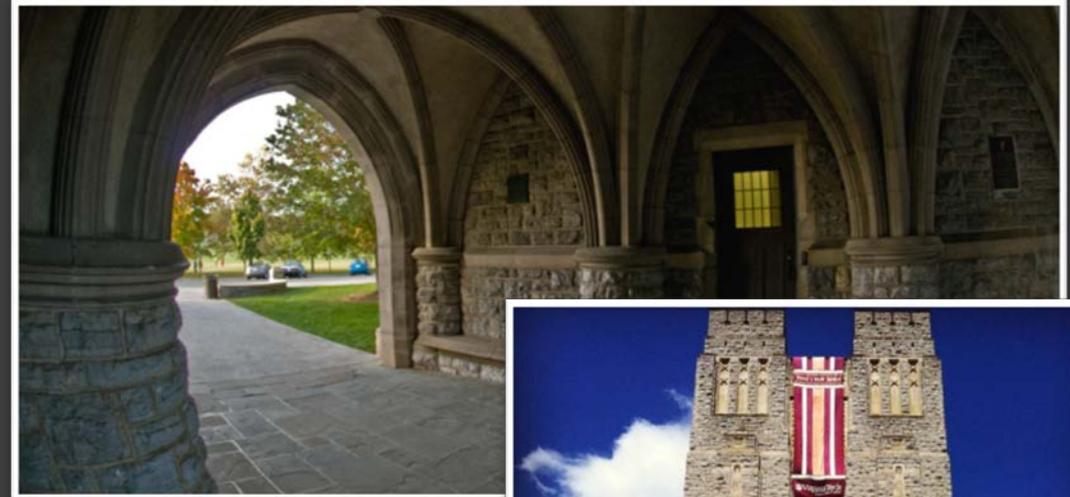
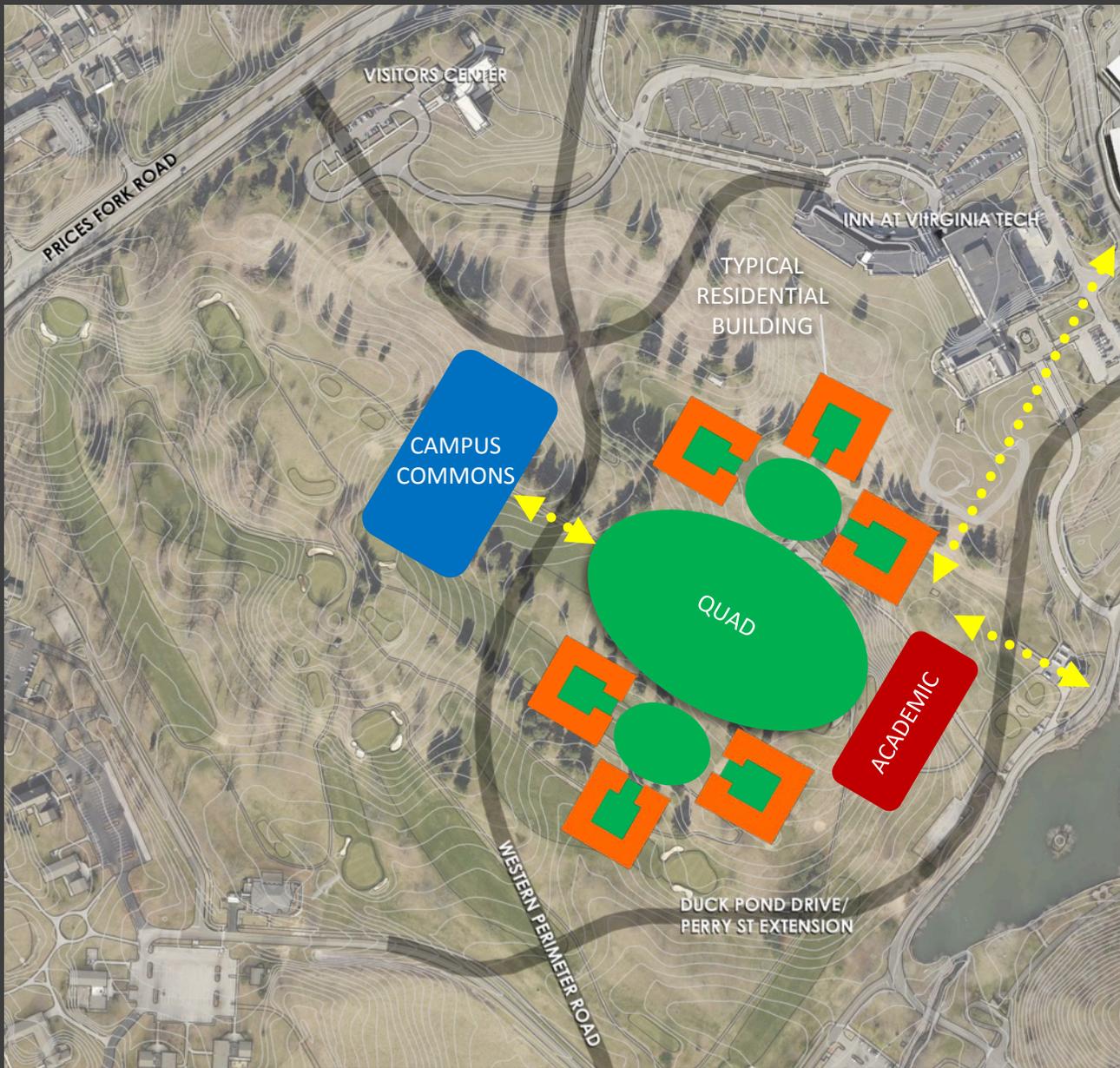
SITE ADAPTATION

## INCORPORATE VIRGINIA TECH CHARACTER



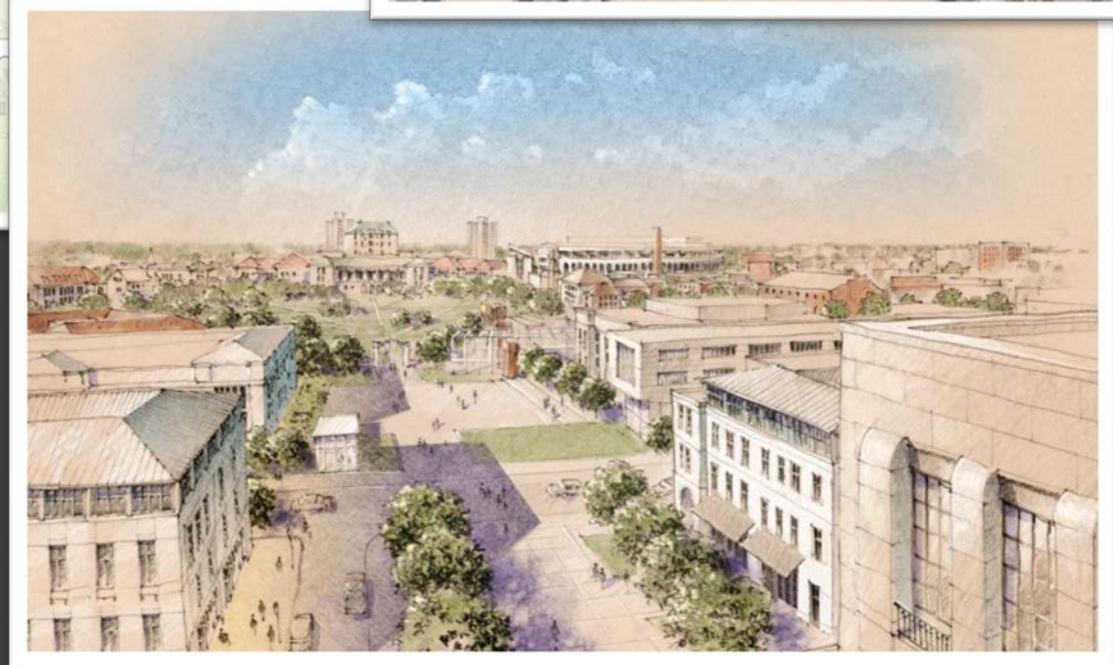
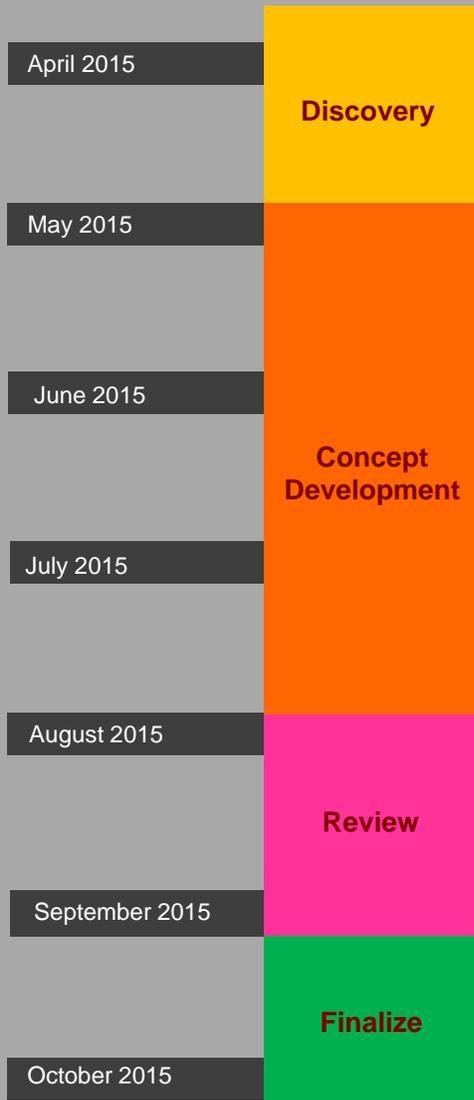
**HOW MIGHT THESE CONCEPTS ADAPT TO VIRGINIA TECH'S CAMPUS?**

## INCORPORATE VIRGINIA TECH CHARACTER



**HOW MIGHT THESE CONCEPTS ADAPT TO VIRGINIA TECH'S CAMPUS?**

# ANTICIPATED TIMELINE



EXAMPLES OF EXPECTED DELIVERABLES

**NEXT STEP: CONSULTANT-LED PRECINCT PLAN**

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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PROPOSED GROWTH SEQUENCING PLAN

**New Construction Phase II:**

- Three Residential Colleges
- Academic Building(s)
- Gain in Beds = 1,050

**Immediate:**

- Identify and Provide Utility Infrastructure (Chilled Water, Steam, Electric, Etc.)

**Immediate:**

- Renovation of Eggleston – Convert Existing Office Space to Residential Use
- Gain in Beds = 70

**Renovation Phase I:**

- Explore the Feasibility of Renovating and Repurposing Owens to Residential Use
- Potential Gain in Beds = 180

**Immediate:**

- Renovation of O'Shaughnessy

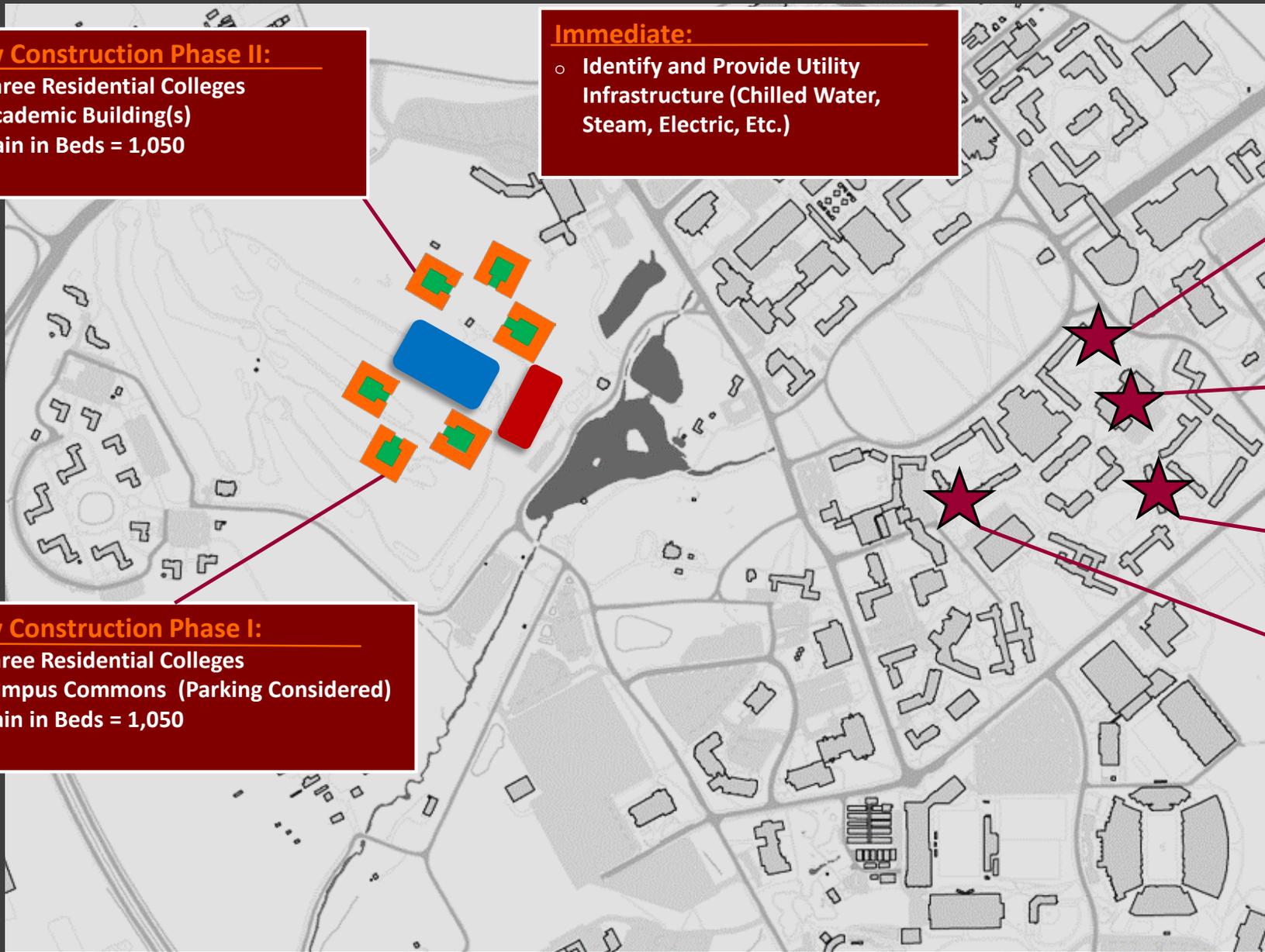
**Renovation Phase II:**

- Explore future of Slusher

**Total Bed Gain = 2,350**

**New Construction Phase I:**

- Three Residential Colleges
- Campus Commons (Parking Considered)
- Gain in Beds = 1,050



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QUESTIONS/COMMENTS?

**RESOLUTION ON APPOINTMENT TO THE  
VIRGINIA TECH/MONTGOMERY REGIONAL AIRPORT AUTHORITY**

**WHEREAS**, the Virginia Tech/Montgomery Regional Airport Authority consists of five directors who are responsible for the management and operation of the Authority; and

**WHEREAS**, one director is appointed by each of the political subdivisions of the Towns of Blacksburg and Christiansburg and the County of Montgomery, one director by the university, and one at-large director appointed jointly by the Virginia Polytechnic Institute and State University Board of Visitors, the Town Councils, and the Board of Supervisors to serve at large; and

**WHEREAS**, the Board of Visitors approved the appointment of Sherwood G. Wilson, the Vice President for Administration, as the university's representative to the Authority on August 31, 2011 to serve for a four-year term expiring August 31, 2015;

**NOW, THEREFORE, BE IT RESOLVED** that Sherwood G. Wilson, Vice President for Administration, be reappointed as the university's representative to the Virginia Tech/Montgomery Regional Airport Authority for a four-year term expiring August 31, 2019.

**RECOMMENDATION:**

That the above resolution reappointing Sherwood G. Wilson, Vice President for Administration, as the university's representative to the Virginia Tech/Montgomery Regional Airport Authority through August 31, 2019 be approved.

June 1, 2015

**RESOLUTION ON APPOINTMENT TO THE  
NEW RIVER VALLEY EMERGENCY COMMUNICATIONS REGIONAL AUTHORITY**

**WHEREAS**, the Virginia General Assembly enacted the “New River Valley Emergency Communications Regional Authority Act” permitting the formation of the New River Valley Emergency Communications Regional Authority (“Authority”); and

**WHEREAS**, the Act provided for the appointment of five persons, one from each participating political subdivision of the Authority, with the fifth member jointly appointed by the unanimous approval of the participating political subdivisions; and

**WHEREAS**, the Board of Visitors of Virginia Polytechnic Institute and State University appointed Sherwood G. Wilson, Vice President for Administration, as the university’s representative to the Authority for a four-year term that expires August 31, 2015;

**NOW, THEREFORE, BE IT RESOLVED** that Sherwood G. Wilson, Vice President for Administration, be reappointed as the university’s representative to the New River Valley Emergency Communications Authority, effective September 1, 2015 for a four-year term expiring August 31, 2019.

**RECOMMENDATION:**

That the above resolution reappointing Sherwood G. Wilson, Vice President for Administration, as the university’s representative to the New River Valley Emergency Communications Authority through August 31, 2019 be approved.

June 1, 2015

**RESOLUTION TO GRANT AN EASEMENT TO ATMOS ENERGY CORPORATION  
FOR NATURAL GAS DISTRIBUTION LINE**

The university is requesting authorization from the Board of Visitors to enter into an agreement with ATMOS Energy Corporation ("ATMOS") for the creation of an easement to ATMOS for the installation and maintenance of an eight inch (8") natural gas line on the university main campus.

**RESOLUTION TO GRANT AN EASEMENT TO ATMOS ENERGY CORPORATION  
FOR NATURAL GAS DISTRIBUTION LINE**

**WHEREAS**, Virginia Polytechnic Institute and State University (“Virginia Tech”) and ATMOS Energy Corporation (“ATMOS”) desire to enter into an Agreement for Extension of Distribution Main and Firm Transportation Service, relative to the installation and maintenance of approximately 21,500 feet of a combined eight inch (8”) steel and eight inch (8”) HDPE natural gas pipeline through the Virginia Tech main campus, in the general route and location described on a drawing entitled “Proposed 8” Natural Gas Line Virginia Polytechnic Institute Blacksburg, VA” attached hereto (Exhibit A); and

**WHEREAS**, Virginia Tech in its ongoing efforts to secure more environmentally sustainable, efficient and cost effective fuel sources for the university desires to more thoroughly and reliably implement the use of natural gas at and by the Virginia Tech power plant by creating an easement to ATMOS for the natural gas line in the herein-above described general location; and

**WHEREAS**, Virginia Tech shall and will retain the fee simple title of all real property, but will not acquire ownership of the natural gas line itself; and

**WHEREAS**, ATMOS and/or its agents, contractors or sub-contractors shall and will be solely responsible for the installation and maintenance of the natural gas line; and

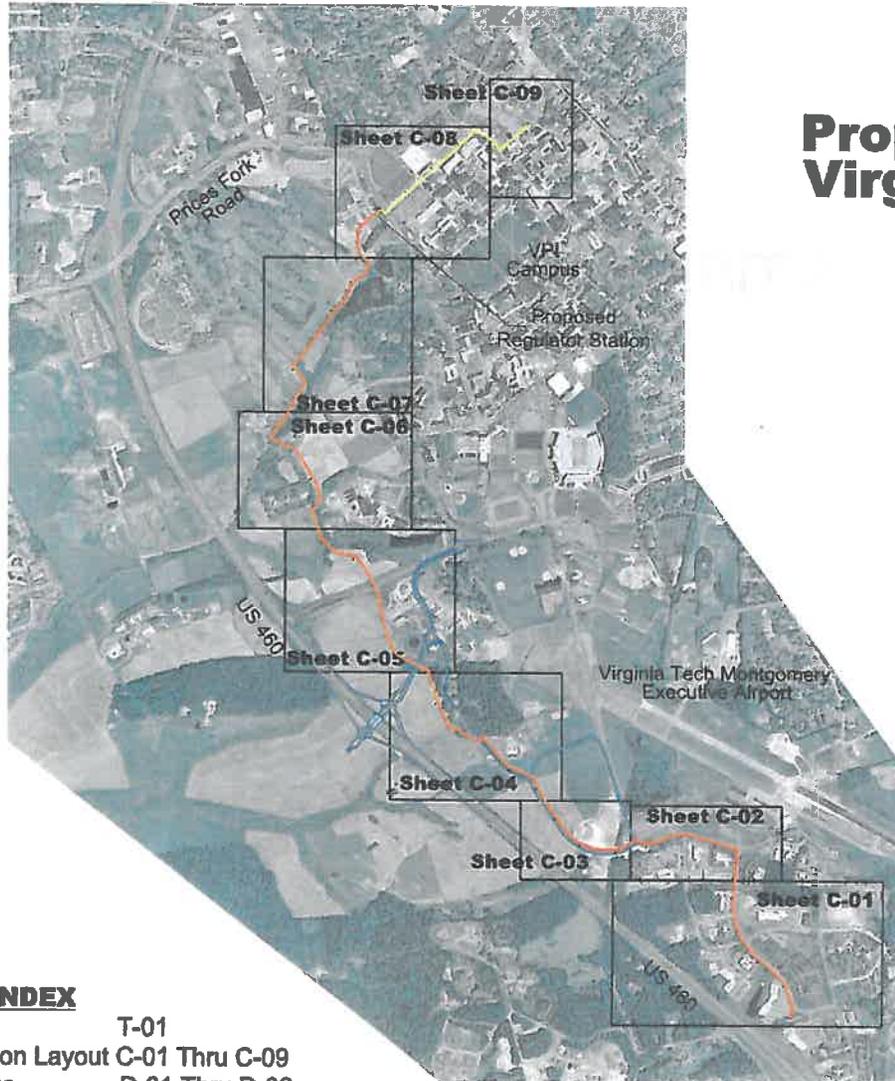
**WHEREAS**, the construction of the natural gas line by ATMOS, its contractors and/or sub-contractors, is scheduled to begin immediately;

**NOW, THEREFORE, BE IT RESOLVED** that the Vice President for Administration, or his successors and/or assigns, be authorized to execute any and all necessary documents to create and convey an easement for the installation and maintenance by ATMOS of an eight inch (8”) natural gas line in the general route and location as stated herein, all in accordance with Virginia Tech’s policy and procedures and the applicable statutes of the Code of Virginia (1950), as amended.

**RECOMMENDATION:**

That the above resolution authorizing the Vice President for Administration, or his successors and/or assigns, to execute any and all necessary documents to create and convey an easement to ATMOS for installation and maintenance of an eight inch (8”) natural gas line in the general route and location as stated herein be approved.

June 1, 2015



## Proposed 8" Natural Gas Line Virginia Polytechnic Institute Blacksburg, VA

- PROPOSED 8" STEEL PIPE
- PROPOSED 8" HDPE PIPE

### General Construction Notes

1. Maps attempt to show all utilities, but locations shown are not necessarily accurate or correct. Because maps of utilities shown are from different sources, existing locations may actually conflict. Bidders shall keep this in consideration. Contractor is responsible for determining actual physical location before pipeline construction.
2. Before actual pipeline construction, Virginia Tech or its agents shall field mark and maintain as necessary, the lines of rights of way and/or cut and fill, elevations and other necessary indicators relative to new road proposals in the areas of proposed pipeline construction.
3. Before actual pipeline construction, Atmos will field mark proposed pipeline installation based upon Virginia Tech locations provided in Note 2. Generally, proposed pipe lines are 15 feet outside proposed and existing rights of way and outside of any proposed cut or fill areas.
4. Installation Restricted to May 15 thru August 1 for the following areas:  
 Station 140+00 thru 173+44 of 8" Steel  
 Station 0+00 thru 20+00 of 8" HDPE

### SHEET INDEX

Title Page	T-01
Construction Layout	C-01 Thru C-09
Detail Page	D-01 Thru D-02



<b>Atmos Energy Mid-States</b>		
<small>510 Crescent Centre Drive, Suite 600 Franklin, TN 37067</small>		
<b>8" STEEL NATURAL GAS LINE</b>		
<b>REINFORCEMENT</b>		
<b>VIRGINIA POLYTECHNIC INSTITUTE</b>		
NO.	DATE	BY
1		
2		
3		
4		
5		
	DRW'G	DATE
	CHK'G	DATE
	APP'G	DATE
		T-01

## **RESOLUTION ON DEMOLITION OF UNIVERSITY BUILDING 433E**

The university requests approval to demolish Building 433E, which is a 1,014 gross square foot (GSF) Quonset hut-type structure on university property located at the Glade Road Research Center in Blacksburg. The building was previously used for applied research and office space and is now unoccupied and in poor condition, and is uneconomical to repair.

## **RESOLUTION ON DEMOLITION OF UNIVERSITY BUILDING-BUILDING 433E**

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the disposition of any building; and

**WHEREAS**, Building No. 433E, a Quonset hut structure outfitted for office and research use located in Blacksburg, is in poor condition, is uninhabitable and uneconomical to repair; and

**WHEREAS**, the university will obtain the approvals of the Art and Architecture Review Board and the Department of Historic Resources for the demolition of this building prior to demolition;

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors approve the demolition of Building No. 433E located in Blacksburg, in accordance with the applicable statutes of the Code of Virginia (1950), as amended.

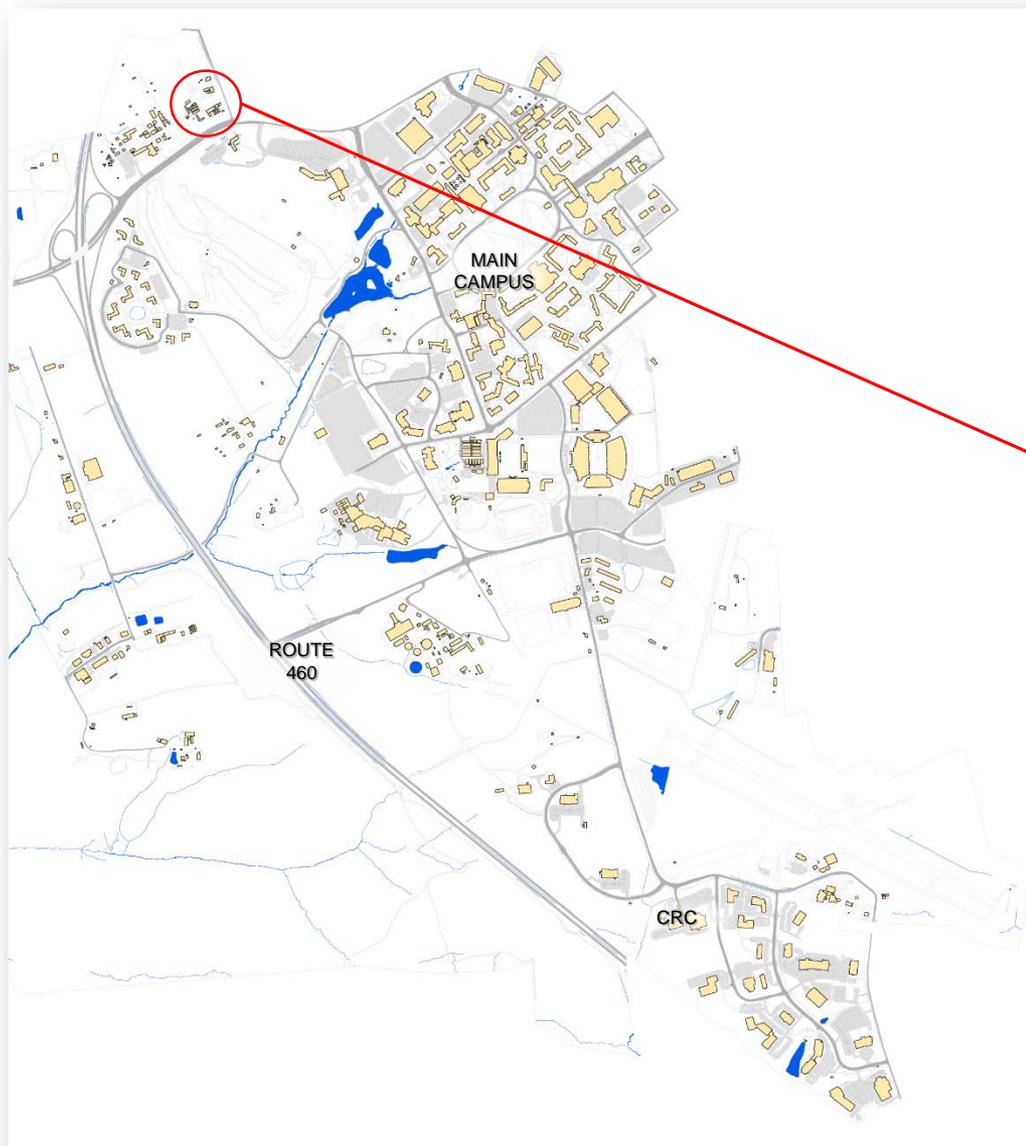
### **RECOMMENDATION:**

That the above resolution authorizing the demolition of Building No. 433E be approved.

June 1, 2015

*Resolution on:*  
**Demolition of Building 433E**

# BUILDING LOCATION & SITE MAP



Building 433E

**DEMOLITION OF BUILDING 433E**

# BUILDING ELEVATIONS



NORTH AND EAST ELEVATION



SOUTH AND WEST ELEVATION

**DEMOLITION OF BUILDING 433E**

# BUILDING INTERIOR PHOTOGRAPHS



**DEMOLITION OF BUILDING 433E**

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors approve the demolition of building number 433E, located in Blacksburg, in accordance with the applicable statutes of the Code of Virginia (1950), as amended.

**RECOMMENDATION:**

**That the above resolution authorizing the demolition of building number 433E be approved.**

## **Committee Minutes**

### **FINANCE AND AUDIT COMMITTEE**

**Duck Pond Room, The Inn at Virginia Tech**

**June 1, 2015**

#### **Audit Closed Session**

**Board Members Present:** Mr. Jim Chapman, Ms. Deborah Petrine, Mr. Michael Quillen, Mr. Horacio Valeiras

**VPI & SU Staff:** Ms. Kay Heidbreder, Ms. Sharon Kurek, Dr. Timothy Sands, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr.

1. Update on Fraud, Waste, and Abuse Cases: The Committee met in closed session to receive an update on outstanding fraud, waste, and abuse cases.
2. Discussion with the Director of Internal Audit: The Committee met in closed session with the Director of Internal Audit to discuss audits of specific departments and units where individual employees were identified.

#### **Audit Open Session**

**Board Members Present:** Mr. Jim Chapman, Mr. Dan Cook – Staff Representative, Mr. Mike Quillen, Mr. Horacio Valeiras

**VPI & SU Staff:** Mr. Bob Broyden, Mr. Allen Campbell, Mr. Al Cooper, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Ms. Mary Helmick, Mr. Tim Hodge, Mr. Hal Irvin, Ms. Sharon Kurek, Ms. Nancy Meacham, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Terri Mitchell, Ms. Laura Neff-Henderson, Dr. Scot Ransbottom, Ms. Lisa Royal, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Mr. Doug Smiley, Dr. Ken Smith, Mr. Brad Sumpter, Ms. Amy Tunison

**Guests:** Mr. Michael Reinholtz and Ms. Meghan Stott, Auditor of Public Accounts

1. Motion to Reconvene in Open Session.
2. Approval of Items Discussed in Closed Session: The Committee reviewed and ratified the quarterly personnel changes and approved the 2015-16 Promotion, Tenure and Continued Appointment Program as submitted.

3. Opening Remarks and Approval of Minutes of the March 30, 2015 Meeting: The Committee reviewed and approved the minutes of the March 30, 2015 meeting.
4. Annual External Audit Scope Discussion with the Auditor of Public Accounts (APA): The Committee met with the Auditor of Public Accounts (APA) for a discussion of the scope of the audit of the 2015 financial statements and the APA's plans for conducting and completing the audit. APA confirmed that the audit schedule is developed such that the final report will be presented to the Board at the November Board meeting.
5. Review and Acceptance of University's Update of Responses to all Previously Issued Internal Audit Reports: The Committee reviewed the university's update of responses to all previously issued internal audit reports. As of December 31, 2014, the university had eight open recommendations. Fifteen audit comments have been issued during the third quarter of this fiscal year. As of March 31, 2015, the university has addressed four comments, leaving 19 open recommendations in progress. As of May 5, 2015, Internal Audit has closed six of the 19 open recommendations leaving 13 open recommendations in progress. The Committee received a briefing at the meeting that reviewed the status of the outstanding comments, including the comments that have been addressed since March 31, 2015.

The Committee accepted the report.

6. Review of the Department of Internal Audit's Status Report as of March 31, 2015: The Committee reviewed the Internal Audit Department's Status Report as of March 31, 2015. Internal Audit has completed 59 percent of its audit plan in accordance with the fiscal year 2014-15 annual audit plan and previously reported modifications.
7. Review and Discussion of Proposed 2016 Audit Plan: The Committee reviewed the proposed audits for the development of the fiscal year 2015-16 annual audit plan. Internal Audit conducted the annual risk assessment after reviewing financial and operational data and seeking input from senior management. Internal Audit has also created a university-wide information technology risk assessment and long-range audit plan in accordance with industry standards. For fiscal year 2015-16, approximately 30 audit projects are proposed, with 14,700 direct audit hours planned. Audits not completed in the fiscal year scheduled will be carried forward to the next fiscal year.

8. Review and Acceptance of the following Internal Audit Reports and Memos Issued: The Committee reviewed and accepted four internal audit reports:
- a. Health and Counseling Centers: The audit received a rating of improvements are recommended. Audit recommendations were issued to management in the areas of conviction checks and computer and data security.
  - b. IT Security Incident Response: The audit received a rating of improvements are recommended. Audit recommendations were issued to management in the areas of incident prevention, incident response procedures, and patch management.
  - c. College of Veterinary Medicine: The audit received a rating of improvements are recommended. Audit recommendations were issued to management in the areas of health and safety and service center billing.
  - d. Vice President for Administration: The compliance review received a rating of improvements are recommended. Audit recommendations were issued to management in the areas of fiscal responsibility, wage payroll, overtime compensation, P14 (adjunct faculty) appointments, and funds handling.
9. Final Resolution of Federal Audit of National Science Foundation Research Expenditures: The Committee received a report on the final resolution of the federal audit of National Science Foundation Research Expenditures. The university has provided regular reports to the Finance and Audit committee on the status of the National Science Foundation audit. In the spring of 2013, the Office of the Inspector General (OIG) for the National Science Foundation (NSF) announced it would perform "cost incurred performance audits" of eleven large institutes of higher education including Virginia Tech which have received significant funding from NSF. The OIG selected Withum Smith and Brown (WSB), a public accounting firm, to perform Virginia Tech's audit. WSB completed the audit in July 2014 and issued the audit report. This report provided an update on the recent resolution of the audit findings in this audit.

The university received a final resolution of the audit from NSF on April 30, 2015. Overall, the auditors reviewed over 193,111 expenditure transactions totaling \$113.2 million on the university's NSF projects for the three year period. The final results were favorable for the university. The final questioned costs, as presented in the final report, were \$64,138, which is less than six-hundredths of one percent of the \$113.2 million total NSF expenditures audited.

## **Finance Closed Session**

**Board Members Present:** Mr. Jim Chapman, Ms. Deborah Petrine, Mr. Michael Quillen, Mr. Horacio Valeiras

**VPI & SU Staff:** Ms. Kay Heidbreder, Ms. Sharon Kurek, Dr. Timothy Sands, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr.

1. Motion for Closed Session
- \* 2. Ratification of Personnel Changes Report: The Committee met in Closed Session to review and take action on the quarterly personnel changes report.

The Committee recommended the personnel changes report to the full Board for approval.

- \* 3. 2015-16 Promotion, Tenure, and Continued Appointment Program: The Committee met in Closed Session to review and take action on the 2015-16 Promotion, Tenure, and Continued Appointment Program.

The Committee recommended the 2015-16 Promotion, Tenure, and Continued Appointment Program to the Full Board for approval.

## **Finance Open Session**

**Board Members Present:** Mr. Jim Chapman, Mr. Dan Cook – Staff Representative, Mr. Mike Quillen, Mr. Horacio Valeiras

**VPI & SU Staff:** Mr. Bob Broyden, Mr. Allen Campbell, Ms. Yohna Chambers, Mr. Al Cooper, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Ms. Mary Helmick, Mr. Tim Hodge, Mr. Hal Irvin, Ms. Sharon Kurek, Ms. Nancy Meacham, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Terri Mitchell, Ms. Laura Neff-Henderson, Dr. Scot Ransbottom, Ms. Lisa Royal, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Mr. Doug Smiley, Dr. Ken Smith, Mr. Brad Sumpter, Ms. Amy Tunison

1. Opening Remarks and Approval of Minutes of the March 30, 2015 Meeting: The Committee reviewed and approved the minutes of the March 30, 2015 meeting.
2. Discussion of the Development of the 2016-2022 Six-year plan submission to the State: During the Sunday afternoon information session, the Board of Visitors received a briefing on the development of the 2016-2022 Six-year

plan that will be submitted to the state in Fall 2015. In this session, the university shared a draft of the six- year plan document currently under development. This discussion also provided an opportunity for the Committee to ask additional questions or discuss issues in greater detail and provide input before the submission of the plan to the State Council of Higher Education of Virginia (SCHEV). The Committee made inquiries regarding the draft initiatives on the plan and submission. The Committee did not recommend any changes to the current six-year plan under development.

The university received instructions for the development of the 2016-2022 Six- Year plan on April 30, 2015, and an initial submission to the state is due on July 1, 2015. After a review and response period, the university and state will finalize the plan in October 2015, and the university will present the final six-year plan to the Board of Visitors for formal approval at the November meeting.

3. Briefing on Financial Strategies, Planning, and Analysis to Support Enrollment Growth: The university envisions a multi-year enrollment growth plan with an overall growth of approximately 2,000 students over a four-year period. The first phase of the plan projects an increase in enrollment by 500 additional students for the 2015-16 freshman class. During the Sunday Information session, the Board of Visitors received a presentation on the planned multi-year enrollment growth. In conjunction with the full Board presentation, the Finance and Audit Committee received a briefing on the financial strategies, planning, and analysis currently underway to support enrollment growth. The presentation included a discussion of financial implications and demands of enrollment growth and potential resources and debt capacity to support the growth. A basic financial model is under development to understand the extent and pace that Student Life facilities can be advanced while maintain affordability. The university intends to manage the growth such that affordability is maintained for the students.
- \* 4. Approval of 2015-16 Faculty Compensation Plan: The Committee reviewed for approval the 2015-16 Faculty Compensation Plan. The report defines the qualification criteria for teaching and research faculty and administrative and professional faculty, provides guidance on the authorized salary average for fulltime teaching and research faculty positions, and requires board approval.

For Fall 2013, Virginia Tech's Authorized Salary was \$93,104. This placed Virginia Tech at the 32<sup>nd</sup> percentile of its peer group for 2013-14, based on the most recent peer salary data available from IPEDS (Integrated Postsecondary Education Data System). Because the university implemented a

merit process in Fall 2014, the authorized salary is estimated to have increased to \$94,817. It is estimated that Virginia Tech's rank will remain at the 32<sup>nd</sup> percentile for Fall 2014, based on SCHEV's two percent forecast of salary escalation at peer institutions.

Recognizing the critical nature of faculty compensation, the university's standing relative to the 60<sup>th</sup> percentile of the university's peer group average salary, the higher levels of competing offers being received by key faculty, and to minimize the high cost of turnover, the university proposes continuing the traditional annual merit-based faculty salary increase program in 2015-16. This plan authorizes management to plan and budget for the nongeneral fund resource allocations necessary to support a merit-based faculty salary increase consistent with the commonwealth's approved compensation plan for faculty for 2015-16.

The Committee recommended the 2015-16 Faculty Compensation Plan to the full Board for approval.

5. Update on the 2015-16 Faculty Merit Process: The committee received an update on the 2015-16 faculty merit process. The 2015 Virginia Appropriation Act, approved on February 27, 2015 by the General Assembly and signed by the Governor on March 26, 2015, included a faculty merit process effective August 10, 2015 assuming no downward revision of state revenues by the State Comptroller by July 5, 2015. This report provided a summary of university and Board actions required to implement the faculty merit plan and the university's timeline to complete the actions in a timely manner.
- \* 6. Approval of Year-to-Date Financial Performance Report (July 1, 2014 – March 31, 2015): The Committee reviewed the Year-to-Date Financial Performance Report for July 1, 2014 – March 31, 2015 for approval. For the third quarter, all programs of the university are on target and routine budget adjustments were made to reflect changes in General Fund revenues and expenditure budgets in academic and administrative areas.

During the third quarter, the annual budget for tuition and fee revenues was increased by \$3.96 million for winter session, spring retention, and unutilized tuition offsets. The revenues for Residence and Dining Halls increased by \$2.79 million for increased occupancy in the Residence Halls, increased orientation and summer school revenue, and increased Dining business volume.

For the quarter ending March 31, 2015, \$27.0 million has been expended for Educational and General capital projects, and \$36.4 million has been expended for Auxiliary Enterprises capital projects. Total capital outlay expenditures for the fiscal year through the quarter ending March 31, 2015 were \$63.4 million.

The Committee recommended the Year-to-Date Financial Performance Report to the full Board for approval.

- \* 7. Approval of 2015-16 University Budget: The Committee received reports and information regarding the 2015-16 Operating and Capital Budgets.

The Committee reviewed for approval the following 2015-16 university budgets:

- a. Operating and Capital Budgets: The university anticipates an initial State authorization of \$1.33 billion during 2015-16 to carry out all of its programs, based on the direct appropriations to the university. However, the annual internal budget varies from this external expenditure authorization for several reasons, some of which increase the annual expenditure authority while others reduce the expenditure plans. For 2015-16, the recommended internal budget for all operations is \$1.4 billion, an increase of \$40.7 million over the adjusted FY 2014-15 budget. The university plans on incremental General Fund support of \$8.3 million from the adjusted 2014-15 budget which includes \$5.8 million for the University Division's Educational and General program, \$1.4 million for the land-grant programs in the Cooperative Extension and Agricultural Experiment Station and \$1.1 million in research support. The Educational and General budget will be \$724.5 million in 2015-16. The auxiliary revenue budget for FY 2015-16 is \$308.8 million, a growth of \$5.3 million or 1.7 percent over the adjusted 2014-15 budget. A significant portion of the increase is attributable to growth in Residential and Dining Programs, Intercollegiate Athletics, Center for the Arts, and increased business volume in the Virginia Tech Electric Services utility. Overall, spending for sponsored research and related activities is projected to be \$338 million, an increase of \$1.2 million over the current fiscal year adjusted budget.

The capital outlay program for 2015-16 is comprised of nine Educational and General projects and 12 Auxiliary Enterprise projects for a total of 21 projects. The total capital outlay budget for fiscal year 2015-16 includes approximately \$483 million of authorizations with an estimated available balance of about \$235 million. Of the available balance, the university plans to spend about

\$113 million on capital projects in fiscal year 2015-16.

The Committee recommended the 2015-16 University Budget to the full Board for approval.

- b. Hotel Roanoke Conference Center Commission Budget: The Hotel Roanoke Conference Center Commission was established by resolutions adopted by Virginia Tech and the City of Roanoke, under Commonwealth of Virginia enabling legislation. The enabling legislation provided that the Commission shall annually prepare and submit to both the City of Roanoke and Virginia Tech a proposed operating budget showing its estimated revenues and expenses for the forthcoming fiscal year, and, if the estimated expenses exceed the estimated revenues, the portion of the unfunded balance is to be borne by each participating party for the operation of the conference center. The Commission has adopted and approved its operating budget for fiscal year 2015-16. Virginia Tech and the City of Roanoke will continue to make equal contributions of \$80,000 to the Commission for fiscal year 2015-16. The funds for Virginia Tech total \$80,000 for the fiscal year 2015-16 and will come from the Fralin endowment which was established to assist with the project.

The Committee recommended the 2015-16 Hotel Roanoke Conference Center Commission budget to the full Board for approval.

- c. Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget: The Committee reviewed for approval the 2015-16 budget for the Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences. The collaboration agreement, which outlines the relationship and responsibilities of each party, requires the governing boards of each university to approve the annual operating budget for the School of Biomedical Engineering and Sciences. The recommended budget for fiscal year 2015-16 is \$ 4.3 million.

The Committee recommended the 2015-16 Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences to the full Board for approval.

- \* 8. Approval of 2015-16 Auxiliary Systems Budgets: The Committee reviewed for approval the 2015-16 Auxiliary Systems Budgets. In accordance with the resolutions authorizing and securing the Dormitory and Dining Hall System, Electric Service System, University Services System, and Intercollegiate Athletics

System revenue bonds, the Board of Visitors is required to adopt an annual budget. All budgets are balanced and designed in accordance with bond covenants including maintenance and reserve requirements. Once approved by the Board of Visitors, the annual budget will be filed with the State Treasurer and will be the basis for making payments from the revenue fund to meet the operating costs of the auxiliary systems.

- a. Dormitory and Dining Hall System Budget: The proposed 2015-16 budget for the Dormitory and Dining Hall System, including debt service, is \$112.7 million for the period of July 1, 2015 to June 30, 2016.
- b. Electric Service System Budget: The proposed 2015-16 budget for the Electric Service System, including debt service, is \$37.9 million for the period July 1, 2015 to June 30, 2016.
- c. University Services System Budget: The proposed 2015-16 budget for the University Services System, including debt service, is \$43.4 million for the period July 1, 2015 to June 30, 2016.
- d. Intercollegiate Athletics System Budget: The proposed 2015-16 budget for the Intercollegiate Athletics System, including debt service, is \$60.6 million for the period July 1, 2015 to June 30, 2016.

The Committee recommended the 2015-16 budget for each of the four Auxiliary Systems to the full Board for approval.

- \* 9. Approval of 2015-16 Pratt Fund Budgets: The Committee reviewed for approval the 2015-16 Pratt Fund budgets for Engineering and Animal Nutrition. The Pratt Fund provides funding for programs in both the College of Engineering and Department of Animal Nutrition in the College of Agriculture and Life Sciences. For 2015-16, the College of Engineering proposes expenditures of \$951,859 and the Animal Nutrition proposes expenditures of \$923,761.

The Committee recommended the 2015-16 Pratt funds budget to the full board for approval.

- \* 10. Approval of Resolution to Reappoint University Commissioner to the Hotel Roanoke Conference Center Commission: The Committee reviewed for approval a resolution to reappoint the Chief Executive Officer of the Virginia Tech Foundation as the university's representative on the Hotel Roanoke Conference Center Commission.

The Committee recommended this resolution to reappoint the Chief Executive Officer of the Virginia Tech Foundation as the university's representative to the Hotel Roanoke Conference Center Commission to the full Board for approval.

- \* 11. Approval of Resolution to comply with Tuition Residency Requirements of the Veteran's Access, Choice, and Accountability Act of 2014: The Committee reviewed for approval a resolution to comply with tuition residency requirements of the Veteran's Access, Choice, and Accountability Act of 2014 (the Act). The Act requires the U.S. Department of Veterans Affairs to disapprove programs of education for payment of benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty at public institutions of higher education if such institutions charge qualifying veterans and other qualified individuals ("covered individuals") tuition and fees in excess of the rate for in-state students for terms beginning after July 1, 2015. All veterans residing in Virginia shall be eligible for in-state tuition. This resolution requests Board approval for providing in-state tuition benefits to "covered individuals" to comply with the Act.

The Committee recommended this resolution to comply with Tuition Residency Requirements of the Veteran's Access, Choice, and Accountability Act of 2014 to the full board for approval.

### **Joint Open Session**

**Board Members Present:** Mr. Jim Chapman, Mr. Dan Cook – Staff Representative, Mr. William Fairchild, Mr. Mike Quillen, Mr. Mehul Sanghani, Mr. Horacio Valeiras

**VPI & SU Staff:** Mr. Ben Austin, Mr. Bob Broyden, Mr. Allen Campbell, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Ms. Bridget Hamill, Ms. Mary Helmick, Mr. Tim Hodge, Mr. Hal Irvin, Ms. Angela Kates, Dr. Chris Kiwus, Ms. Sharon Kurek, Ms. Leigh LaClair, Ms. Nancy Meacham, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Terri Mitchell, Ms. Laura Neff-Henderson, Dr. Scot Ransbottom, Ms. Lisa Royal, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Mr. Jason Soileau, Mr. Brad Sumpter, Ms. Sarah Wells, Mr. Eric Wetzell, Dr. Sherwood Wilson

- \* 1. Approval of Resolution for Lane Electric Substation Expansion: The Committees reviewed for approval a resolution for Lane Electric Substation Expansion. Virginia Tech Electric Service supplies power to Virginia Tech, the Corporate Research Center (CRC), and approximately 6,000 customers in the town of

Blacksburg. As campus and the CRC have grown and more buildings are air conditioned, the load at the Lane Electric Substation becomes critical in the summer. For several years, peak summer demand on the substation has approached the full-load sustained output limit and has once exceeded the limit. To meet the increasing demand and support for the ongoing development of both campus and the CRC, the university proposes an expansion of the Lane Electric Substation.

The proposed expansion includes the purchase and installation of two 28,000 kVA transformers, two circuit switchers, six distribution reclosers with space for an additional four reclosers, a control house and associated relay, and control equipment. The improvements would alleviate the loading problems at the Lane Substation and service future construction in the Life Sciences area, Special Purpose Housing area, and the second phase of the CRC.

The estimated project costs inclusive of design, construction, and equipment is \$6.5 million. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of the project. This funding plan calls for the use of debt which may be serviced from Electric Service auxiliary revenue. Any cash designated for the project accumulated prior to the issuance of permanent debt may be used directly for project costs and to lower the total debt issuance. The Town of Blacksburg and CRC customers will bear an appropriate portion of the project cost through their electric service rates. This request is for a \$6.5 million authorization for the Lane Electric Substation Expansion project.

The Committees recommended the resolution for Lane Electric Substation Expansion to the full Board for approval.

- \* 2. Approval of Resolution for Constructing the Health Center Improvements: The Committees reviewed for approval a resolution for Constructing the Health Center Improvements. In March 2014, the Board of Visitors approved a \$200,000 planning authorization for the Health Center Improvements project. The planning work is nearing completion of schematic designs and will be ready to enter the construction phase this summer. In accordance with the scope of the authorized planning project, the designed solution proposes a 3,500 gross square foot one-story addition to the east wing of McComas Hall and 1,700 square feet of interior renovations of the existing Schiffert Health Center for a total 5,200 gross square foot project.

The proposed addition includes space to house the Campus Alcohol and Prevention Center, expanded infirmary space to ensure separation of wound care cases from Methicillin-resistant Staphylococcus Aureus (MRSA) cases, and an isolation area which could serve to handle highly contagious cases and assist with emergency preparedness. The proposed renovations create three intake rooms, a phlebotomy area, an orthopedic room, a nebulizer room, a dietitian's office, and a biohazard waste storage space.

As with all self-supporting projects, the university has developed a financing plan to support the project. The total project budget is \$3.071 million and annual debt service is estimated to be \$250,000. The timing of the project request has been coordinated with the 2016 retirement of debt for the original construction of McComas Hall. The funding plan for debt service calls for the redirection of existing Student Health fee revenues when debt on the original McComas Hall project is retired. Thus, student fees will not be increased for this project and the revenue source is sufficient to cover this amount.

This request is for a \$2.871 million authorization supplement to the existing \$200,000 planning authorization for a \$3.071 adjusted total project budget authorization to complete the Health Center Improvements project.

The Committees recommended the resolution for Constructing the Health Center Improvements to the full board for approval.

**\*Requires full Board approval.**

There being no further business, the meeting adjourned at 12:10 p.m.

# Update of Responses to Open Internal Audit Comments

## FINANCE AND AUDIT COMMITTEE

March 31, 2015

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

The report includes outstanding recommendations from Compliance Reviews and Audit Reports. Consistent with the report presented at the March Board meeting, the report of open recommendations includes three attachments:

- Attachment A summarizes each audit in order of final report date with extended and on-schedule open recommendations.
- Attachment B details all open high or medium priority recommendations for each audit in order of the original target completion date, and with an explanation for those having revised target dates or revised priority levels.
- Attachment C charts performance in implementing recommendations on schedule over the last seven years. The 97 percent on-schedule rate for fiscal year 2015 reflects closing 32 of 33 recommendations by the original target date and management has established a revised target date for the extended item.

The report presented at the March 30, 2015 meeting covered Internal Audit reports reviewed and accepted through December 31, 2014 and included eight open medium and high priority recommendations. Activity for the quarter ended March 31, 2015 resulted in the following:

Open recommendations as of December 31, 2014	8
Add: Medium & High priority recommendations accepted March 30, 2015	15
Subtract: recommendations addressed since December 31, 2014	4
Remaining open recommendations as of March 31, 2015	<u>19</u>

While this report is prepared as of the end of the quarter, management continues to receive updates from Internal Audit regarding auditee progress on action plans. Through May 5, 2015 Internal Audit has closed six of the 19 outstanding medium and high priority recommendations for an adjusted total of 13 open recommendations. The remaining open recommendations are progressing as expected and are on track to meet their respective target due dates. Management continues to work jointly with the units and providing assistance as needed to ensure the action plans are completed timely.

**ATTACHMENT A**

**Open Recommendations by Priority Level**

**FINANCE AND AUDIT COMMITTEE**

**March 31, 2015**

Report Date	Audit Name	Audit Number	Total Recommendations							
			ISSUED	COMPLETED	OPEN					
					Extended		On-schedule		Total	
					High	Medium	High	Medium	Open	
30-Oct-13	Housing and Residence Life	14-1134	2	1	1					1
22-Aug-14	Wi-Fi Infrastructure Security	14-1160	1					1		1
27-Aug-14	Windows Server Security	14-1157	3					3		3
23-Oct-14	Facilities Work Order System	14-1176	2					2		2
20-Feb-15	Materials Science and Engineering	15-1188	2	1				1		1
23-Feb-15	University Building Official	15-1193	5				1	4		5
04-Mar-15	Fralin Life Science Institute	15-1197	1					1		1
05-Mar-15	Conflicts of Interest and Commitment	14-1163	3				2	1		3
12-Mar-15	Virginia Tech Electric Service	15-1194	2				1	1		2
<b>Totals:</b>			<b>21</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>14</b>		<b>19</b>

**ATTACHMENT B**

**Internal Audit Open Recommendations**

**FINANCE AND AUDIT COMMITTEE**

March 31, 2015

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised		
30-Oct-13	1	14-1134	Housing and Residence Life	Summer Conferences and Camps	High		15-Sep-14	<b>15-Sep-15</b>	1	The unit developed an appropriate checklist of standard components to be completed for summer conferences and camps to address the identified risks. The unit did not consistently complete the checklist; thus proper documentation was not obtained for approximately 30% of events held in the summer of 2014. A revised management action plan and target date has been established based on Internal Audit's follow up with the unit.
23-Feb-15	2	15-1193	University Building Official	Untimely Approval of Time Spent on Capital Projects	Medium		01-Apr-15		2	
23-Feb-15	3	15-1193	University Building Official	Inconsistent Procedure for Permit Issuance	Medium		01-Apr-15		2	
23-Feb-15	4	15-1193	University Building Official	Temporary Certificates of Occupancy	Medium		01-Apr-15		2	
12-Mar-15	5	15-1194	Virginia Tech Electric Service	Funds Handling Accountability and Reconciliation	High		15-Apr-15		2	
12-Mar-15	6	15-1194	Virginia Tech Electric Service	System Access	Medium		15-Apr-15		2	
05-Mar-15	7	14-1163	Conflicts of Interest and Commitment	Statement of Economic Interests Training	Medium		01-May-15		2	
22-Aug-14	8	14-1160	Wi-Fi Infrastructure Security	Unauthorized Access Points	Medium		01-Jun-15		2	
27-Aug-14	9	14-1157	Windows Server Security	University Password Policy	Medium		01-Jun-15		2	
27-Aug-14	10	14-1157	Windows Server Security	Log Management	Medium		01-Jun-15		2	
27-Aug-14	11	14-1157	Windows Server Security	Windows Server Control Environment	Medium		01-Jun-15		2	
20-Feb-15	12	15-1188	Materials Science and Engineering	Labor Cost Transfers	Medium		30-Jun-15		2	
23-Oct-14	13	14-1176	Facilities Work Order System	Labor Rates	Medium		01-Nov-15		3	

**ATTACHMENT B**

**Internal Audit Open Recommendations**

**FINANCE AND AUDIT COMMITTEE**

**March 31, 2015**

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised		
23-Feb-15	14	15-1193	University Building Official	Inaccurate and Untimely Non-Capital Permit Billing	High		30-Nov-15		3	
23-Feb-15	15	15-1193	University Building Official	Inaccurate University Building Official Master Listing	Medium		30-Nov-15		3	
04-Mar-15	16	15-1197	Fralin Life Science Institute	Oversight of Laboratory Spaces in Flagship Buildings	Medium		31-Dec-15		3	
23-Oct-14	17	14-1176	Facilities Work Order System	HokieServ Process Improvements	Medium		01-Apr-16		3	
05-Mar-15	18	14-1163	Conflicts of Interest and Commitment	Conflict of Interest Programmatic Enhancement	High		30-Sep-16		3	
05-Mar-15	19	14-1163	Conflicts of Interest and Commitment	Clarification of Conflict of Interest Officer Role and Disclosure Requirements	High		30-Sep-16		3	

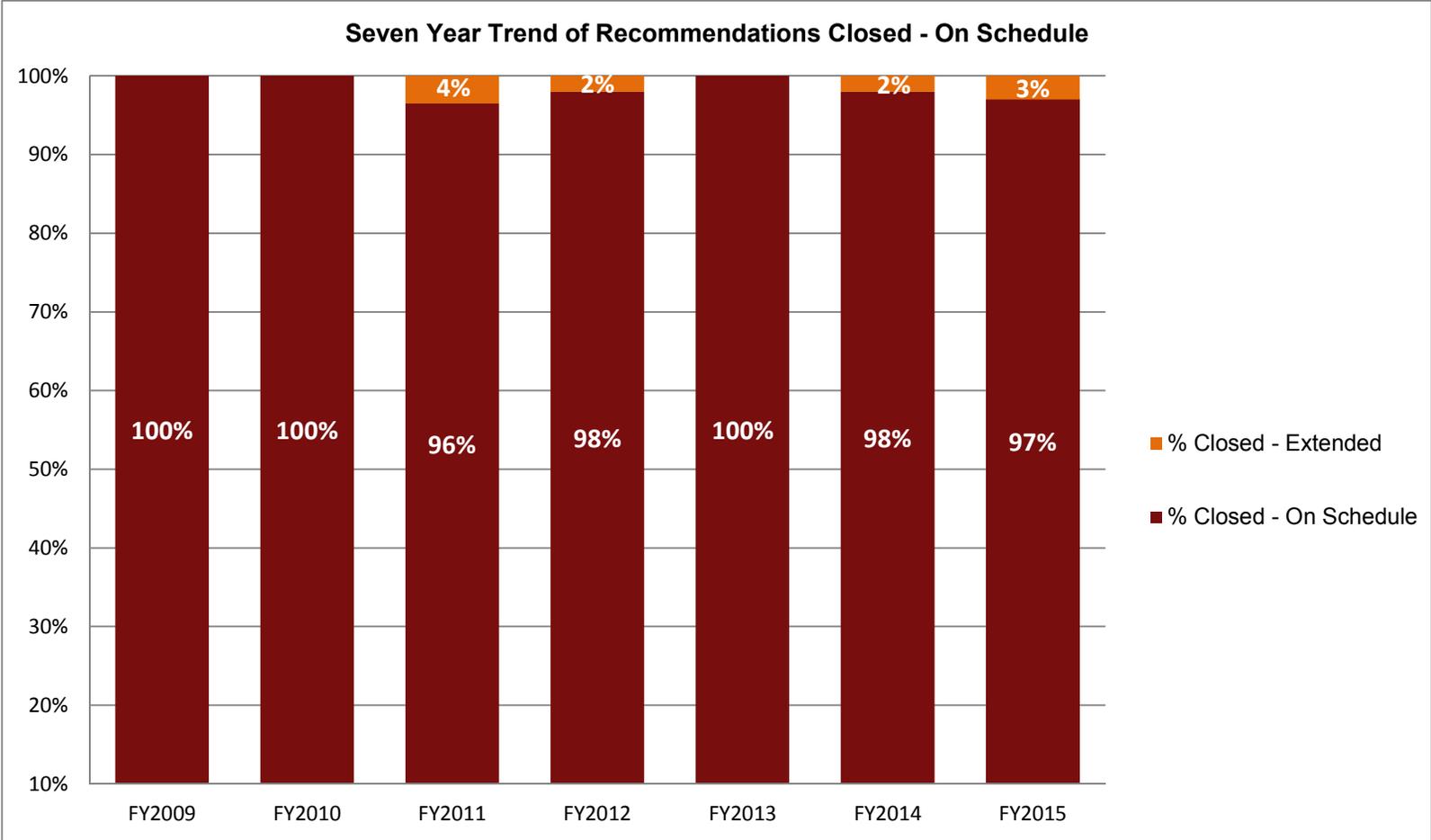
- (1) A revised management action plan and target date has been established based on Internal Audit's follow up with the unit.
- (2) As of March 31, 2015, management confirmed during follow up discussions with Internal Audit that actions are occurring and the target date will be met. The Internal Audit department will conduct testing after the due date to confirm that the Management Action Plan is implemented in accordance with the recommendations.
- (3) Target date is beyond current calendar quarter. Management has follow-up discussions with the auditor to monitor progress, to assist with actions that may be needed to meet target dates, and to assess the feasibility of the target date.

**ATTACHMENT C**

**Management Performance and Trends Regarding Internal Audit Recommendations**

**FINANCE AND AUDIT COMMITTEE**

**March 31, 2015**



**Internal Audit Status Report**  
**FINANCE AND AUDIT COMMITTEE**

**May 5, 2015**

**Audit Plan Update**

Audits were performed in accordance with the fiscal year 2014-15 annual audit plan at a level consistent with the resources of the Department of Internal Audit. Three risk-based audits and one compliance review have been completed since the March board meeting. Due to personnel turnover, the risk-based audit of Departmental Scholarships has been deferred until next fiscal year.

The following 12 audit projects are underway: Athletics NCAA – Financial Aid, Environmental Health and Safety, Export and Secure Research Compliance, Facilities Operations, IT: FERPA/HIPAA, Research: Cost Sharing, University Scholarships and Financial Aid, Differential Tuition and Program Fees, Language and Culture Institute, Virginia Cooperative Extension – Southeast District, and compliance reviews of the College of Science and the Vice President for Information Technology. Additionally, two advisory service projects, one conducted confidentially at the request of University Legal Counsel and another of the Washington Alexandria Architecture Center conducted at the request of the College of Architecture and Urban Studies, are underway.

So far in fiscal year 2014-15, Internal Audit has completed 59 percent of its audit plan as depicted in Exhibit 1.

**Exhibit 1**  
**FY 2014-15 Completion of Audit Plan**

<b>Audits</b>	
Total # of <b>Audits</b> Planned	28
Total # of Supplemental <b>Audits</b>	5
Total # of Carry Forwards	4
Total # of Planned <b>Audits</b> Canceled and/or Deferred	3
Total <b>Audits</b> in Plan as Amended	34
Total <b>Audits</b> Completed	20
<b>Audits</b> - Percentage Complete	59%
Note: Includes Compliance Reviews and Advisory Services	

# Internal Audit Proposed Audit Plan for Fiscal Year 2015-16

## FINANCE AND AUDIT COMMITTEE

May 21, 2015

Internal Audit conducts risk-based audits, compliance reviews, advisory services, and fraud investigations. The risk-based audit is an objective examination of evidence for the purpose of providing an independent assessment to contribute to the improvement of governance, risk management, and the control systems within the university. The objective of the compliance review is to ensure all senior management areas (even low risk) receive periodic reviews from Internal Audit every five years to perform tests of compliance with major university business policies at a minimum. Advisory service activities, the nature and scope of which are agreed with the client, are intended to add value and improve the university's governance, risk management, and control processes without the internal auditor assuming management responsibility.

Internal Audit leadership conducted its annual risk assessment to identify the entities that should receive audit attention in fiscal year 2015-16. University departments and administrative operations were grouped into approximately 175 auditable entities or responsibility centers based on common missions and the existing organizational structure.

For each auditable entity, financial data reviewed included expenditures, revenues, cash receipts, federal contracts and grants, and the total number of employees. The relative business risk was assessed on a judgmental basis for the following qualitative and quantitative factors.

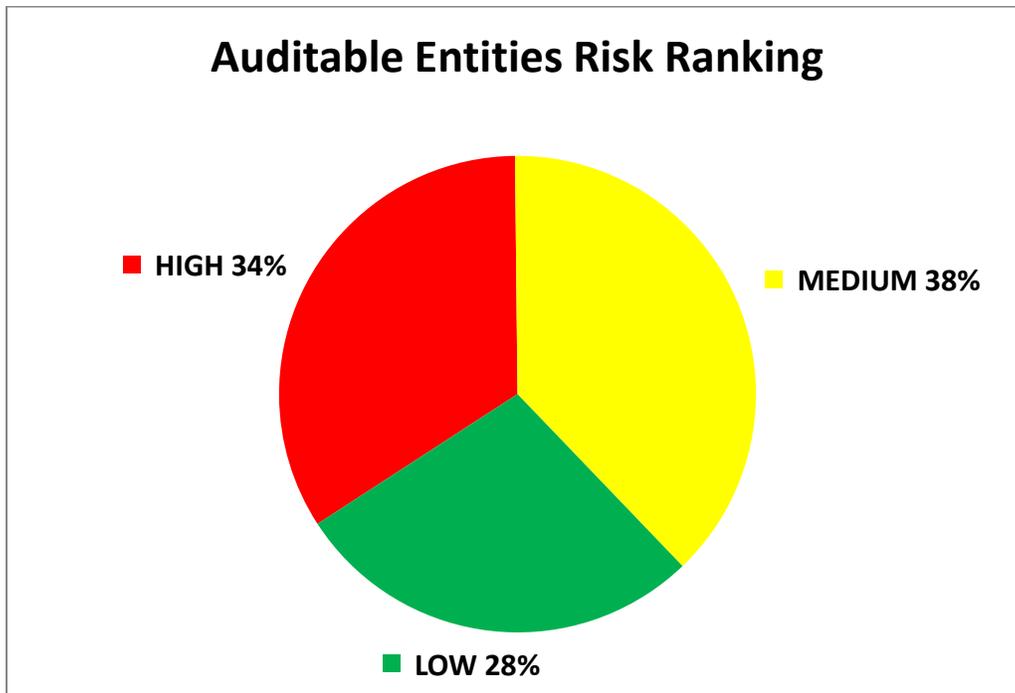
Factor
Quality and Stability of Control Environment
Business Exposure (Materiality and Liquidity of Operational Resources)
Public and Political Sensitivity
Compliance Requirements
Information Technology and Management Reporting

Elements considered within these factors included:

- Sense of management control consciousness;
- Stability and expertise of management;
- Interval since the last audit review;
- Complexity of operations and technology applications;
- Materiality or financial impact to the university;
- Potential impact to reputation;

- Impact of noncompliance with internal and external policy, procedure, regulatory, and statutory requirements; and
- Reliance on information and management reporting for operating decisions, monitoring performance, providing services, and allocating resources.

The graph below depicts the results of the risk assessment classifications. The risk assessment results are similar to previous risk assessments conducted by Internal Audit.



Senior management had the opportunity to provide input on areas for consideration in the preparation of the audit plan. Additionally, a five-year core audit plan was developed to ensure Internal Audit provides adequate coverage related to the university's critical areas. See the Proposed Five-Year Core Audit Plan (Schedule 4). The Core Audit Plan includes several multi-year audits that will allow for annual reviews of selected components of the entities with high external compliance risk and complex operations. These entities are University Scholarships and Financial Aid, Research, Human Resources, and Intercollegiate Athletics.

Internal Audit has also created a university-wide information technology (IT) risk assessment and audit plan document mapped to the ISO 27002 standard. This planning method helps ensure the consideration and reduction of enterprise-wide risks within the IT universe at Virginia Tech and compliance with Commonwealth of Virginia requirements for IT audit functions. ISO 27002 is an information security standard published by the International Organization for Standardization (ISO) that is considered to be a best practice for developing and maintaining enterprise-wide IT security. IT

policies at the university already reference this internationally accepted standard as the basis for the guidance set forth.

Internal Audit consulted with key IT personnel during the development of the assessment and plan document to ensure that audit coverage was maximized and properly targeted. The assessment of IT and business operations at the university identified four high-level risk domains, which provide the basis for execution of the five-year audit plan. These domains are as follows:

- Student Systems;
- Finance and Administrative Systems;
- Human Resources Systems; and
- Research Systems.

These domains are intended to encapsulate the vast majority of the systems and computing environments within the IT universe at the university. Audit coverage will be obtained for each of these risk domains in all of the 12 main content areas and their sub-areas described in the ISO 27002 standard for each five-year audit plan. This will be achieved in a variety of audits that are topical in nature to gain a better understanding of the university-wide environment instead of narrowly focusing on the performance of individual departments. This approach will also allow Internal Audit to maintain current knowledge of the IT security and operating conditions in a dynamic industry through the constant evaluation and revision of individual audits during the plan period. See the Proposed Five-Year Core Information Technology Audit Plan on Schedule 5.

As each audit is undertaken, risks will be re-evaluated to ensure proper audit coverage taking into account confidentiality, integrity, and availability. If new topics emerge during the five-year plan period that require more immediate attention, reconfiguration of the plan can be undertaken to accommodate these changes.

Given existing resources, an estimated 14,700 direct hours will be devoted to audits, planning, and reviews (Schedule 1). Based on the risk assessment and feedback from management, the proposed audit plan (Schedule 2) includes a balance of high, medium, and low risk entities and compliance reviews (Schedule 3). A description of the preliminary audit scope for projects on the fiscal year 2015-16 plan is detailed in Schedule 6. Internal Audit's goal is to complete 85 percent of the audit plan. The proposed audit plan may be modified based on the external audit environment or changes in regulations, management, or resources.

**AUDIT PERSONNEL AVAILABLE HOURS FOR FISCAL YEAR 2015-16**

<b>Sources of Effort Available:</b>	<b>No. of Employees</b>	<b>Annual Hours</b>	<b>Total Hours</b>	<b>Percent Of Effort</b>
Audit Staff *	9	2,080	17,720	88.60%
Wage Auditor	1	1,000	1,000	5.00%
Graduate Assistant / Student Worker	2	640	1,280	6.40%
<b>Total Available - Fully Staffed</b>	<b>12</b>		<b>20,000</b>	<b>100.00%</b>

\* Adjusted for Existing Vacancies (2 positions for 2-3 months)

**Planned Application of Effort:**

Performing Scheduled Audits		7,100		35.50%
Compliance Reviews		1,350		6.75%
Advisory Services / Management Requests		3,000		15.00%
Reviews of Alleged Fraud, Waste, and Abuse		1,500		7.50%
Annual Audit Activities (Follow-up, Inventory)		750		3.75%
Continuous Monitoring		1,000		5.00%
<b>Total Direct Hours - Audit, Planning, and Review</b>			<b>14,700</b>	<b>73.50%</b>
Vacations, Holidays, and Sick Leave		2,800		14.00%
Training and Professional Development		700		3.50%
Administrative Tasks / Network Maintenance		1,800		9.00%
<b>Total Indirect Hours</b>			<b>5,300</b>	<b>26.50%</b>
<b>Grand Total Hours of Effort</b>			<b>20,000</b>	<b>100.00%</b>

**AUDIT PLAN FOR FISCAL YEAR 2015-16**

<b>ENTITIES</b>	<b>LAST AUDIT</b>	<b>RISK</b>	<b>HOURS</b>
Athletics NCAA – Eligibility *	2012	High	350
Construction Management	2010	High	350
Contract Administration	N/A	High	325
Controller’s Office – General Accounting	2009	High	300
Crop and Soil Environmental Sciences	2008	High	350
Departmental Scholarships	2010	High	250
Electrical and Computer Engineering	2009	High	350
Human Resources: Leave Accounting *	2010	High	250
International Activities	N/A	High	300
IT: Linux Server Security	2012	High	350
IT: Network Security (RLAN, Routers, and Firewalls)	N/A	High	350
IT: Printer Security	2012	High	300
IT: Project Management	2009	High	250
Physics	2007	High	300
Real Estate Management	2014	High	300
Research: Effort Reporting *	N/A	High	350
The Inn at Virginia Tech and Skelton Conference Center	2009	High	300
University Scholarships and Financial Aid *	2013	High	300
Graduate Admissions Application System	N/A	Medium	200
Institute for Critical Technology and Applied Science (ICTAS)	2009	Medium	275
Student Centers and Activities	2010	Medium	300
Building Construction / Myers-Lawson School of Construction	2004	Low	250
Center for Organizational Technological Advancement (COTA)	N/A	Low	200
Interdisciplinary Center for Applied Mathematics (ICAM) /	2003 /	Low	250
Institute for Society, Culture, and Environment (ISCE)	N/A		
	<b>Total Hours Needed</b>		<b><u>7,100</u></b>
	<b>Total Audits Planned</b>		<b>24</b>

\* Entity receives an annual audit on different components of their operation.

**FIVE-YEAR COMPLIANCE REVIEW PLAN  
FOR FISCAL YEARS 2015-16 THROUGH FISCAL YEAR 2019-20**

<b>Audit Entity (Senior Management Areas)</b>	<b>Last Review</b>	<b>Hours of Effort</b>				
		<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>
Athletics	2013		250			
College of Agriculture and Life Sciences	2014				350	
College of Architecture and Urban Studies	2012		300			
College of Business	2015					200
College of Engineering	2013			350		
College of Liberal Arts and Human Sciences	2013	350				
College of Natural Resources and Environment	2014				250	
College of Science	2015					250
College of Veterinary Medicine	2013			250		
Office of the President	2011	200				
Office of the Provost	2012	350				
University Libraries	2011	250				
Vice President and Dean for Graduate Education	2014				250	
Vice President for National Capital Region	2011	200				
Vice President for Administration	2015					400
Vice President for Advancement	2011			350		
Vice President for Finance	2012		250			
Vice President for Information Technology	2015					250
Vice President for Outreach and International Affairs	2011		350			
Vice President for Research and Innovation	2012			300		
Vice President for Student Affairs	2014				400	
<b>Total Budgeted Hours</b>		<b>1350</b>	<b>1150</b>	<b>1250</b>	<b>1250</b>	<b>1100</b>
<b>Number of Reviews</b>		<b>5</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>

NOTE: Compliance reviews include all departments reporting to the respective senior management area.

**PROPOSED FIVE-YEAR CORE AUDIT PLAN  
FOR FISCAL YEAR 2015-16 THROUGH FISCAL YEAR 2019-20**

<b>Area</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Enrollment Services</b>	Financial Aid – State and Inst. Prgms., Overaward, Student Acad. Progress	Financial Aid – Student Eligibility, Title IV Return, Quality Assur., COI, COA	Financial Aid – Federal Grants, Financial Reporting, Loans	Financial Aid – Inst. Eligibility, State and Inst. Prgms., Overaward	Financial Aid – Student Eligibility, Title IV Return, Quality Assur., COI, COA
	Dept. Scholarships	Undergrad. Admissions	University Registrar	Graduate Education	
<b>Research</b>	ICTAS	VTCRI	VBI	ICAT	VTTI
	ICAM / ISCE	High Performance Computing	Animal Care and Resources	OSP Project Set-Up, Billing, A/R, Close-Out	IRB for Human Subjects
	Effort Reporting	Cost Transfers	Lab Safety	PI Grant Management	OIRED
<b>HR and Payroll</b>	Leave Accounting	Benefits	Payroll Transactions	Compensation and Classification / Equity	Hiring and Termination
<b>Auxiliary Enterprises/ Student Support</b>	The Inn at Virginia Tech & Skelton Conf. Center	Dining Services	Recreational Sports	Hokie Passport Services	Housing & Residence Life
	Student Centers and Activities	Telecommunications (CNS)	Licensing and Trademarks	Center for the Arts	Continuing and Professional Education
	NCAA – Eligibility	Athletics – Policy Compl.	NCAA – Recruiting	Athletics – Operations	NCAA – Financial Aid
<b>Facilities and Operations</b>	Construction Management	Virginia Tech Police Department	Records Management	Fleet Services, Parking, & Transportation	EHS
	Real Estate Management	Emergency Preparedness	Mail Services	Printing and Copier Management Program	Facilities Operations
<b>Finance</b>	Controller's Office – General Accounting	Controller's Office – Fixed Assets	Controller's Office – Risk Management	Office of the University Bursar	Procurement and Accounts Payable
<b>Academic Units</b>	Crop and Soil Environmental Sciences	Biomechanical Engr. and Mechanics (BEAM)	Sustainable Biomaterials (SBIO)	Chemistry	Agricultural and Applied Economics
	Electrical and Computer Engineering	Geosciences	Mining and Materials Engineering	Chemical Engineering	Mechanical Engineering
	Physics	Biochemistry	Biological Systems Engr.	Horticulture	Mathematics
	Building Const. / Myers-Lawson School of Const.	Entomology	School of Public and International Affairs	Industrial and Systems Engineering	Dairy Science
<b>Off-Campus Locations</b>	International Activities	Commonwealth Campus Centers	VCE – Northern District	Eastern Shore / Virginia Seafood ARECs	VCE – Central District

**PROPOSED FIVE-YEAR CORE INFORMATION TECHNOLOGY AUDIT PLAN  
FOR FISCAL YEAR 2015-16 THROUGH FISCAL YEAR 2019-20**

ISO 27002 Coverage Areas

Year	Audit	ISO 27002 Coverage Areas												
		Risk Assessment	Security Policy	IT Security Organization	Asset Management	Human Resources Security	Physical and Environmental Security	Communications and Operations Management	Access Control	Information Systems Acquisition, Development, and Maintenance	Business Continuity	IT Security Incident Management	Compliance	
2016	Project Management	✓					✓		✓					
2016	Network (RLAN, Routers, and Firewalls)		✓			✓	✓	✓	✓					
2016	Printer Security					✓	✓	✓						
2016	Linux Server Security					✓		✓		✓				
2017	Advancement System		✓				✓	✓						
2017	COOP Review	✓		✓	✓		✓			✓	✓			
2017	General Controls Review			✓		✓	✓					✓		
2017	Surplus Property						✓							
2018	Disaster Recovery	✓		✓	✓		✓			✓	✓			
2018	External Interfaces and Wire Transfers					✓			✓					
2018	Mobile Device Security			✓		✓	✓	✓						
2018	Outsourced Cloud Services						✓		✓	✓				
2019	Banner Applications		✓				✓	✓		✓				
2019	Windows Server Security					✓		✓						
2019	PCI Compliance								✓					
2019	Wireless Security						✓	✓	✓					
2020	Oracle Database			✓					✓					
2020	FERPA			✓			✓					✓		
2020	Employee Access Life Cycle			✓	✓									
2020	IT Security Incident Response				✓	✓		✓	✓	✓	✓			

Note: Audits will include coverage of all critical or sensitive risk domains (Student, Finance, Human Resources, and Research) of the university.

IT Audits that will include decentralized scope coverage across campus

## **PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN**

The description of the preliminary audit scope for projects on the fiscal year 2015-16 audit plan is detailed below. However, the preliminary scope is subject to change as the audit objectives are based on identified business goals and objectives, potential risks, and processes designed to mitigate those risks during the audit planning process. The annual expenditures and revenues referenced below reflect fiscal year 2013-14 data unless otherwise noted.

### ***Reviews of Colleges, Schools, and Departments***

The objective of these audits is to assure sound business practices are in place and processes comply with university policies. These reviews will focus on the unit's business objectives and will evaluate controls and business risks. Tests of records may include core business functions such as contract and grant administration, service centers, health and safety, facility security, conflict of interest, and systems and network security as applicable, to determine if processes effectively manage risks, safeguard assets, and comply with policies.

### **Building Construction and the Myers-Lawson School of Construction**

The Department of Building Construction focuses on the development of a critical understanding of construction means and methods as well as management processes. Two distinct concentrations seek to develop a student's knowledge in the areas of construction and design, and development in real estate and construction. The Myers-Lawson School of Construction provides undergraduates and graduates more choices for pursuing construction education. The school works with faculty from multiple departments to provide students with additional opportunities to pursue concentrations, minors, or support courses related to construction. Faculty is comprised of Principal Faculty, Core Faculty with tenure lines in their respective departments, and Affiliated Faculty from related academic disciplines. Combined expenditures for the school and department exceeded \$2.8 million, with sponsored research totaling just over \$700,000. These entities were last audited as part of a college-wide review in 2004.

### **Crop and Soil Environmental Sciences**

For more than 105 years, the Department of Crop and Soil Environmental Sciences has served the citizens of the Commonwealth of Virginia with knowledge and practice for sustainable crop production and land management. The department employs 22 tenured and tenure-track faculty members on the Blacksburg campus and six faculty members located at research and extension centers throughout Virginia. Of the approximately 300 students enrolled, more than 240 are in two undergraduate degree programs: Environmental Science, and Crop and Soil Science. Total expenditures for the department were \$10.8 million, with sponsored research totaling nearly \$4.5 million, a figure that represents 29 percent growth since 2010. Research activities are focused in three domains: Agronomy; Crop Improvement, Breeding, and Genomics; and Environmental Science. This department was last reviewed as part of a college-wide review in 2008.

**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN****Electrical and Computer Engineering**

The Bradley Department of Electrical and Computer Engineering (ECE) at Virginia Tech is one of the country's larger ECE departments. ECE offers bachelor, masters, and doctoral degrees in electrical and computer engineering with education and research opportunities in diverse areas including control systems, computers, communications, electronics, electromagnetics, and power. Beyond its main presence in Blacksburg, the department has research and teaching facilities in Arlington, Falls Church, and Hampton. Expenditures for the department totaled nearly \$37.5 million, with sponsored research totaling approximately \$18.6 million, a figure that represents 43 percent growth since 2010. ECE was last reviewed as part college-wide review in 2009.

**Physics**

The Department of Physics (Physics) offers bachelor, masters, and doctoral degrees in physics, applied physics, industrial physics, and nuclear science and engineering, among others. Faculty members within the department have been recognized nationally and internationally, for research in areas of particle and nuclear physics, condensed matter physics, and biophysics and astrophysics. Physics operates several research centers and institutes located in Blacksburg as well as in Roanoke and Arlington. Expenditures for the department exceeded \$10.8 million, with sponsored research totaling \$3 million. Physics was last audited as part of a college-wide review in 2007.

***Athletics NCAA – Eligibility***

Virginia Tech sponsors 22 varsity sports at the NCAA Division I level, including 11 men's sports and 11 women's sports, including Women's Golf which will begin competition in fall of 2015. The Department of Athletics (Athletics) monitors more than 550 student-athletes each academic year. Athletics had operating revenues of approximately \$73.1 million and total operating expenses of approximately \$69.6 million. Student-athletes are awarded aid in accordance with NCAA, Atlantic Coast Conference, and university rules and regulations. Internal Audit conducts a complete audit of Athletics over a five-year period. This audit will include reviews of eligibility, academic performance program, amateurism, rules education, and coaching staff limits and contracts. The last audit of these specific NCAA activities was in 2012.

***Center for Organizational Technological Advancement (COTA)***

Virginia Tech established COTA in 1994 to foster best practices and innovation in business, industry, K-12 and post-secondary education, government, and nonprofit. COTA offers an Environmental Management Systems program to address the needs of a broad range of interested parties and the evolving needs of society for environmental protection, as well as a Virginia School Leaders Institute (VSLI). VSLI is designed specifically for recently appointed school administrators and aspiring superintendents. COTA also provides grants that typically range from \$500 to \$2,000 to support development and conferences at Hotel Roanoke and Conference Center. COTA

**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN**

handled approximately \$400,000 in cash receipts. This area has not previously been reviewed.

***Construction Management***

Management of construction projects at the university is primarily overseen by the University Design and Construction (UDC) unit within the Facilities Department. UDC provides oversight for both new construction and renovation projects valued at over \$2 million, which are defined as capital projects. This unit provides critical services to the university and oversees project managers who supervise construction projects from beginning to end, ensuring that projects are completed within time and budgetary constraints. Active capital projects are currently valued at more than \$400 million. UDC expenditures totaled \$91.7 million. Since this activity was last reviewed in 2010, leadership changes have occurred and responsibilities have been modified due to outsourcing the renovations function.

***Contract Administration***

Contract administration encompasses creating, executing, analyzing, monitoring, and terminating agreements to maximize operational and financial performance, all while reducing financial risk. The university routinely executes significant contracts with various providers of goods and services. Although University Legal Counsel must review all contracts prior to execution, some additional positions are granted signature authority for contractual agreements. Entities likely involved in this review will include: the Vice President for Finance and Chief Financial Officer, who by policy serves as the university's Chief Contracting Officer; University Legal Counsel; the Procurement Department; the Information Technology Acquisitions (ITA) Department, the university's Contract Review Officer, and others. This activity has not previously received a targeted review.

***Controller's Office – General Accounting***

The General Accounting section of the Controller's Office supports the Banner Finance help line and provides training for new employees in the areas of Banner Finance navigation, general accounting query, and finance web reporting. The section also performs audits of departmental journal entry transfers and is responsible for Banner Finance daily batch updating, month-end close, and year-end close. The General Accounting section of the Controller's Office is responsible for reconciling the university's bank accounts, reconciling the Banner Finance system to the state's accounting system, and various other reconciliations. This area was last reviewed in 2009.

***Departmental Scholarships***

Scholarship administration at Virginia Tech is highly decentralized with the principal administrative responsibility primarily delegated to the college and department level. Funding sources for departmental scholarships includes endowments as well as annual/operating funds. University Scholarships and Financial Aid (USFA) acts as an agent to deliver scholarship proceeds to students. University departments provided or

**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN**

monitored approximately \$8.8 million in student financial assistance in the form of departmental scholarships in fiscal year 2013-14 and planned to award approximately \$8.6 million in fiscal year 2014-15. The topic was last audited in 2010.

***Graduate Admission Application System***

In 2013, the Graduate School commissioned the development of a web-based graduate admissions system that allows for greater control of the overall admissions process. The Graduate School receives approximately 9,000 applications annually, and each of these applications and the associated fees are processed through this system. There has been no dedicated audit of this system.

***Human Resources: Leave Accounting***

The Leave Accounting unit in Human Resources provides advice, guidance, counseling, and training on leave policies and procedures for approximately 7,300 faculty and staff. Leave Accounting processes leave transactions and provides customer service assistance to employees and departmental leave representatives in response to inquiries, leave corrections, and leave adjustments. The Leave Programs Supervisor provides training for departmental leave representatives. A new leave reporting tool for salaried employees will be phased in between July 2015 and January 2016. The system will replace the current Leave Entry and Reporting Web System, which was launched in 1998 and requires electronic entry and paper submission. The new system will allow departments to enter and submit leave reports electronically. The last audit of this activity was in 2010.

***Institute for Critical Technologies and Applied Science (ICTAS)***

ICTAS is an interdisciplinary research investment institute that stimulates, catalyzes, and promotes the growth of cutting-edge research in engineering, science, and medicine. ICTAS invests in research directly through seed project funding; purchase, installation, and maintenance of specialized equipment; state-of-the-art laboratories; new faculty recruitment and hiring; graduate student support; matching funds for research proposals; and specialized space for research. A host of research units function under the auspices of ICTAS including the Macromolecules and Interfaces Institute (expenditures of \$1 million) and the Ted and Karyn Hume Center for National Security and Technology (expenditures of \$6 million). Additionally, ICTAS, reporting to the Vice President for Research and Innovation, had expenditures of almost \$10.3 million. The last audit of this area was in 2009.

***Interdisciplinary Center for Applied Mathematics (ICAM) and Institute for Society, Culture, and Environment (ISCE)***

ICAM was formed in 1987 to promote and facilitate interdisciplinary research and education in applied mathematics. ICAM reports to the Vice President for Research and Innovation and had expenditures of approximately \$277,000. ISCE supports targeted creative, interactive, multi-, and interdisciplinary research endeavors involving the social sciences, humanities, and the arts. Research extends from public policy to personal identity and including explorations of race, ethnicity, class, and gender. ISCE,

**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN**

also reporting to the Vice President for Research and Innovation, had expenditures of approximately \$543,000. ICAM was previously audited in 2003, but ISCE has not received a dedicated review.

***International Activities***

The university's emphasis on efforts to further develop its global presence presents distinct opportunities and challenges. The review will focus primarily on Virginia Tech's Steger Center for International Scholarship (formerly known as CESA) along with other academic and education abroad activities. The Steger Center is the university's European campus center, and base for operations and support of its programs in the region. A wide variety of semester-long and summer study abroad programs provide diverse learning experiences for undergraduate and graduate students. While many of the Steger Center programs are tailored for the educational and research development of Virginia Tech faculty members and students, another important focus is collaboration with nearby institutions to arrange faculty and student exchanges. This activity has not previously received a targeted review.

***IT-Linux Servers***

There are numerous servers in use at Virginia Tech supporting everything from sensitive research to central systems. While a significant number of servers at Virginia Tech operate in the more popular Windows environment, there are still many servers operating in a Linux environment. These servers require specialized administration and may have unique security challenges. This audit will focus on security across the enterprise by selecting servers in various administrative and academic departments. The last audit of this topic was in 2012.

***IT-Network Security (RLAN, Routers, and Firewalls)***

Virginia Tech provides an extensive telecommunications and data network that accommodates tens of thousands of registered users connecting work and personal devices through wired, Wi-Fi, and virtual private network connections. Additionally, the university operates a Restricted/Limited Access Network (RLAN), which provides employees who work with personally identifying information additional layers of protection for network and computing environments. This audit will assess the network security architecture. There has been no dedicated audit of network security, although various components, including Wi-Fi security, have been reviewed previously.

***IT-Printer Security***

There are numerous printers in use within the university's administrative and academic units. These printers can have highly sensitive responsibilities including printing checks, transcripts, and completed tax forms. Sensitive communication involving senior administration, University Legal Counsel, and Human Resources can be printed regularly as well. This is of particular concern in that the printers themselves continue to become more complex with their own hard drives and operating systems in use, yet are rarely secured with the same level of detail that servers or personal computers endure. This audit will focus on physical and logical security of printers across the

**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN**

enterprise by selecting varying devices for review in multiple functional areas based on risk. The last audit of this topic was in 2012.

***IT-Project Management***

The project management process incorporates a practical framework for steering a project from concept through completion. Utilization of, and adherence to, a framework for project management helps to ensure projects are delivered on time, within budget, and aligned with established deliverables. The Virginia Tech Standard for Information Technology Project Management (Standard) was designed to promote best practices of the nationally recognized Project Management Institute. This audit will focus on the design of the Standard and application of the Standard in the project management process. IT project management was last audited as a part of a Communications and Network Services audit in 2009.

***Real Estate Management***

Real Estate Management provides assistance to the university community in the areas of leasing and property management of real estate, property acquisitions, transfers, sales, real estate easements and rights-of-way, and disposal and demolition of surplus buildings. Real Estate Management also serves as the repository of all university deeds, leases, and other real estate documents, including facility use agreements. The unit manages in excess of 200 payable leases and facility use agreements with planned expenditures estimated at \$30.4 million for fiscal year 2015-16. Additionally, the unit is responsible for overseeing nearly 30 income leases and facility use agreements, with anticipated revenues of approximately \$1.1 million in fiscal year 2015-16. The unit was last audited in 2014, and as a result of that review is recurring on an accelerated timeline.

***Research: Effort Reporting***

The university receives significant funding for sponsored projects from federal and state agencies, private foundations, organizations, and industry. Effort reports (Personnel Activity Reports) are distributed to employees who work on these projects to document the allocation between direct and indirect activities equivalent to the level of effort benefitting these projects. Effort certification verifies these funds are properly expended to comply with regulatory requirements. Each college, department, or organizational unit is responsible for ensuring Personnel Activity Reports are completed and submitted in a timely manner. This review will cover effort reporting for the research expenditures totaling \$288 million. No dedicated audit of this topic has been completed previously.

***Student Centers and Activities***

Student Centers and Activities, a unit within the Division of Student Affairs at Virginia Tech, complements the academic program by providing a variety of activities, educational opportunities, programs, facilities, and services that enhance student development and enrich the quality of campus life. The university has three student centers: Squires Student Center, the Graduate Life Center at Donaldson Brown, and G. Burke Johnston Student Center. Student Centers and Activities had operating revenues

**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2015-16 AUDIT PLAN**

of approximately \$12.3 million and total operating expenses of \$12.4 million. This unit was last audited as part of the University Unions and Student Activities review in 2010.

***The Inn at Virginia Tech and Skelton Conference Center***

The Inn at Virginia Tech and Skelton Conference Center (the Inn), opening in 2005, offers nearly 24,000 square feet of conference space, including a 700-seat ballroom, 10 conference rooms, and 147 hotel rooms and suites. In addition to the hotel and conference facilities, the Inn also boasts a full-service restaurant and lounge. Benchmark Hospitality International, a Texas-based luxury hotel and resort company, assumed management of the facility in January 2011. The Inn had \$10.9 million in revenue and \$8.4 million in cash receipts. This unit was last audited in 2009.

***University Scholarships and Financial Aid***

The Office of University Scholarships and Financial Aid (USFA) is part of the Enrollment and Degree Management area. USFA supports the university's student access, enrollment, and retention goals by providing the financial means to encourage economic, social, cultural, and academic diversity in the student body. USFA provided or monitored approximately \$439.9 million in student financial assistance in fiscal year 2013-14. A complete audit of USFA is performed over a four-year period. This review will include state and institutional programs and overawards. The last audit of this activity was in 2013.

***Compliance Reviews***

Internal Audit will continue its program of limited scope reviews of senior management areas. These surveys review major aspects of a department's administrative processes using internal control questionnaires and limited testing that provides broad audit coverage ensuring compliance with university policies on campus.

## Review and Acceptance of Internal Audit Reports Issued

### FINANCE AND AUDIT COMMITTEE

April 21, 2015

#### Background

In concurrence with the fiscal year 2014-15 Internal Audit Plan approved by the Finance and Audit Committee at the September 15, 2014 Board of Visitors meeting, the department has completed three risk-based audits and one compliance review during this reporting period. This report provides a summary of the ratings issued during the period and the rating system definitions. Internal Audit continues to make progress on the annual audit plan.

#### Ratings Issued This Period

Health and Counseling Centers	Improvements are Recommended
IT Security Incident Response	Improvements are Recommended
College of Veterinary Medicine	Improvements are Recommended
Vice President for Administration	Improvements are Recommended

#### Summary of Audit Ratings

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

#### Definitions of each assessment option

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

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

**Significant or Immediate Improvements are Needed** – The audit identified several control weaknesses that have caused, or are likely to cause, material errors, omissions, or irregularities to go undetected. The weaknesses are of such magnitude that senior

management should undertake immediate corrective actions to mitigate the associated business risk and possible damages to the organization.

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

**RECOMMENDATION:**

That the internal audit report reviewed above be accepted by the Finance and Audit Committee.

June 1, 2015

# **Final Resolution of Federal Audit of National Science Foundation Research Expenditures**

## **FINANCE AND AUDIT COMMITTEE**

**May 1, 2015**

### **Background**

In addition to the annual audits of the university's financial statements and its Intercollegiate Athletics program performed by the Auditor of Public Accounts (APA), Virginia Tech is also subject to special purpose audits or reviews performed by other entities, such as federal agencies sponsoring grants and contracts. Due to the growth in the breadth of the research programs and the dollar volume of activities at Virginia Tech, the university was selected for inclusion in such audits or reviews. At most of the meetings since June 3, 2013, the university provided reports to the Finance and Audit Committee on the status of the National Science Foundation audit. This report provides the final results of the audit resolution process following the completion of this audit.

### **Background - National Science Foundation Audit**

In the Spring of 2013 the Office of the Inspector General (OIG) for the National Science Foundation (NSF) announced it would perform "cost incurred performance audits" of 11 large institutes of higher education which have received significant funding from NSF. Because Virginia Tech currently has 503 active awards totaling \$190.7 million from NSF, it was one of the universities selected for audit.

The OIG selected Withum Smith and Brown (WSB), a public accounting firm, to perform Virginia Tech's audit. The audit commenced in Spring 2013 and covered a three year period from January 1, 2010 to December 31, 2012. During the audit, the university provided an extensive amount of data to the auditors and worked with them to complete the audit process which lasted more than a year. In early July of 2014 WSB issued their audit report dated June 30, 2014. The report included six audit findings with total questioned costs of \$1.6 million. The university agreed with the auditors that \$64,138 of the questioned costs related to non-salary expenditures were not in compliance per federal regulations for allowable costs and should be refunded to NSF. However, the university disputed the remaining \$1.5 million in questioned costs.

To resolve the disputed findings, on July 18, 2014 the university held initial discussions with the Cost Analysis and Audit Resolution (CAAR) branch of NSF. The CAAR branch of NSF *"resolves compliance, internal control, and questioned costs findings contained in awardee*

Office of Management and Budget (OMB) A-133 audit reports and/or Office of Inspector General (OIG) initiated audits and investigations of NSF awards”.

### Final Resolution of This Audit

The university received a final resolution of the audit from the NSF CAAR personnel on April 30, 2015. Overall, the auditors reviewed over 193,111 expenditure transactions totaling \$113.2 million on the university’s NSF projects for the three year period. The total questioned costs represented 1.42 percent of the total NSF expenditures. A summary of the audit findings and final resolution is provided below:

	Finding Description	Questioned Costs	Allowed Costs	Sustained Finding
1	Exceeded NSF Limits on Senior Personnel Salary	\$1,456,716	\$1,456,716	\$0
2	Improper Allocation of Indirect Costs	\$15,585	\$0	\$15,585
3	No Benefit for Moving and Relocation Expenses	\$8,485	\$0	\$8,485
4	Unallocable Immigration Fees	\$2,913	\$0	\$2,913
5	Unreasonable Travel Expenses	\$2,101	\$0	\$2,101
6	Unreasonable Equipment and Property Charges	\$118,329	\$83,275	\$35,054
	<b>Totals:</b>	<b>\$1,604,129</b>	<b>\$1,539,991</b>	<b>\$64,138</b>

As shown above, \$1.45 million or 91 percent of the questioned costs relate to exceeding NSF limits on senior personnel salary. Specifically, this finding relates to NSF rules which preclude charging more than two-ninths of a senior personnel’s salary across all active NSF projects for that personnel. NSF is the only federal agency that has this rule related to faculty salaries.

The WSB auditors and NSF OIG personnel initially did not accept the university’s argument that NSF rules permit limited re-budgeting of costs to streamline the administration of NSF awards and that this re-budgeting authority did not specifically exclude faculty salaries. They also rejected the university’s argument related to other ambiguities in the NSF guidance related to salaries. It is important to note that, absent the unique NSF salary limits, the faculty’s salaries charged to the project would have been an allowable cost to the NSF

projects. The auditors did not question that the effort performed by the faculty did not benefit the projects.

Resolution relating to questioned salary costs:

The final report found in favor of the university and agreed that the university did have re-budgeting authority as shown in final CAAR report which stated (with emphasis added by the university):

*“NSF's faculty salary compensation policy is budgeting guidance for the preparation and submission of proposals. As stated in the NSF "Frequently Asked Questions (FAQs) On Proposal Preparation and Award Administration" dated January 2013, awardees "can internally approve an increase or decrease in person months devoted to the project after an award is made, even if doing so results in salary support for senior personnel exceeding the 2 month salary rule. No prior approval from NSF is necessary. The caveat is if the change would cause the objective or scope of the project to change, then the awardee would have to submit an approval request via Fastlane." NSF recently clarified the policy in the latest version of the Proposal and Award Policies and Procedures (PAPPG; NSF 15-1). **Based on the above, NSF has determined that the basis for this finding misinterprets NSF's faculty salary compensation policy, and as a result, hereby allows all of the \$1,456,716 in questioned costs identified for finding number 1.**”*

Subsequent to the audit, the Office of Sponsored Programs (OSP) implemented additional procedures to monitor senior personnel's salaries charged to NSF projects. If the two months limit and the budgeted amount is exceeded on an NSF project, OSP works with departments to either transfer any excess amounts or to formally re-budget the project and document that the scope remains unchanged.

Resolution relating to the remaining questioned costs:

The remaining questioned costs generally relate to equipment purchased near the end of NSF projects, salary cost transfers, travel expenditures, visa costs, etc. and whether such expenditures benefited the NSF grant that was charged. The total of questioned costs for these items was \$147,413, the university concurred that \$64,138 of such charges were inappropriate but disputed the remaining \$83,275.

The final report agreed with the university's position. The university had previously removed \$11,817 of questioned costs from active NSF projects. The university has also issued a check to NSF totaling \$52,321 to settle the remaining amount of the \$64,138 of questioned costs and complete the resolution of this audit. **The final questioned costs, as presented in the final CAAR report, of \$64,138 was less than six-hundredths of one percent of the \$113.2 million total NSF expenditures audited.**



# **Financial Strategies, Planning, and Analysis for Enrollment Growth**

M. Dwight Shelton, Jr.

June 1, 2015

# Why Increase Undergraduate Enrollment Growth?

- Respond to demand
- Serve more Virginia residents
- Increase campus representation
- Enhance resources and improve quality

# Financial Planning Goals

- Plan delivery of services in a coordinated manner
- Balance competing demands
- Bend cost curves
- Focus resources to maximize impact

# Undergraduate Growth Scenarios

- 500 additional entering first year students (\$8.5M tuition in 2015-16)
- Results in net growth of 2,000 over four years
- Possible additional growth, beyond 2,000, over eight year period

# Financial Planning Process

- Under development
- Comprehensive approach
- Coordinated with:
  - Campus programs and leadership
  - State funding
- Recognize that resources are finite

# Financial Implications

Enrollment growth has significant financial implications for:

- Capital Program (e.g. Six-year plan)
- Operating Budget (multi-year plans)
- Potential State Investment
- Debt Rating and Capacity
- Institutional Financial Strength

# Enrollment Growth Enhances and Impacts

- Relationship to other university strategic goals
  - Research
  - Faculty salaries
  - Infrastructure projects
- Incremental critical needs
  - Unfunded mandates
  - Unavoidable cost increases
  - State cost assignments
- Cost containment & affordability

# Competing Demands Within Enrollment Growth

- Operating Budget:
  - Instruction (faculty, faculty startup)
  - Advising & student support
  - Academic support & library
  - Student Services (admissions, registrar, financial aid)
  - Institutional support
  - Operation & maintenance of plant (utilities, custodial)
  - Auxiliary Enterprises (dorm, dining, union, recreation, bus, parking)
  - Student financial aid
- Capital Budget:
  - Facilities (e.g. instructional labs, residence halls, etc)
  - Infrastructure (roadways, utility systems)
  - Renovation of existing spaces

# Potential Resources

- Potential resources to support enrollment growth:
  - Tuition (state policy/elasticity of demand)
  - Mandatory fees
  - User charges (room rate, meal plan)
  - State support
  - Private philanthropy
  - Reallocations of existing capacity (space, personnel)
  - Containment of administrative & support costs

# Debt Capacity

- Enrollment growth will enhance debt capacity
- Committed to operate within BOV 5% debt ratio requirement
- Initial estimate of \$65M of additional debt capacity from enrollment growth through FY 2023
- This would add to the \$296M of existing unallocated debt capacity for the period
- Results in total debt capacity of \$361M available to support enrollment growth, infrastructure, and other strategic objectives

# Financial Planning to Support Academic Quality

- Academic Affairs Committee is reviewing academic program needs to accommodate enrollment growth and ensure quality
- Finance is working jointly with the Provost Office to understand costs and identify potential resourcing strategies to ensure desired outcomes including faculty salaries, financial aid, and other institutional needs

# Financial Planning to Support Student Life Infrastructure Needs

- Student Affairs and Buildings and Grounds Committees are reviewing student facility concepts to accommodate enrollment growth
- Finance has begun working in conjunction with Facilities and Student Affairs to understand costs and identify potential resourcing and pacing strategies to ensure financial feasibility

# Summary

- Advance strategic goals in a balanced manner
  - Thoughtful resource planning to balance the appropriate delivery of services with competing demands
- Develop new and improved facilities and quality programs to support campus priorities
- Resource constraints may impact the extent and pace at which student life and facilities needs can be achieved
- The financial planning process will ensure continued affordability, consistent with the land grant mission of access

**Questions?**



# 2015-16 Faculty Compensation Plan

M. Dwight Shelton, Jr.

June 1, 2015

# 2015-16 Faculty Compensation Plan

- Consistent with prior year plans
- University continues to follow parameters from Secretary of Education
  - Consolidated Salary Authorization for Faculty Positions in Institutions of Higher Education
  - Defines qualification criteria for T/R and A/P faculty
  - Provides guidance on authorized salary average for full-time T/R
  - Requires Board approval

# 2015-16 Faculty Compensation Plan Elements

- Authorized Salary Average
- 2015-16 pay structure
- Promotion and tenure process
- Annual evaluation and salary adjustment process
- Other salary adjustments
- Merit Review and Compensation Process

## Authorized Salary Average

- University authorized salary average of \$93,104 for 2013-14 at 32<sup>nd</sup> percentile of our peer group.
- SCHEV has not published a Fall 2014 authorized salary for Virginia Tech.
  - IPEDS peer data for Fall 2014 not yet available
  - SCHEV estimates an average 2% peer increase
- If the market moves as expected, the university's 2014-15 merit action should maintain our relative market position.

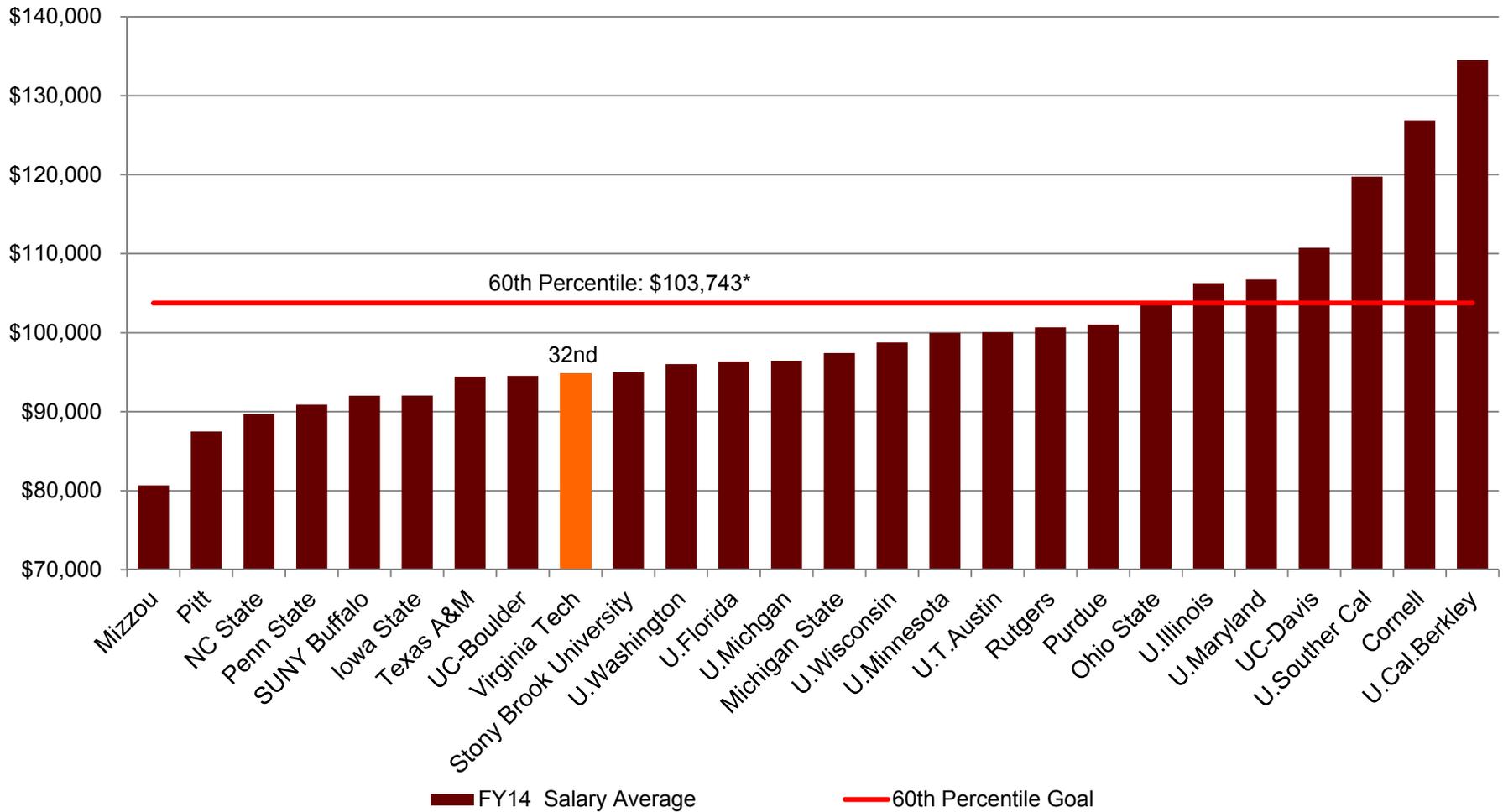
# Peer Salary Benchmarking

	<b>Fall 2013</b>	<b>Fall 2014*</b>
60 <sup>th</sup> Percentile IPEDS	\$101,709	\$103,743
State Authorized Salary Average	\$93,104	\$94,817
Actual Average Salary <sup>(a)</sup>	\$91,775	\$94,817
Rank -- Authorized	18 of 26	18 of 26
Rank -- Actual	20 of 26	18 of 26
Percentile – Authorized	32 <sup>nd</sup>	32 <sup>nd</sup>
Percentile -- Actual	28 <sup>th</sup>	32 <sup>nd</sup>

*\*IPEDS peer salary data for Fall 2014 is not yet available. Estimates are based on the State Council of Higher Education's forecast of 2% salary escalation at peer institutions.*

(a) Computed in accordance with traditional consolidated salary average guidelines provided by the Secretary of Education.

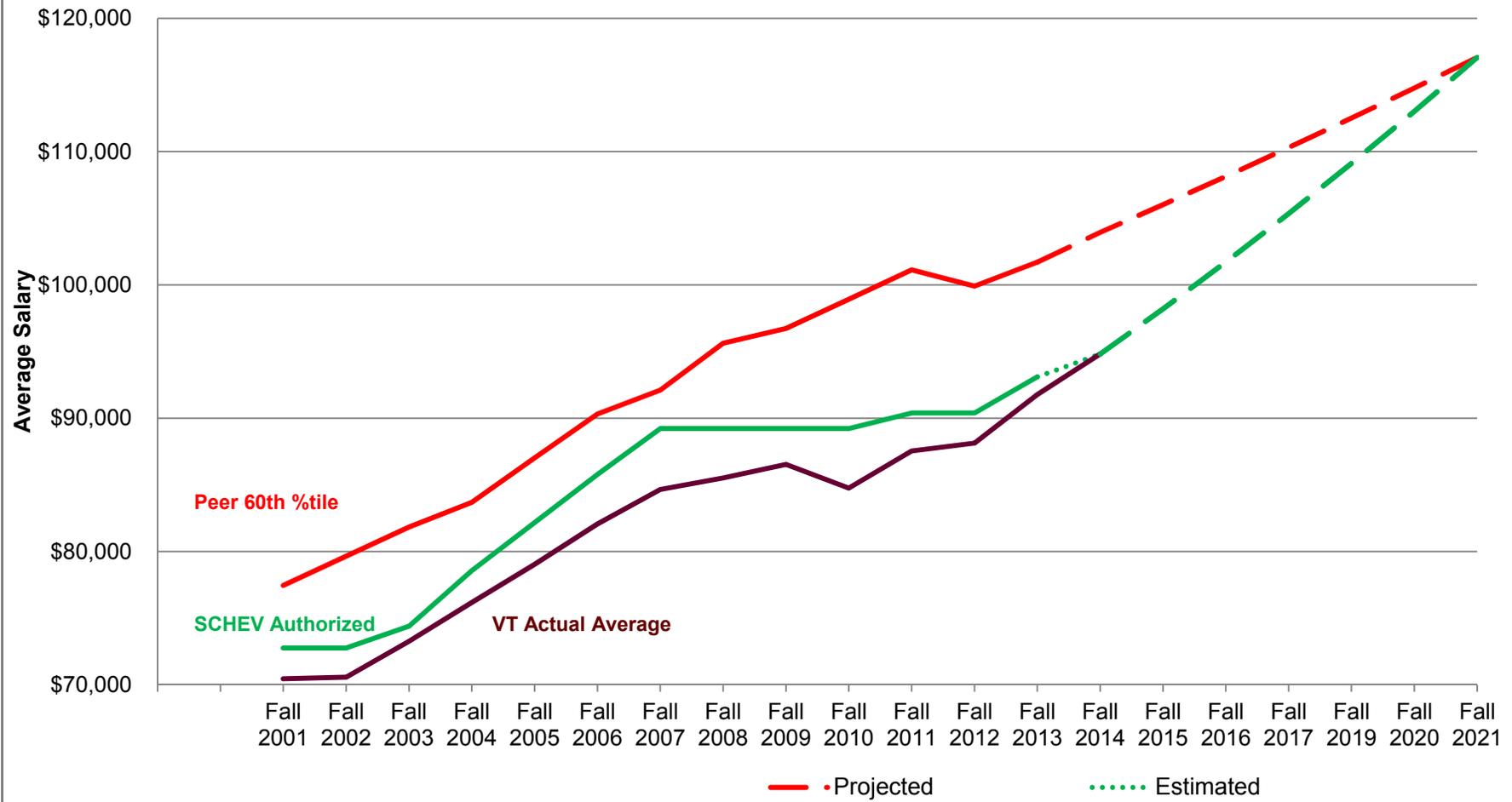
# SCHEV Peer Salary Benchmarking



\*IPEDS peer salary data for Fall 2014 is not yet available. Estimates are based on the State Council of Higher Education's forecast of 2% salary escalation at peer institutions

# Faculty Salary Progress

## Towards 60<sup>th</sup> Percentile of SCHEV Peer Group (Fall 2001-Fall 2021)

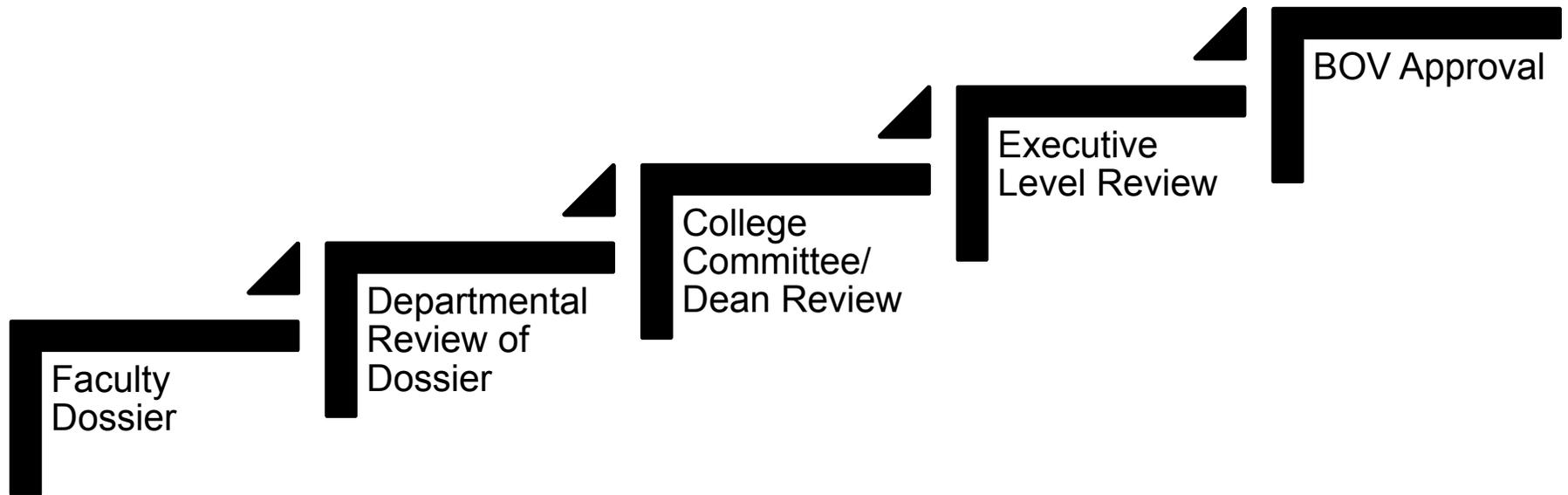


# 2015-16 Pay Structure

- Establishes entrance salaries for each faculty rank
- Summarizes distribution of faculty across ranks

	9-Month Faculty	12-Month Faculty	Approximate Distribution of Faculty By Rank
	Entrance	Entrance	
<b>Professor</b>	\$86,313	\$105,271	33%
<b>Associate Professor</b>	66,015	79,992	30%
<b>Assistant Professor</b>	54,611	66,427	25%
<b>Senior Instructor</b>	46,837	60,944	2%
<b>Advanced Instructor</b>	41,758	54,173	2%
<b>Instructor</b>	38,274	49,798	8%

# Promotion & Tenure Process



- Promotion to a higher rank and appointment with tenure may be granted to faculty members on a regular faculty appointment who have demonstrated outstanding accomplishments.
- Each candidate for promotion or tenure will be evaluated in light of the triple mission of the university: instruction, research, and outreach.

# Promotion & Tenure

<b>Faculty</b>	<b>Clinical Faculty</b>	<b>Professor of Practice</b>	<b>Cooperative Extension</b>	<b>Instructor</b>	<b>Amount*</b>
Professor	Clinical Professor	Professor of Practice			\$7,000
Associate Professor	Clinical Associate Professor	Associate Professor of Practice	Senior Agent	Senior Instructor	\$5,000
Assistant Professor	Clinical Assistant Professor	Assistant Professor of Practice	Agent	Advanced Instructor	\$3,000

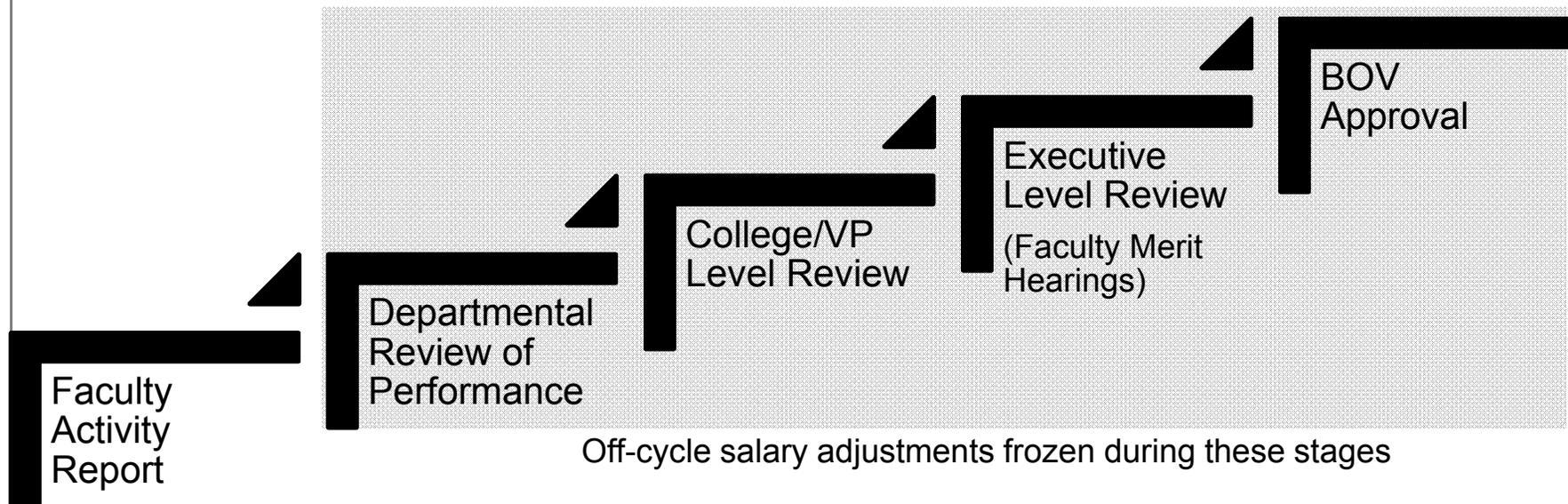
*\*No Change to Amounts from 2014-15 Faculty Compensation Plan*

# Annual Evaluation and Salary Adjustments

- Faculty Activity Report (FAR)
  - Teaching/Research Faculty: instructional activities, creative scholarship, outreach and service contributions and other professional activities and recognitions
  - Administrative/Professional faculty: activities in support of their specific job goals as they relate to the broader mission of the university
- FAR forms the basis of faculty evaluations conducted annually by departments independent of the faculty merit process

# Annual Evaluation and Salary Adjustments

## Faculty Merit Process



- Salary adjustments in the faculty merit process are based on performance, not automatic.
- All merit recommendations are reviewed at three levels before presenting to Board of Visitors for approval.

## Other Salary Adjustments

- May happen for:
  - changes in duties and responsibilities
  - special temporary assignments
  - while intent is that all faculty follow standard merit timeline, if hiring anniversary date for restricted positions is used instead of standard timeline
  
- Salary changes established through this process are submitted for ratification to the Board of Visitors on a quarterly basis on the Faculty Personnel Changes Report in accordance with the Faculty Compensation Plan.

# Merit Review and Compensation Process

- In accordance with the 2015 General Assembly, the university proposes an annual merit-based faculty salary program in 2015-16
  - At least 3.5% for T&R faculty
    - 1% of the funding amount from reallocation
  - No more than 2.0% for A/P faculty
    - 1% of the funding amount from reallocation

# Merit Review and Compensation Process

- Contingent upon state revenue target achievement
- State revenues are currently exceeding state budget pace
- State revenues to be certified by State Comptroller on July 5, 2015
- Effective date Aug 10, 2015

# Questions?

## Update on the 2015-16 Faculty Merit Process

### FINANCE AND AUDIT COMMITTEE

June 1, 2015

The 2015 Virginia Appropriation Act, approved on February 27, 2015 by the General Assembly and signed by the Governor on March 26, 2015, included a faculty merit process effective August 10, 2015 assuming no downward revision of state revenues by the State Comptroller by July 5, 2015. Given that the Board of Visitor's meeting schedule does not align with the legislated timeline for this process, this report provides an update on how the university envisions implementing the state's timeline within the board's meeting schedule through action of the board's Executive Committee before the legislated effective date. The full board will be asked to ratify the actions at the September meeting.

### Schedule for 2015-16 Faculty Merit Process

<b>Date</b>	<b>Action</b>
March 2015	Cost and funding strategy for faculty merit process reviewed with Board of Visitors.
May-Mid June 2015	Department heads review merit adjustment recommendations with Deans and Vice Presidents.
June 2015	2015-16 Faculty Compensation Plan will be reviewed for approval by Board of Visitors.
Late June-July 2015	Deans and Vice Presidents review merit adjustment recommendations with university executives.
July 5, 2015	State Comptroller confirms that revenue contingency in the Appropriation Act has been satisfied and the salary process can proceed.
Early August 2015	University will convene the Executive Committee of the Board of Visitors to review and approve faculty merit recommendations.
August 10, 2015	Legislated effective date of faculty salary actions.
August 31, 2015	Full Board of Visitors will be asked to ratify faculty merit recommendations.



# Financial Performance Report

## Third Quarter 2014-15

Tim Hodge, Assistant Vice President for  
Budget and Financial Planning

June 1, 2015



# Overview

- The university continuously monitors financial performance
- Each quarter the university provides the Board with an update on financial performance
- The annual budget represents the university's projection of operations
  - The original budget is as reviewed with the Board in June
  - The adjusted budget is revised as new information becomes available



# E&G Operating Budget

## Key Annual Budget Changes

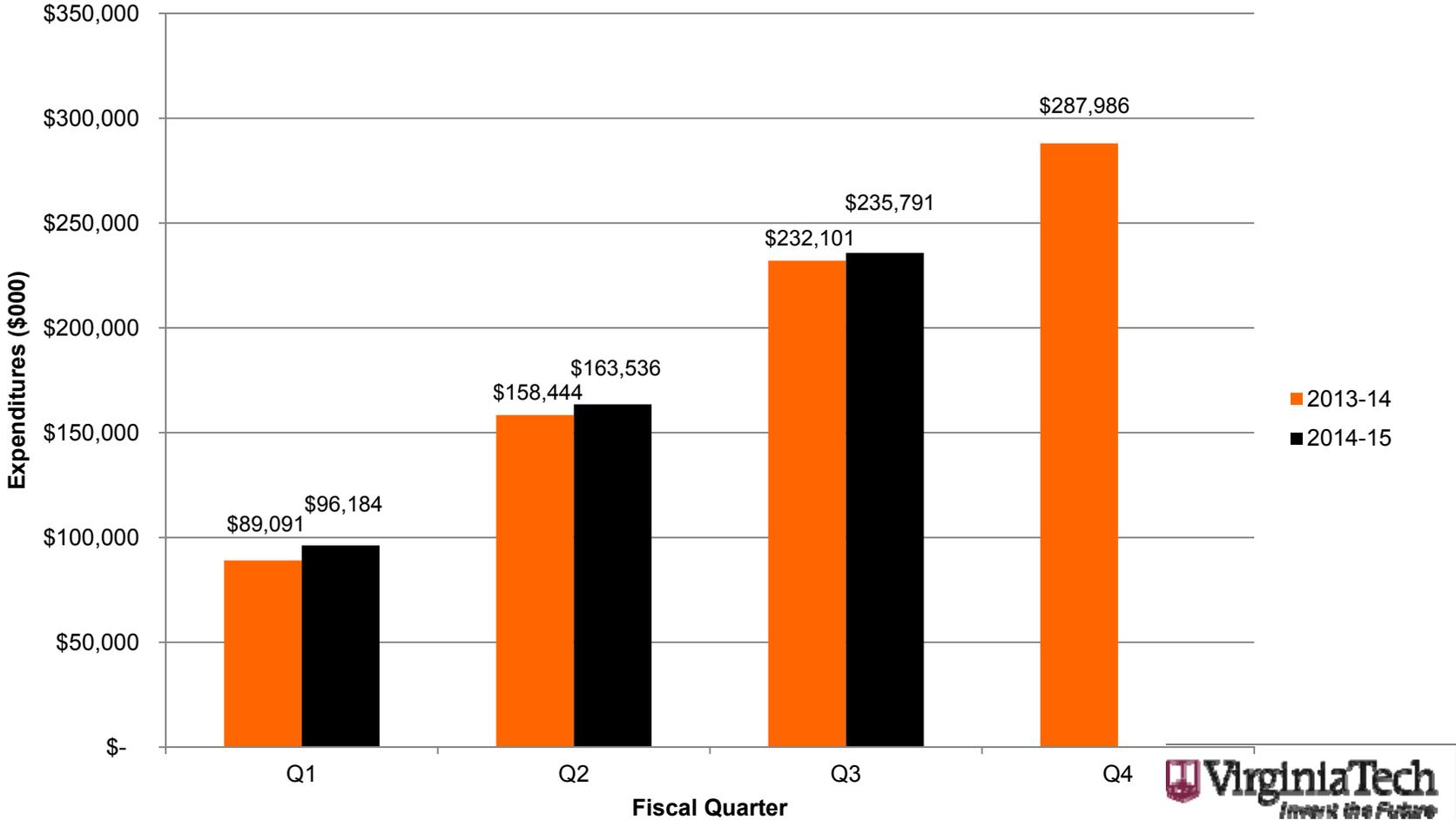
- Tuition: \$3.96 million budget increase for winter session and higher than projected spring retention
- Veterinary Medicine Teaching Hospital: \$300k budget increase for increased case loads

## Performance

- University Division
  - Normal timing variations
- Cooperative Extension/Agricultural Experiment Station (CE/AES)
  - Improvement in collections of Federal funds in Agency 229.



## Sponsored Programs Expenditures 2013-14 to 2014-15





# Auxiliary Enterprises

## Key Annual Budget Changes

- Residential & Dining: \$1.8 million increase in business volume and projects
- Athletics: \$3.4 million expense increase including \$1.6 million game settlement technical accounting change, \$700k operating, \$600k scholarship transfer, and \$500k Rector Field House planning

## Performance

- Fleet & Electric Service: lower than projected business volume; offset by lower than projected expenses
- Printing Services: higher than project business volume
- Other activities are performing well



# Capital Outlay

- **Total capital program level currently authorized**
  - \$647.4 million over several years
- **Cumulative program expenses**
  - \$416.9 million inception-to-date
- **Significant total program adjustments**
  - Projects approved at the March 2015 Board meeting and added to the report:
    - ❖ Airport Hangar Replacement
    - ❖ Softball and Track Improvements
    - ❖ Residential Connectivity



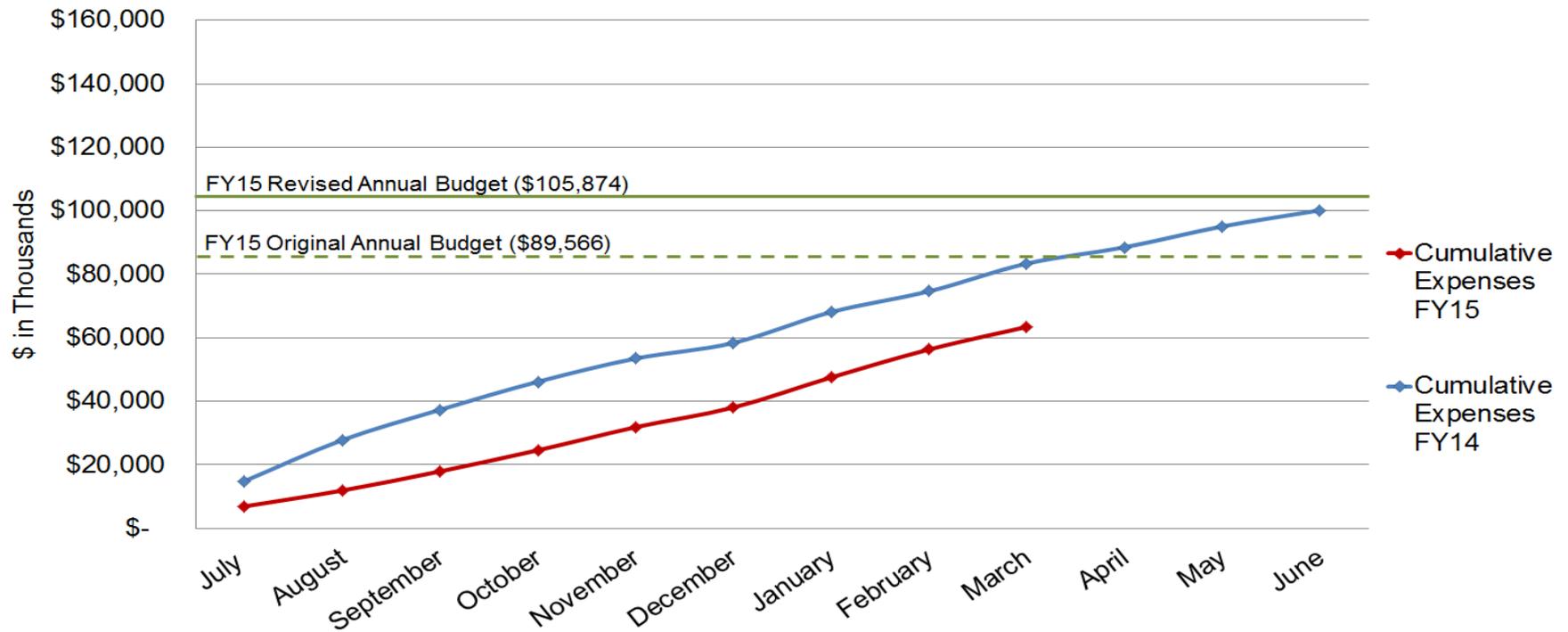
# Capital Outlay

- **Annual capital budget as of third quarter**
  - \$105.9 million
- **Annual expenses as of third quarter**
  - \$63.4 million
- **Annual budget adjustments this quarter**
  - Total project budgets unchanged.
    - ❖ Classroom Building \$(4.4 million)
    - ❖ South Recreation Field Surface Conversion \$(700 thousand)
    - ❖ Unified Communications & Network Renewal \$(1.8 million)
    - ❖ Upper Quad Residential Facilities \$12.5 million



# Capital Outlay Trends: Annual Performance

CAPITAL PROGRAM ANNUAL PERFORMANCE  
Cumulative Monthly Expenditures  
Fiscal Year 2014 and Fiscal Year 2015





# Capital Outlay

- **Major Construction Underway**
  - Classroom Building
  - Fire Alarm Systems and Access
  - Indoor Athletic Training Facility
  - Marching Virginians Practice Facility
  - South Recreation Field Surface Replacement
  - Upper Quad Residential Facilities



# Questions?



# 2015-16 Operating and Capital Budgets

M. Dwight Shelton, Jr.

June 1, 2015

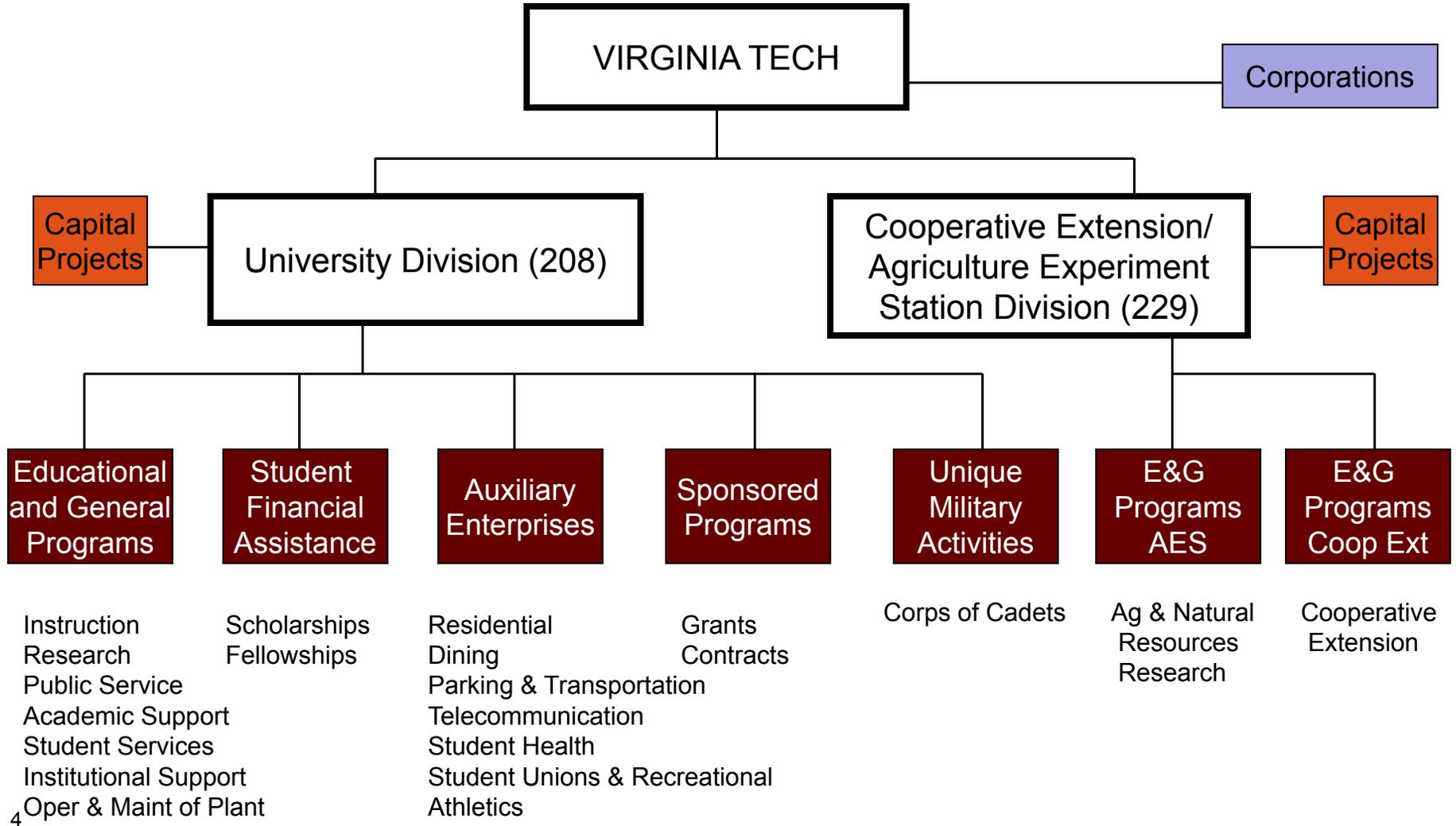
# Management Accounting Overview

- ❑ Fiscal Year – July 1 to June 30
  
- ❑ Accounting Basis – cash
  - ❑ Same as the Commonwealth of Virginia
  
- ❑ Fund Accounting System - ensures the intended linkage between funding and purpose

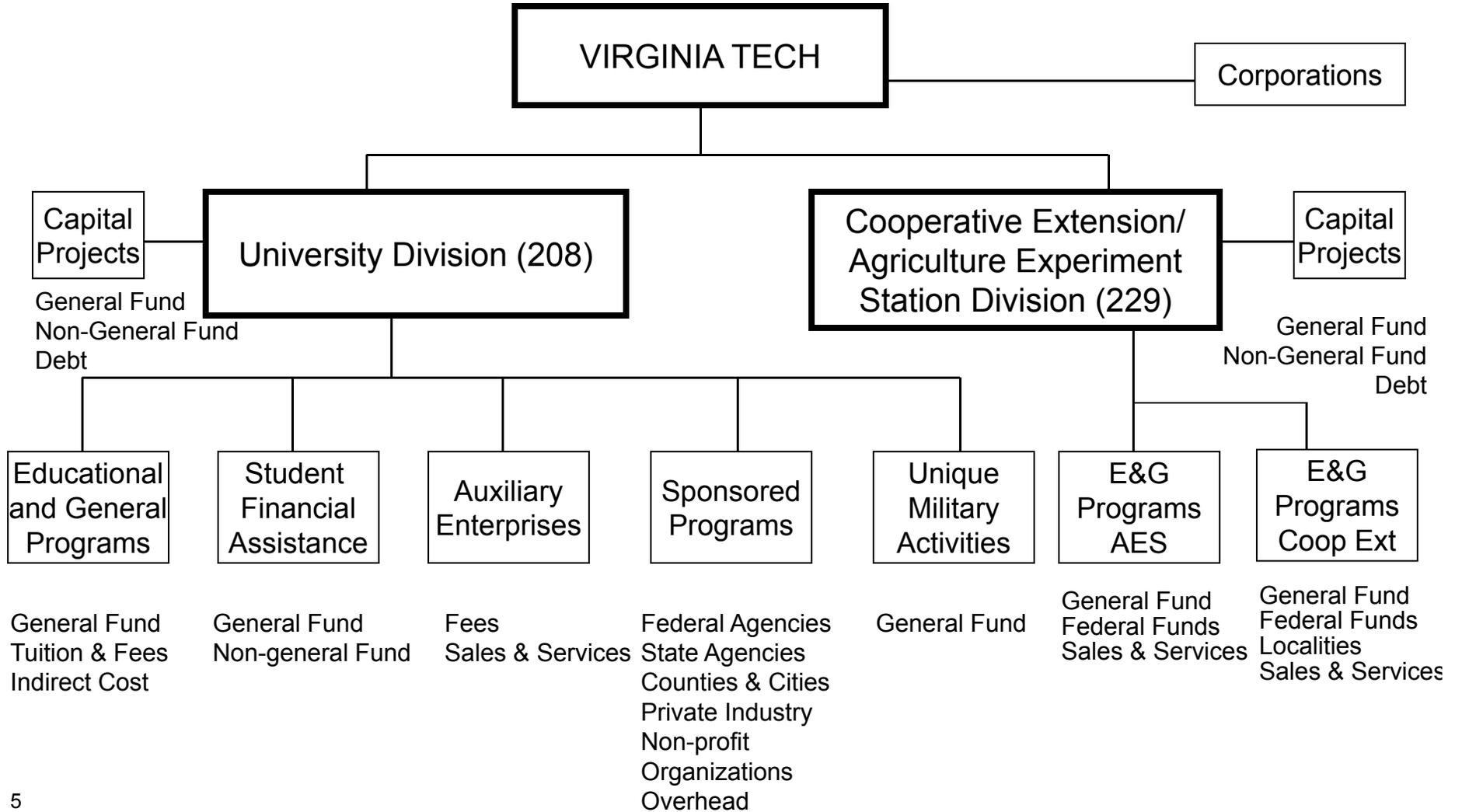
# Budget Development Timeline

- ❑ Fall/Spring – state budget process determines state support, nongeneral fund assessments & cost assignments, guidance, and costs
- ❑ Spring – BOV establishes tuition & fee rates
- ❑ May-June – finalize budget to advance strategic plan and address critical needs
- ❑ July 1 – start of new fiscal year

# Program Structure



# Fund Sources



# Incremental General Fund

(\$ in Millions)

**University Division E&G (Agency 208)**

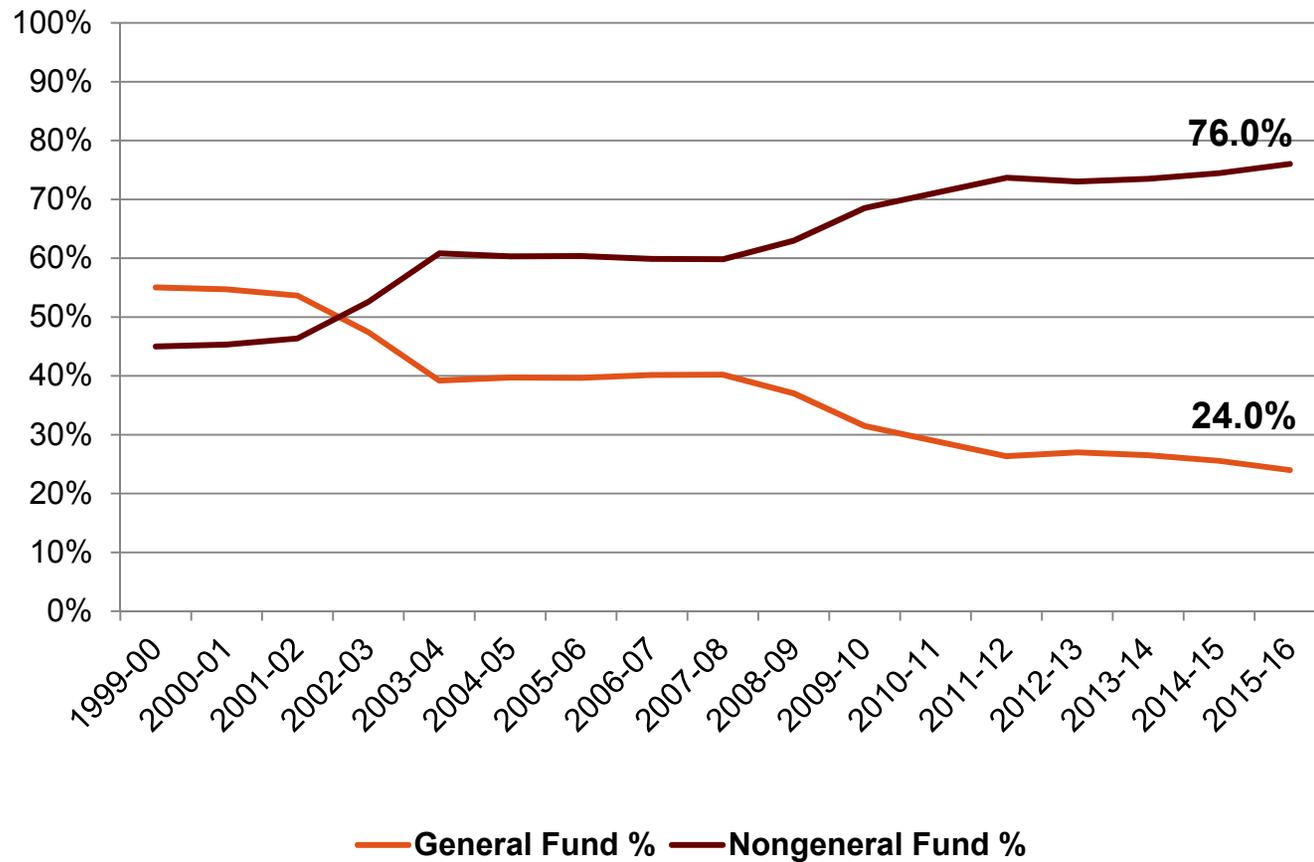
September Budget Reduction	\$ (6.1)
Faculty Salary Increase	1.65
Enrollment Growth	1.65
Staff Compensation Program	1.0
Fringe Rate Changes	1.2
Targeted Institutional Research	0.3
<i>Subtotal University Division E&amp;G</i>	<i>\$ (0.3)</i>
Brain Disorder Research	1.25
Financial Aid	0.1
Equipment Trust Fund	1.5
<b>Total University Division</b>	<b>\$ 2.55</b>

# Incremental General Fund

	<u>(\$ in Millions)</u>
<b><u>CE/AES Division (Agency 229)</u></b>	
Faculty Salary Increase	\$ 0.5
Staff Compensation Program	0.4
Fringe Changes	0.5
	<hr/>
<i>Subtotal CE/AES</i>	\$ 1.4
<b>University Total (both agencies)</b>	<b>\$ 3.95</b>

# Fund Split

## Education & General Fund Split



# 2015-16

## General Fund Support %

(\$ in Millions)

	<b>GF</b>	<b>Total</b>	<b>% GF</b>
208 E&G	\$153.3	\$639.4	24.0%
229 E&G	68.5	85.0	80.6%
Auxiliary	-	308.8	0.0%
Sponsored	5.4	338.0	1.6%
SFA	19.8	20.5	96.6%
Other	2.1	7.9	26.4%
Total	\$249.1	\$1,399.7	17.8%

# 2015-16

## Auxiliary Revenue Sources

(\$ in Millions)

	<b>Amount</b>	<b>Proportion</b>
Room Fee	\$ 49.7	16.1%
Board Fee	51.4	16.6%
Comprehensive Fee	54.0	17.5%
Self-generated	153.7	49.8%
Total	\$ 308.8	100.0%

# Federal Funds

(\$ in Millions)

	<u>2014-15</u>	<u>2015-16</u>	<u>Change</u>	
			<u>\$</u>	<u>%</u>
<u>Direct</u>				
Agency 229	\$16.98	\$15.64	\$(1.34)	(7.89%)
Federal Work Study	0.98	1.08	0.10	10.08%
<u>Pool</u>				
Sponsored Programs	193.80	183.80	(10.00)	(5.16%)

# 2015-16 Operating Budget

(\$ in Millions)

	2014-15 Adjusted Budget	2015-16 Proposed Budget	Change	
			\$	%
208 E&G	\$607.1	\$639.4	\$32.3	5.3%
229 E&G	\$85.0	\$85.0	\$0.1 <sup>1</sup>	0.1%
Auxiliary	\$303.5	\$308.8	\$5.3	1.7%
Sponsored	\$336.8	\$338.0	\$1.2	0.4%
SFA	\$19.9	\$20.5	\$0.6	3.0%
Other	\$6.7	\$7.9	\$1.2	18.4%
<b>Total</b>	<b>\$1,359.0</b>	<b>\$1,399.7</b>	<b>\$40.7</b>	<b>3.0%</b>

# Compensation Plan

- Contingent upon state funding availability, the university plans for:

## Faculty Merit Program

- 3.5% T&R faculty program comprised of:
  - 2.5% university allocation
  - 1.0% minimum reallocation by VPs and Deans
- 2.0% A/P faculty program comprised of:
  - 1.0% university allocation
  - 1.0% reallocation by VPs and Deans

**Merit programs are performance-based, not automatic**

## Staff Program

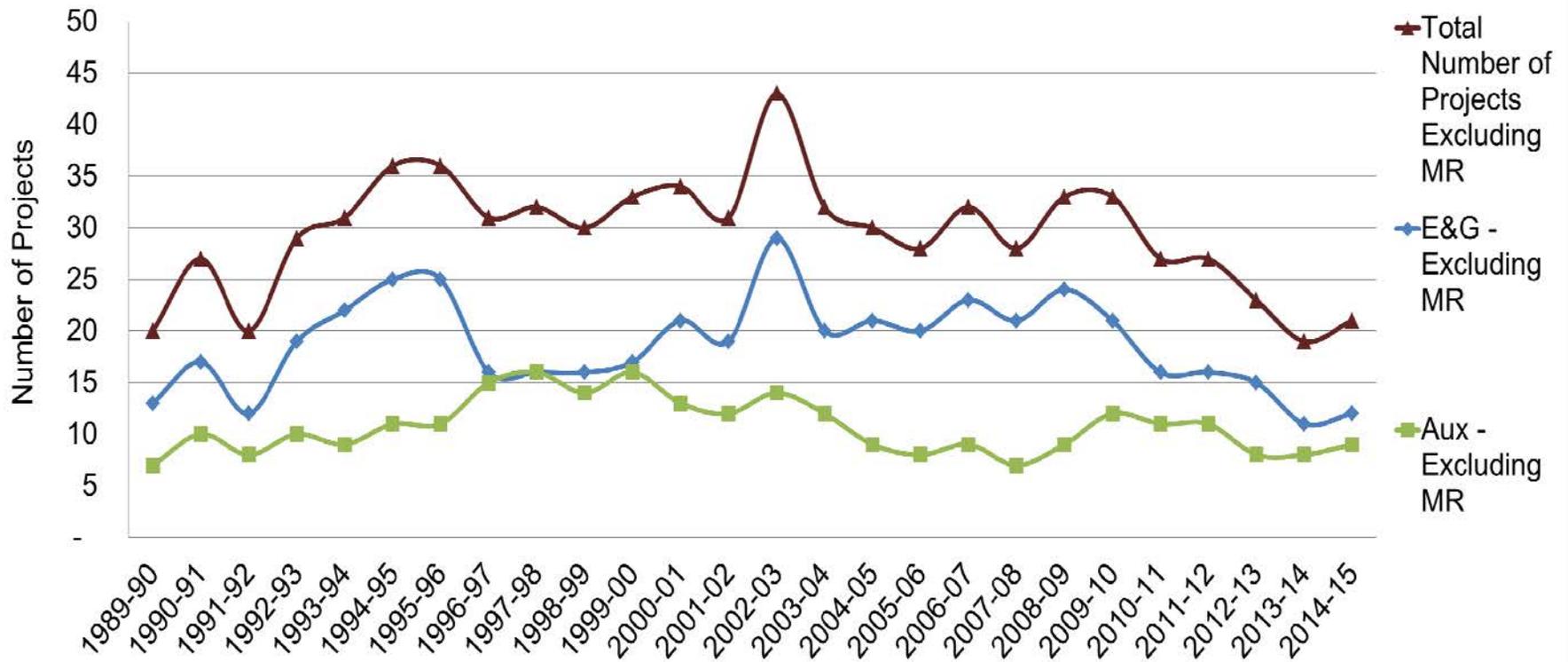
- 2.0% classified and university staff program comprised of:
  - 1.0% university allocation
  - 1.0% reallocation by VPs and Deans
- Classified staff state compression program of a \$65 per year of service increase for years of service between 5-30 years.

# Capital Budget Development

- ❑ Capital projects represent large expenditure commitments that occur in a relatively short period of time.
- ❑ Resource plans for capital projects are generally developed five to six years prior to implementation.
- ❑ This lead time is necessary to prepare resources for such large costs.
- ❑ Once initiated, a capital project requires approximately four years to complete.
- ❑ The annual budget reflects the projected expenditure activity for the given fiscal year.

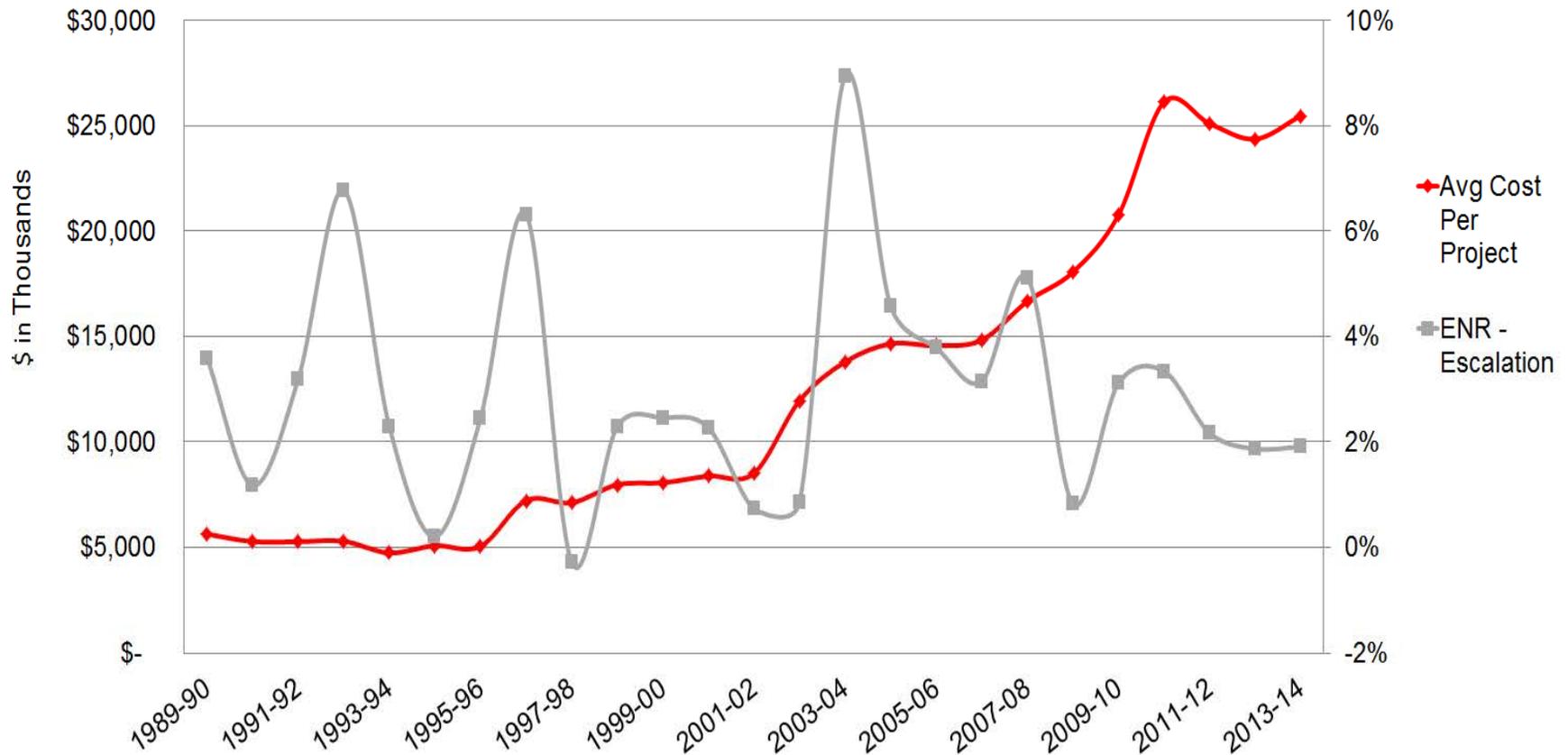
# Trend of Total Capital Program Budget

**CAPITAL PROGRAM PROJECTS**  
Total Number of Active Capital Projects  
 Fiscal Year 1990 - Fiscal Year 2015



# Trend of Average Project Cost

CAPITAL PROGRAM AVERAGE COST TREND  
Average Cost for Active Projects vs. ENR Escalation  
 Fiscal Year 1990 - Fiscal Year 2014



# 2015-16 Capital Budget

- ❑ The capital outlay program for fiscal year 2016 includes 21 projects in various phases of design, construction, and close-out
- ❑ The total fiscal year budget for 2016 is \$483 million with an expected annual spending of approximately \$113 million
- ❑ The university expects to initiate the following new capital projects as listed below:
  - Academic Buildings Renewal
  - Improve Kentland Facilities
  - Airport Hangar Replacement
  - Planning for Softball and Track Improvements
  - Residential Connectivity

**Questions?**

## **2015-16 Faculty Compensation Plan**

### **FINANCE AND AUDIT COMMITTEE**

**April 17, 2015**

The university continues to use the parameters provided in the “Consolidated Salary Authorization for Faculty Positions in Institutions of Higher Education” document from the Secretary of Education to develop the annual Faculty Compensation Plan. This document defines the qualification criteria for teaching and research faculty and administrative and professional faculty, provides guidance on the authorized salary average for full-time teaching and research faculty positions, and requires board-approval.

In accordance with the most recent Consolidated Salary Authorization, the 2015-16 Faculty Compensation Plan provides information about (1) the 2015-16 pay structure, (2) the promotion and tenure process, (3) the annual evaluation and salary adjustment process for teaching and research faculty, administrative and professional faculty, and research faculty, and (4) salary adjustments within the evaluation period.

This faculty compensation plan covers only faculty positions. The compensation plan for staff is administered separately by the university administration in accordance with the Board of Visitors’ approval of the university’s Management Agreement, effective July 1, 2006, as well as guidance from the state Department of Human Resource Management.

#### **Authorized Salary Average**

The authorized salary average applies to all full-time teaching and research positions with the rank of professor, associate professor, assistant professor, instructor, or lecturer that are engaged in teaching and research for 50 percent or more of the time. As noted in the Consolidated Salary Authorization document, “Institutions are expected to award differential salary increases to their faculty based on performance and other circumstances such as promotions, tenure, and changes in responsibility. The net effect of all salary actions should be an average salary that approximates the state authorized salary average.”

The commonwealth measures the adequacy of faculty salaries by comparing the institutional average with the average of a unique benchmark group for each public college and university. The benchmark groups are constructed by matching characteristics of colleges and universities, such as size of the student body, percentage of degrees granted in various disciplines, percentage of graduate degrees conferred, and research activity levels. The General Assembly established an objective in the late 1980s to fund a faculty salary average at all institutions that would approximate the salary average at the 60<sup>th</sup> percentile in the ranking of salary averages in individual benchmark groups. The State Council of Higher Education for Virginia (SCHEV) last reviewed and updated each institution’s Faculty Salary Peer Group in

2007. The 2013-14 benchmarking of Virginia Tech's Faculty Salary Average is made using the peer group established in 2007.

For Fall 2013, Virginia Tech's Authorized Salary was \$93,104. This placed Virginia Tech at the 32<sup>nd</sup> percentile of its peer group for 2013-14, based on the most recent peer salary data available data from the Integrated Postsecondary Education Data System (IPEDS). Because the university implemented a merit process in Fall 2014 the authorized salary is estimated to have increased to \$94,817. Based on SCHEV's two percent forecast of salary escalation at peer institutions, it is estimated that that the university's authorized salary will remain at the 32<sup>nd</sup> percentile of peer institutions for Fall 2014. Summary statistics are provided in the table below.

	<b>Fall 2013</b>	<b>Fall 2014</b>
60 <sup>th</sup> Percentile IPEDS	\$101,709	\$103,743*
State Authorized Salary Average	\$93,104	\$94,817*
Actual Average Salary <sup>(a)</sup>	\$91,775	\$94,817*
Rank – Authorized	18 of 26	18 of 26*
Rank – Actual	20 of 26	18 of 26*
Percentile – Authorized	32 <sup>nd</sup>	32 <sup>nd</sup> *
Percentile – Actual	28 <sup>th</sup>	32 <sup>nd</sup> *

*\*IPEDS peer salary data for Fall 2014 is not yet available. Estimates are based on the State Council of Higher Education's forecast of 2% salary escalation at peer institutions.*

<sup>(a)</sup> Computed in accordance with traditional consolidated salary average guidelines provided by the Secretary of Education.

Attachment A provides a list of the university's peer group and the comparative salary averages for Fall 2014.

### **2015-16 Pay Structure**

In accordance with the intent of the Consolidated Salary Authorization, a pay structure for the teaching and research faculty for 2015-16 is presented in Attachment B. This plan is derived from the 2014-15 approved plan. It incorporates the merit adjustment that was approved for 2014-15 and displays the normal entrance rate for each faculty category along with the change from the approved compensation rate for each rank. Also displayed is the distribution of faculty across the ranks.

The salary average for administrative and professional faculty may not exceed the authorized salary average for the teaching and research faculty by more than 35 percent.

### **Promotion, Tenure, and Continued Appointment**

Promotion to a higher rank and appointment with tenure may be granted to faculty members on a regular faculty appointment who have demonstrated outstanding accomplishments in an appropriate combination of instructional, research, outreach,

and other professional activities. A current curriculum vitae together with student and peer evaluations of teaching, reprints of publications, evaluations by external reviewers from the same or a related field, and other similar documents comprise a dossier which furnishes the principal basis for promotion and tenure decisions. Faculty members being considered for either promotion or the awarding of tenure will have their dossiers reviewed at three levels: by a departmental committee and the head or chair; by a college committee and the dean; and by a university committee and the Provost. Each candidate for promotion or tenure will be evaluated in the light of the tripartite mission of the university: instruction, research, and outreach. Although not all candidates can be expected to have equal levels of commitment or equal responsibilities in each of these missions, a high level of general competence is expected in recognition of the need for flexibility in the future establishment of priorities in academic programs. Beyond that basic foundation of competence, decisions related to tenure or promotion to associate professor will require evidence of excellence in at least one area.

The university's mission and commitment as a major research institution require high accomplishment for promotion to professor. Faculty members must demonstrate a high level of competence in an appropriate combination of instruction, outreach, and professional activities relevant to their assignment. Because of the university's mission and commitment as a major research institution, successful candidates for the rank of professor must demonstrate excellence in research, scholarship, or creative achievement, as appropriate for the candidate's discipline and assignment. Promotion to the rank of professor is contingent upon national or international recognition as an outstanding scholar and educator.

In addition to the material contained in this section, the Faculty Handbook provides detailed policies and procedures for the departmental evaluation, the college evaluation, and the university evaluation

Members of the Library faculty and Cooperative Extension faculty not holding appointments in a collegiate department may be considered for continued appointment or for promotion in faculty rank in recognition of appropriate professional accomplishments. Dossiers of candidates for promotion or continued appointment are submitted to the University Promotion and Continued Appointment Committee for Extra-collegiate Faculty by the relevant dean or director with accompanying recommendation. The recommendations of the Committee are conveyed to the Provost, who makes final recommendations to the President.

The following raises are recommended for promotions to:

Professor	\$7,000
Associate Professor	5,000
Assistant Professor	3,000

For academic-year faculty members who have Research Extended Appointments (10, 11, or 12 month appointments funded by sponsored projects) with salaries adjusted in accordance with formulas in Policy 6200 - Policy on Research Extended Appointments, or for those who have a limited-term appointment as department head or other

administrator, the stipend is adjusted by the same conversion rate to preserve its value when the faculty member returns to the academic-year base appointment.

The clinical faculty track provides for long-term, full-time or part-time faculty appointments to individuals whose primary responsibilities are instruction and/or service in a clinical setting, such as veterinary medicine. Tenure cannot be earned in these ranks, and time spent in one of these ranks is not applicable toward probationary tenure-track faculty service. There are four clinical ranks beginning with Clinical Instructor. Those clinical faculty members with outstanding performance may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the Provost.

The following raises are recommended for promotions to:

Clinical Professor	\$7,000
Clinical Associate Professor	5,000
Clinical Assistant Professor	3,000

The professor of practice series provides for short- or long-term, full- or part-time, non-tenure-track faculty appointments for individuals who bring specialized expertise to the instructional programs of the university, thereby complementing the qualifications and contributions of tenure-track faculty. There are three professor of practice ranks, beginning with Assistant Professor of Practice. Instructors may be promoted into the Assistant Professor of Practice rank. Tenure will not be awarded at any of these ranks and all service at one of these ranks will be excluded from the probationary period should the faculty member later be appointed to a tenure-track position. Professor of practice faculty members with a record of outstanding performance may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the Provost.

Professor of Practice	\$7,000
Associate Professor of Practice	5,000
Assistant Professor of Practice	3,000

There are three ranks for extension agents: Associate Extension Agent, Extension Agent, and Senior Extension Agent. Criteria for promotion in rank include educational preparation, performance, and professionalism. The Director of Cooperative Extension makes a recommendation to the Provost based on an evaluation of the candidate's dossier and recommendations of the Peer Review Committees, District Director, and Associate Directors of Cooperative Extension.

The following raises are recommended for promotions within Cooperative Extension:

Senior Agent	\$5,000
Agent	3,000

The instructor track provides for full- and part-time appointments to individuals whose primary responsibilities are to the undergraduate instructional program. Tenure will not

be awarded at any of these ranks and all service at any instructor rank will be excluded from the probationary period should the faculty member later be appointed to a tenure track position. There are three ranks in the series: Instructor, Advanced Instructor, and Senior Instructor. Those instructors with outstanding performance may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the Provost.

The following raises are recommended for promotions to:

Senior Instructor	\$5,000
Advanced Instructor	3,000

At the June meeting each year, the university will submit to the Board of Visitors a report of recommended promotion, tenure, and continued appointment actions for review and approval.

## **Annual Evaluation and Salary Adjustments**

### **Teaching and Research Faculty**

An evaluation of every faculty member's professional performance is held each year. All persons holding non-temporary faculty appointments are asked to prepare a report at the end of each academic year (or other appropriate 12-month period) citing their instructional activities, creative scholarship, and other professional activities and recognitions during the year. Salary recommendations are based upon performance documented in these annual reports, which are reviewed by departmental personnel committees in some cases, by the department head or chair, and the dean.

Salary adjustments are based on merit; they are not automatic. Recommendations for salary adjustments originate with the department head or chair and are reviewed by the dean. At the university level, the dean reviews the salary adjustment recommendations at a formal salary hearing with the President, the Provost, the Chief Financial Officer, and others as needed.

### **Administrative and Professional Faculty**

Administrative and Professional Faculty are comprised of Senior Administrators and Managers and Professionals. Senior Administrators perform work directly related to management of the educational and general activities of the institution at least 50 percent or more of their contractual time, and typically serve in executive leadership roles such as vice president, dean, and assistant or associate vice president or dean. Managers have responsibility for supervision and evaluation of a significant number of staff and/or professional faculty, and budgetary responsibility for their unit or a substantive program. Professionals provide direct service to students, other university constituencies, or clients external to the university as part of the university's missions of learning, discovery, and engagement. Professionals include, but are not limited to, extension agents, librarians, coaches, physicians, lawyers, engineers, architects,

student or academic affairs professionals, development officers, specialists in public relations, human resources, information technology, and financial specialists.

Evaluations are based upon standards set by the supervisor with the participation of the faculty member and relate closely to the duties inherent in the functional title and job description of the position. Annually set expectations become one of the important criteria for judging professional job performance in the subsequent year. In addition to maintaining a high level of performance in carrying out their job-related duties and responsibilities, senior administrators, managers, and professionals are expected to participate in and provide leadership of departmental, divisional, or university-wide committees, special university-wide assignments, or similar activity on behalf of important university priorities.

Salary adjustments are based on merit; they are not automatic. Recommendations for salary adjustments originate with the supervisor and are reviewed as appropriate by the department head, dean, and vice president. At the university level, the dean or vice president reviews the salary adjustment recommendations at a formal salary hearing with the President, the Provost, the Chief Financial Officer, and others as needed.

### Research Faculty

Research faculty are those with the titles of research associate, senior research associate, postdoctoral associate, research scientist, senior research scientist, research assistant professor, research associate professor, research professor, project associate, senior project associate, or project director. Research faculty appointments are intended to promote and expedite the research activities of the university. Tenure cannot be earned in these ranks and service is not applicable toward probationary faculty service.

Each research faculty member is evaluated and given a merit adjustment on the same schedule for evaluations and raise recommendations as the other faculty groups. Salary adjustments are based on merit; they are not automatic. An annual performance review by the principal investigator and/or department head becomes part of the basis for salary adjustments. Recommendations for salary adjustments originate with the supervisor (usually the principal investigator or the department head or chair) and are reviewed as appropriate by the department head or chair, dean, and Vice President for Research. At the university level, the dean or vice president reviews the salary adjustment recommendations at a formal salary hearing with the President, the Provost, the Chief Financial Officer, and others as needed.

### Other Salary Adjustments

Faculty salary adjustments are normally reviewed and approved by the Board of Visitors in two phases: adjustments for promotion are recommended at the June meeting and adjustments based on performance are recommended at the fall meeting. In addition to this process, it is sometimes necessary to adjust the salaries of specific faculty members at other times during the fiscal year. These adjustments are primarily for changes in duties and responsibilities, for special temporary assignments, for retention

or other exceptional needs, and for faculty selected for a different position as part of a search. Adjustments on the anniversary date of appointment for a restricted faculty member may also be approved in lieu of the normal merit process.

To recognize continued educational attainment, faculty members may receive a base salary adjustment of up to \$3,000 for completion of the doctorate effective upon official certification by the degree-granting institution that all requirements have been met for award of the degree.

The President, Provost, and Chief Financial Officer are authorized to administer the faculty compensation plan during the year and act upon requests for salary adjustments. The President has issued a set of guidelines establishing the parameters for approval of special salary adjustments. By separate resolution, the Board has delegated authority to the President or designee for approval of changes in employment status that do not involve any salary action, salary adjustments made in accordance with existing policies and standard formulas, off-cycle salary adjustments less than 10 percent, new appointments and salary adjustments for faculty members on restricted contracts, and new appointments of non-tenure track instructional faculty or administrative and professional faculty below the level of senior administrator and their direct reports. The quarterly Personnel Changes Report will reflect those actions of strategic importance to the institution as identified in the resolution.

### **Faculty Research Incentive Plan**

During 2011-12, a university workgroup developed a university savings program by incentivizing faculty research activities. This effort resulted in the Board's creation of a Faculty Research Incentive Program (FRIP) that has similarities to programs at peer institutions. This plan was implemented as a pilot in 2012-13, and will be continued in 2015-16.

The goal of the FRIP is to provide an incentive for principal or co-principal investigators to secure additional competitively awarded, externally sponsored activities. Through the leveraging of appropriately charged time to competitive grants and contracts, research time that is funded by departments or colleges can be reduced, resulting in salary savings that can be used to both support the incentive program as well as to support academic initiatives.

One-time research incentive payments are made from department or college salary savings and are based on a minimum savings threshold that is applied equitably within departments or colleges. Faculty must apply in advance to be considered for the program. Research incentive payments must be approved by the department head or chair, the dean, and the provost (or the appropriate administrators based on reporting structure); all disapprovals must also be reviewed by each management level. When salary savings result in a reduction in faculty assignments, those salary savings are excluded from the program.

## **Implementation of the 2015-16 Merit Review and Compensation Process**

Recognizing the critical nature of faculty compensation, the university's standing relative to the 60<sup>th</sup> percentile of the university's peer group average salary, the higher levels of competing offers being received by key faculty, and to minimize the high cost of turnover, the university proposes continuing the traditional annual merit-based faculty salary increase program in 2015-16.

This plan authorizes management to plan and budget for the nongeneral fund resource allocations necessary to support a merit-based faculty salary increase consistent with the commonwealth's approved compensation plan for faculty for 2015-16.

To implement the 2015-16 merit review and compensation program in accordance with the 2015 General Assembly approval, the Budget Office will develop salary pools for each academic and administrative area, based upon 2.5 percent of the existing teaching and research faculty salary allocations (this includes a 0.5 percent university reallocation), and 1.0 percent of the existing administrative and professional faculty salary allocations. The vice presidents and deans are expected to reallocate 1.0 percent. This will result in a merit program total of at least 3.5 percent for Teaching and Research faculty, and no more than 2.0 percent for Administrative and Professional faculty to recognize performance.

The university may also elect to create a supplemental pool to achieve certain targeted salary compensation or retention needs. For example, in some years the university has worked to address issues such as salary compression and equity needs. For 2015-16, such changes may result from one or more of the following processes:

- The university establishes a special pool of funds to address salary inequity and retention issues for specific faculty. If implemented, the funding will only be used to make adjustments based on evaluations of specific circumstances surrounding individual faculty members. As such, these adjustments would not be available to all faculty members and may occur at any time during the year, subject to approval by the Board.
- The President may use a special pool of funds to adjust individual salary recommendations made by the vice presidents and deans when he determines that a different adjustment is warranted.

### **RECOMMENDATION:**

That the proposed 2015-16 Faculty Compensation Plan for Teaching and Research, Administrative and Professional, and Research Faculty be approved.

June 1, 2015

**Attachment A****VIRGINIA TECH****2013-14 Fiscal Year**

<u>Institution</u>	<u>Average Salary</u> <sup>1</sup>	<u>Rank</u>
California-Berkeley, University of	\$ 131,868	1
Cornell University	124,380	2
Southern California, University of	117,405	3
California-Davis, University of	108,585	4
Maryland-College Park, University of	104,652	5
Illinois at Urbana-Champaign, University of	104,184	6
Ohio State University-Main Campus	101,556	7
Purdue University-Main Campus	99,045	8
Rutgers University-New Brunswick/Piscataway	98,703	9
Texas at Austin, University of	98,100	10
Minnesota-Twin Cities, University of	98,028	11
Wisconsin-Madison, University of	96,822	12
Michigan State University	95,526	13
Michigan-Ann Arbor, University of	94,581	14
Florida, University of	94,482	15
Washington-Seattle Campus, University of	94,149	16
Stony Brook University	93,114	17
<b>Virginia Tech</b>	<b>93,104</b>	<b>18</b>
Colorado at Boulder, University of	92,682	19
Texas A & M University	92,583	20
Iowa State University	90,243	21
SUNY at Buffalo	90,234	22
Pennsylvania State University-Main Campus	89,118	23
North Carolina State University at Raleigh	87,966	24
Pittsburgh-Main Campus, University of	85,797	25
Missouri-Columbia, University of	79,092	26

**Virginia Tech's SCHEV Peer Percentile Ranking****32<sup>nd</sup>**


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<sup>1</sup> Average salary is based on the latest available data (2013) from IPEDS

**Attachment B****2015-16 Pay Structure****Virginia Tech**

	9-Month Faculty	12-Month Faculty	Distribution of Approximate % of Total Faculty By Rank
	Entrance	Entrance	
Professor	\$ 86,313	\$ 105,271	33%
Associate Professor	66,015	79,992	30%
Assistant Professor	54,611	66,427	25%
Senior Instructor	46,837	60,944	2%
Advanced Instructor	41,758	54,173	2%
Instructor	38,274	49,798	8%

## **Financial Performance Report - Operating and Capital**

### **FINANCE AND AUDIT COMMITTEE**

**July 1, 2014 to March 31, 2015**

The Financial Performance Report of income and expenditures is prepared from two sources: actual accounting data as recorded at Virginia Tech and the annual budgets which are also recorded in the university accounting system. The actual accounting data reflect the modified accrual basis of accounting, which recognizes revenues when received rather than when earned and the expenditures when obligated rather than when paid. The Original Budget was approved by the Board of Visitors at the June meeting. The Adjusted Budget reflects adjustments to incorporate actual experience or changes made during the fiscal year. These changes are presented for review and approval by the Finance and Audit Committee and the Board of Visitors through this report. Where adjustments impact appropriations at the state level, the university coordinates with the Department of Planning and Budget to ensure appropriations are reflected accurately.

The July to March 2014-15 budget (year-to-date) is prepared from historical data which reflects trends in expenditures from previous years as well as known changes in timing. Differences between the actual income and expenditures and the year-to-date budget may occur for a variety of reasons, such as an accelerated or delayed flow of documents through the accounting system, a change in spending patterns at the college level, or increases in revenues for a particular area.

Quarterly budget estimates are prepared to provide an intermediate measure of income and expenditures. Actual revenues and expenditures may vary from the budget estimates. The projected year-end budgets are, however, the final measure of budgetary performance.

## OPERATING BUDGET

Attachment L

1. Tuition and Fee revenues are slightly behind historical projections due to the timing of collections.
2. All Other Income is higher than projections due to increased program revenue in the Language and Culture Institute.
3. Academic Program expenditures are ahead of historical projections due to the timing of continuing education program expenditures.
4. Support Program expenditures exceed projections due to the timing of litigation costs. A reimbursement of a portion of those litigation costs is pending.
5. The budget for federal revenue is established to match projected allotments from the federal government. All expenses in federal programs are covered by drawdowns of federal revenue up to allotted amounts. Federal revenue in the Cooperative Extension/Agriculture Experiment Station Division was greater than the projected budget due to the timing of a draw that was requested in 2013-14, but received in 2014-15.
6. Expenditures are temporarily exceeding projections due to the timing of recoveries from localities.
7. Quarterly and projected annual variances are explained in the Auxiliary Enterprises section of this report.
8. Historical patterns have been used to develop a measure of the revenue and expenditure activity for Sponsored Programs. Actual revenues and expenses may vary from the budget estimates because projects are initiated and concluded on an individual basis without regard to fiscal year. Total sponsored research revenues and expenses are less than projected, but sponsored research revenues are ahead of 2013-14 activity levels.
9. Revenues and Expenses for All Other Programs were less than projected due to lower than budgeted interest earnings and timing of surplus property expense activity.
10. The General Fund revenue budget has been increased \$28,896 for the Virtual Library of Virginia distribution costs and \$4,500 for a transfer from Student Financial Assistance to the Educational and General program for assistantships in the Multicultural Academic Opportunities Program. It has been decreased \$4,806,037 for finalization of the state budget on June 23<sup>rd</sup>, \$6,133,525 for the September General Fund reduction, and \$365,368 for the actual state central fund distribution due to support below initial estimates. The corresponding expenditure budgets have been adjusted accordingly.
11. The annual budget for Tuition and Fees has been decreased \$577,818 for the finalization of the budgets for tuition, E&G fees, and Veterinary Medicine capitation. It was increased \$6,128,765 for strong summer and fall enrollment and \$3,960,000 for winter session, spring retention and unutilized tuition offsets. The corresponding expenditure budgets have been adjusted accordingly.
12. The All Other Income revenue budget for the University Division has been decreased \$270,000 for the commonwealth's capture of interest earnings, \$30,000 for sales and services, and \$110,354 for reduced Virginia racing revenue. The revenue budget was increased \$44,704 for budget finalization and \$800,000 for higher than projected activity in the Veterinary Teaching Hospital. The corresponding expenditure budgets have been adjusted accordingly.
13. The General Fund revenue budget has been decreased \$622,096 for finalization of the state budget on June 23<sup>rd</sup>, and \$359,018 for actual state central fund distribution due to support below initial estimates. The corresponding expenditure budgets have been adjusted accordingly.
14. The Federal revenue budget in the Cooperative Extension/Agricultural Experiment Station Division has been increased \$2,500,000 for the carryover of unexpended federal funds and revised calculations of federal formula funds. The corresponding expenditure budgets have been adjusted accordingly.
15. The revenue and expense budgets for Sponsored Programs were reduced \$3,200,000 for finalization of the state budget on June 23<sup>rd</sup>.
16. The projected year-end revenue and expense budgets for Student Financial Assistance were decreased \$271,420 for the Graduate Fellowships program and increased \$68,625 for the VA Military Survivors and Dependent Program and \$154,500 for the two-year College Transfer Grant. A revenue and expense budget of \$4,500 was transferred from Student Financial Assistance to the Education & General program in support of internships and graduate assistantships.
17. The projected annual budgets for All Other Programs were increased \$77,370 to finalize various budgets. The expense budget was increased \$304,722 for outstanding 2013-14 commitments that were initiated but not completed before June 30, 2014.

**OPERATING BUDGET  
2014-15**

Attachment L

Dollars in Thousands

	July 1, 2014 to March 31, 2015			Annual Budget for 2014-15		
	Actual	Budget	Change	Original	Adjusted	Change
<b>Educational and General Programs</b>						
<b><u>University Division</u></b>						
<u>Revenues</u>						
General Fund	\$121,631	\$121,631	\$0	\$158,805	\$147,533	\$-11,272 (10)
Tuition and Fees	415,890	418,189	-2,299 (1)	410,277	419,868	9,591 (11)
All Other Income	29,962	28,348	1,614 (2)	39,344	39,728	384 (12)
<b>Total Revenues</b>	<b>\$567,483</b>	<b>\$568,168</b>	<b>\$-685</b>	<b>\$608,426</b>	<b>\$607,129</b>	<b>\$-1,297</b>
<u>Expenses</u>						
Academic Programs	\$-285,942	\$-285,113	\$-829 (3)	\$-377,224	\$-376,927	\$298 (10,11,12)
Support Programs	-154,403	-152,761	-1,642 (4)	-231,202	-230,203	999 (10,11,12)
<b>Total Expenses</b>	<b>\$-440,345</b>	<b>\$-437,874</b>	<b>\$-2,471</b>	<b>\$-608,426</b>	<b>\$-607,129</b>	<b>\$1,297</b>
<b>NET</b>	<b>\$127,138</b>	<b>\$130,294</b>	<b>\$-3,156</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b><u>CE/AES Division</u></b>						
<u>Revenues</u>						
General Fund	\$52,479	\$52,365	\$114	\$68,100	\$67,118	\$-982 (13)
Federal Appropriation	17,420	13,824	3,596 (5)	14,483	16,983	2,500 (14)
All Other Income	910	696	214	865	866	1
<b>Total Revenues</b>	<b>\$70,809</b>	<b>\$66,885</b>	<b>\$3,924</b>	<b>\$83,448</b>	<b>\$84,967</b>	<b>\$1,519</b>
<u>Expenses</u>						
Academic Programs	\$-63,495	\$-62,159	\$-1,336 (6)	\$-76,620	\$-78,138	-1,519 (13,14)
Support Programs	-5,578	-5,244	-334	-6,829	-6,829	0
<b>Total Expenses</b>	<b>\$-69,073</b>	<b>\$-67,403</b>	<b>\$-1,670</b>	<b>\$-83,448</b>	<b>\$-84,967</b>	<b>\$-1,518</b>
<b>NET</b>	<b>\$1,736</b>	<b>\$-518</b>	<b>\$2,254</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Auxiliary Enterprises</b>						
Revenues	\$258,737	\$258,067	\$670 (7)	\$294,243	\$303,523	\$9,280 (7)
Expenses	-215,803	-221,593	5,790 (7)	-289,602	-305,130	-15,528 (7)
Reserve Drawdown (Deposit)	-42,934	-36,474	-6,460 (7)	-4,641	1,607	6,247 (7)
<b>NET</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Sponsored Programs</b>						
Revenues	\$224,967	\$249,113	\$-24,146 (8)	\$339,968	\$336,768	\$-3,200 (15)
Expenses	-235,791	-271,522	35,731 (8)	-339,968	-336,768	3,200 (15)
Reserve Drawdown (Deposit)	10,824	22,409	-11,585	0	0	0
<b>NET</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Student Financial Assistance</b>						
General Fund	\$19,924	\$19,924	\$0	\$19,977	\$19,924	\$-53 (16)
Expenses	-19,278	-19,283	5	-19,977	-19,924	53 (16)
Reserve Drawdown	0	0	0	0	0	0
<b>NET</b>	<b>\$646</b>	<b>\$641</b>	<b>\$5</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>All Other Programs *</b>						
Revenue	\$4,687	\$5,171	\$-484 (9)	\$6,631	\$6,709	\$78 (17)
Expenses	-4,906	-5,427	521 (9)	-6,631	-7,013	-382 (17)
Reserve Drawdown (Deposit)	219	256	-37 (9)	0	305	305 (17)
<b>NET</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total University</b>						
Revenues	\$1,146,607	\$1,167,328	\$-20,721	\$1,352,693	\$1,359,020	\$6,327
Expenses	-985,196	-1,023,102	37,906	\$-1,348,052	-1,360,931	-12,879
Reserve Drawdown (Deposit)	-31,891	-13,809	-18,082	\$-4,641	1,911	6,552
<b>NET</b>	<b>\$129,520</b>	<b>\$130,417</b>	<b>\$-897</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

\* All Other Programs include federal work study, alumni affairs, surplus property, and unique military activities.

1. Expenses in Residence and Dining Halls are lower than projected due to the timing of facility improvement projects.
2. Expenses in Parking and Transportation Services are lower than projected due to lower than forecasted Fleet Services business volume.
3. Revenues for the University Services System are higher than projected due to higher than forecast student fee revenue. Expenses are lower than projected due to the timing of expenses.
4. Revenue and expenses for the Electric Service auxiliary are lower than projected due to lower than anticipated electricity consumption. Expenses are also lower than projected due to lower than forecasted total cost of purchased electricity.
5. Revenues for Other Enterprise Functions are higher than projected due to higher than forecasted business volume in the New Student Programs, Licensing and Trademark, Software Sales, and Printing Services. Expenses are lower than projected due to timing of operating expenses and one-time projects as well as the deferral of server replacement for Hokie Passport.
6. The projected annual revenue, expense, and reserve budgets for Residence and Dining Halls were adjusted for increased occupancy in the Residence Halls, increased orientation and summer school revenue, increased Dining business volume, one-time facility projects, and maintenance expenses.
7. The projected annual expense budget for Auxiliary Enterprises was adjusted for \$10.1 million in outstanding 2013-14 commitments and projects that were initiated but not completed before June 30, 2014. This amount includes \$3.1 million for Athletics, \$2.7 million for Residence Halls, and \$0.9 million in Telecommunication Service commitments and projects. The remainder is spread across the other auxiliary programs.
8. The projected annual expense and reserve budgets for the Auxiliary Enterprise were adjusted to reduce the placeholder budgets for compensation and fringe benefit final amounts.
9. The projected annual revenue, expense, and reserve budgets for Parking and Transportation were decreased for business volume in Parking Services and Fleet Services. The projected annual expense and reserve budgets for Transit Auxiliary were adjusted for the Multi-Modal Transit Facility project. The projected revenues, expenses, and reserve budgets in Parking Services were adjusted due to timing of prior year operating activities and increased \$1.3 million for payment for parking spaces displaced by capital projects to replace those parking spaces.
10. The projected annual revenue and expense budgets for the University Services System were adjusted for increased career fair revenue and expenses in Career Services auxiliary and a \$250,000 increase for one-time facility maintenance expenses in Squires Student Center.
11. The projected annual revenue budget for Intercollegiate Athletics was adjusted \$6.1 million to accommodate increased revenue from conference allocation, private gifts, basketball guarantees, game settlements, licensing, the Military Bowl, and concessions. These increases were offset by decreased revenue from student football tickets and women's basketball tickets. Annual expense and reserve draw budgets were adjusted \$6.3 million to accommodate the Military Bowl expenses, personnel actions, Student Athlete Academic Support Services support, ongoing operational needs, game settlements, scholarship activity, one-time athletic facility projects, and ticket sales expenses.
12. The projected annual revenue and expense budgets for Electric Service were decreased to accommodate for revised 2014-15 cost of wholesale electricity and reduced customer rates.
13. The projected annual expense and reserve budgets for the Inn at Virginia Tech and Skelton Conference Center were adjusted for decreased one-time project expenses.
14. The projected annual revenue, expense, and reserve budgets for Other Enterprise Functions were adjusted for increased business volume in New Student Programs and Library Photocopy, licensing contracts in Software Sales, the establishment of the Child Play Group, equipment purchases in Hokie Passport, timing of clearing accounts, and increased personnel and scholarship expenses in Licensing and Trademark.

**UNIVERSITY DIVISION  
AUXILIARY ENTERPRISES**

Attachment L

Dollars in Thousands

	July 1, 2014 to March 31, 2015			Annual Budget for 2014-15		
	Actual	Budget	Change	Original	Adjusted	Change
<b>Residence and Dining Halls</b>						
Revenues	\$100,357	\$100,422	\$-65	\$105,084	\$107,878	\$2,794 (6)
Expenses	-71,895	-74,113	2,218 (1)	-102,045	-107,427	-5,382 (6,7,8)
Reserve Drawdown (Deposit)	-28,462	-26,309	-2,153 (1)	-3,039	-451	2,588 (6,7,8)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Parking and Transportation</b>						
Revenues	\$12,268	\$12,264	\$4	\$13,107	\$13,756	\$649 (9)
Expenses	-8,853	-9,103	250 (2)	-13,537	-13,483	54 (7,8,9)
Reserve Drawdown (Deposit)	-3,415	-3,161	-254 (2)	430	-273	-703 (7,8,9)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Telecommunications Services</b>						
Revenues	\$16,002	\$15,773	\$229	\$18,804	\$18,806	\$2
Expenses	-12,447	-12,575	128	-18,615	-19,340	-725 (7,8)
Reserve Drawdown (Deposit)	-3,555	-3,198	-357	-189	534	723 (7,8)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>University Services System *</b>						
Revenues	\$40,388	\$40,153	\$235 (3)	\$41,565	\$41,620	\$55 (10)
Expenses	-29,899	-31,404	1,505 (3)	-40,357	-40,860	-503 (7,8,10)
Reserve Drawdown (Deposit)	-10,489	-8,749	-1,740 (3)	-1,208	-760	448 (7,8,10)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Intercollegiate Athletics</b>						
Revenues	\$47,983	\$47,560	\$423	\$57,798	\$63,862	\$6,064 (11)
Expenses	-52,831	-52,481	-350	-56,421	-65,644	-9,223 (7,8,11)
Reserve Drawdown (Deposit)	4,848	4,921	-73	-1,377	1,782	3,158 (7,8,11)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Electric Service</b>						
Revenues	\$25,888	\$26,406	\$-518 (4)	\$36,853	\$36,721	\$-132 (12)
Expenses	-25,627	-26,339	712 (4)	-36,040	-36,646	-605 (7,8,12)
Reserve Drawdown (Deposit)	-261	-67	-194 (4)	-813	-75	737 (7,8)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Inn at Virginia Tech/Skelton Conf. Center</b>						
Revenues	\$7,483	\$7,424	\$59	\$10,876	\$10,876	\$0
Expenses	-8,707	-8,759	52	-11,544	-11,633	-89 (7,8,13)
Reserve Drawdown (Deposit)	1,224	1,335	-111	667	757	90 (7,8,13)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Other Enterprise Functions</b>						
Revenues	\$8,368	\$8,065	\$303 (5)	\$10,156	\$10,004	\$-152 (14)
Expenses	-5,544	-6,819	1,275 (5)	-11,043	-10,097	946 (7,8,14)
Reserve Drawdown (Deposit)	-2,824	-1,246	-1,578 (5)	887	93	-794 (7,8,14)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL AUXILIARIES</b>						
Revenues	\$258,737	\$258,067	\$670	\$294,243	\$303,523	\$9,280
Expenses	-215,803	-221,593	5,790	-289,602	-305,130	-15,527
Reserve Drawdown (Deposit)	-42,934	-36,474	-6,460	-4,641	1,607	6,247
Net	\$0	\$0	\$0	\$0	\$0	\$0

\* University Services System includes Health Services, VT Rescue Squad, Career Services, Student Centers & Activities, Student Organizations, Recreational Sports, and the Center for the Arts.

**CAPITAL OUTLAY BUDGET****Educational and General Projects**

1. The current year and total project budget amounts reflect the balance of maintenance reserve appropriation carried forward from fiscal year 2014 and the state's fiscal year 2015 allocation of \$8.021 million of Maintenance Reserve funds.
2. This project will renovate the 5,900 gross square foot, 560-seat McBryde 100 Classroom and restore the space to a state-of-the-art learning environment for the benefit of undergraduate education. Design work is complete and the project is scheduled to start construction in May to ensure the classroom is ready for use by the fall 2015 academic semester. The annual budget was adjusted in the first quarter to reflect the project's approval to move forward at the June 2014 Board of Visitors meeting.
3. This project will plan the renovation of three academic buildings located in the core of main campus bordering the Drillfield: Davidson Hall-Front Section, Sandy Hall, and the Liberal Arts Building. Preliminary Design work is complete.. The state has authorized a total project cost of \$30.5 million based on preliminary designs and appropriated General Fund resources for the project effective fiscal year 2016.
4. The instructional components of the Dairy Science program are being relocated to Kentland through a project with the Virginia Tech Foundation. This project is for planning the relocation of six remaining agricultural facilities with three new facilities. The new facilities include a metabolism research laboratory, an applied reproduction facility, and a building for animal demonstration, handling, and holding spaces. Preliminary Design work is underway. The state has authorized a total project cost of \$7.6 million and appropriated General Fund resources for the project effective fiscal year 2016.
5. This project will support progress on fire alarm systems and accessibility improvements for several E&G buildings including Randolph Hall, War Memorial Hall, Food Science and Technology Building, Norris Hall, Newman Library, Lane Hall, Patton Hall, Litton Reaves Hall, Whittemore Hall, Architecture Annex, and Wallace Annex. The implementation plan calls for improvements to be executed in multiple packages, and construction funding will be released on a package-by-package basis. Construction for the first six subprojects; including the Food Science and Technology Building, Architecture Annex, Wallace Annex, War Memorial Hall, Lane Hall, and Whittemore Hall is underway. The State has allocated \$4.89 million of General Fund resources for the total project budget of which \$3.9 million has been committed for projects underway.
6. This project is for a 73,400 gross square foot classroom building to meet the university's instructional classroom and laboratory needs. The state approved a revised total project budget of \$42.65 million inclusive of \$3.65 million of equipment on November 12, 2014. Construction is underway with substantial completion expected in July 2016. The annual budget was adjusted in the third quarter to reflect slower than anticipated cash outflows for the project in fiscal year 2015.
7. This project will construct a facility to accommodate the practice needs of the Marching Virginians. The project envisions three components: a facility, a covered open air pavilion, and an artificial turf field. Construction is underway. The original project schedule called for the fields to be online for fall semester 2014 and the building components to be complete spring 2015. The schedule has been revised for substantial completion expected for both components in July 2015.
8. The project is complete and has been occupied since August 2012 with a total anticipated cost of \$44.3 million. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer.
9. The project is complete and has been occupied since July 2013. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer.
10. The project is complete and has been occupied since January 2014. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2015, and resources are sufficient to cover the accelerated flow.
11. The project is complete and has been occupied since October 2013. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer.
12. The project is complete and has been occupied since June 2014. The state approved a revised total project budget of \$32 million in August 2014 inclusive of \$884,360 supplement related to soil contamination and schedule extension. The annual budget was adjusted in the second quarter to reflect this revised funding approval. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer.
13. The project is complete and has been occupied since June 2014. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer.
14. This is a subproject of a Blanket Authorization, which allows unforeseen small projects to be authorized administratively with nongeneral funds for expediency. This authorization is expected to be closed at the end of fiscal year 2015.

**CAPITAL OUTLAY PROJECTS  
AUTHORIZED AS OF March 31, 2015**

Dollars in Thousands

	CURRENT YEAR			TOTAL PROJECT BUDGET					
	ORIGINAL ANNUAL BUDGET	REVISED ANNUAL BUDGET	YTD EXPENSES	STATE SUPPORT	GENERAL OBLIGATION BOND	NONGENERAL FUND	REVENUE BOND	TOTAL BUDGET	CUMULATIVE EXPENSES
Educational and General Projects									
<u>Educational and General Maintenance Reserve</u>									
Maintenance Reserve	6,975	9,196	4,863	9,196	0	0	0	9,196	4,863 (1)
<u>Design Phase</u>									
McBryde 100 Classroom Renovation	0	500	180	0	0	2,800	0	2,800	180 (2)
Planning: Academic Buildings Renewal	542	542	44	0	0	1,889	0	1,889	1,355 (3)
Planning: Improve Kentland Facilities	530	530	69	0	0	1,500	0	1,500	198 (4)
<u>Construction Phase</u>									
Address Fire Alarm Systems and Access Classroom Building	1,700	1,700	189	4,891	0	0	0	4,891	501 (5)
Classroom Building	14,400	10,000	3,599	42,652	0	0	0	42,652	6,245 (6)
Marching Virginians Practice Facility	3,300	3,300	2,033	0	0	4,750	0	4,750	2,221 (7)
<u>Close-Out</u>									
Academic and Student Affairs Building	491	491	159	0	0	0	45,153	45,153	44,016 (8)
Chiller Plant, Phase I	220	220	72	12,059	0	400	7,639	20,098	19,592 (9)
Human & Agricultural Biosciences Building I	621	1,100	704	53,759	0	0	0	53,759	53,154 (10)
Performing Arts Center	810	810	674	27,387	0	32,565	40,135	100,087	99,168 (11)
Renovate Davidson Hall, Phase I	392	1,593	1,202	32,003	0	0	0	32,003	31,612 (12)
Signature Engineering Building	16,000	16,000	13,270	47,609	0	18,650	28,959	95,218	89,095 (13)
<u>On Hold and Not Funded</u>									
Blanket: E&G Research Projects	0	0	0	0	0	3,500	0	3,500	547 (14)
<b>TOTAL</b>	<b>45,981</b>	<b>45,982</b>	<b>27,057</b>	<b>229,556</b>	<b>0</b>	<b>66,054</b>	<b>121,886</b>	<b>417,496</b>	<b>352,745</b>

## CAPITAL OUTLAY BUDGET (Continued)

**Auxiliary Enterprises Projects**

1. Projects are scheduled and funded by the auxiliary enterprises during the annual Auxiliary Enterprise budgeting process. The units prepare five-year plans that outline their highest priority deferred maintenance needs. The annual budget reflects the spending plans of the auxiliary units on scheduled maintenance reserve work for fiscal year 2015. The outstanding balance is committed to a five year forward looking maintenance plan to ensure sufficient resources are available for major maintenance repairs. The auxiliary maintenance reserve program covers 104 assets with a total replacement value of \$1.1 billion.
2. This project will design, construct, install necessary utilities, and equip a 14,000 gross square foot building with the capacity to house two planes and to provide interior office spaces for pilots. The existing hangar will be razed at a later time as part of the future runway extension project. The annual budget was established in the third quarter to reflect initiating the project.
3. This project will plan a 3,000 gross square feet one-story addition to the east wing of McComas Hall and a renovation of 1,700 gross square feet to an interior portion of the existing Schiffert Health Center. Planning work is underway with schematic design nearing completion.
4. This project will plan a permanent solution for softball hitting practice and a long-term solution for Rector Field House serviceability for the track and field programs. The planning authorization will cover establishing a scope, schedule, delivery method, preliminary design efforts, cost, and a funding plan for the envisioned solution. The annual budget was established in the third quarter to reflect initiating planning activity.
5. This project will install necessary components for Wi-Fi network transmission through approximately 2,000 wireless access points in thirty-eight residence halls. The project also updates the residential wired network infrastructure to accommodate the increased demand on the network from wireless devices. The total cost is estimated to be \$3.3 million and the authorization will be underspent. The annual budget was established in the third quarter to reflect initiating the project.
6. The new field house is nearly complete with substantial completion expected in June 2015. The total cost is expected to be \$21.3 million and the authorization will be underspent.
7. This project will replace the natural turf of the south recreation field surface with a synthetic turf playing surface. A multi-purpose area will be created that may be arranged as six flag football fields, or six soccer fields, or four 300-foot softball fields. The improvements will include fencing, lighting, and a nine-foot asphalt path around the field to allow for maintenance vehicle traffic and to create a jogging/walking path. Construction is underway with substantial completion expected in June 2015. The total cost is expected to be \$3.710 million and the authorization will be underspent. The annual budget was adjusted in the first quarter to reflect construction authorization and in the third quarter to reflect expected cash outflows for fiscal year 2015.
8. This project includes improvements to four complementary communication infrastructure components. The four components include a unified communications system, upgrading the Internet Protocol (IP) Network, upgrading the cable plant, and upgrading equipment rooms in various facilities. The total expected costs are \$16.5 million and this project is anticipated to be complete in spring 2017. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2015.
9. This project replaces Rasche and Brodie with two new residential facilities and razes Thomas and Monteith. The construction phase is underway with total expected costs of \$91 million. This project schedule calls for completion of the two new halls by fall semester 2016 based on a three-year construction schedule. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2015.
10. The subproject is complete, the 36 bed house is occupied, and the financial accounts will be closed when final payments are processed. The subproject was delivered under a Public-Private Partnership Agreement.
11. This project envisioned a new residence hall of approximately 250 beds. Cost estimates exceed the project budget and the project is on hold while the university explores alternatives. Funding for the project may be considered pending a program plan and financial plan.
12. The purpose of this unfunded parking blanket authorization balance is to complete future improvements and repair projects for the parking system as specific needs are identified and as funding becomes available.
13. This is the remaining unallocated authorization of the original \$23.5 million Oak Lane Community, Phase IV project. The outstanding Oak Lane Community expansion, houses two through five and their necessary site improvements, may be constructed as organizations come forward with program and financing plans.

Dollars in Thousands

	CURRENT YEAR			TOTAL PROJECT BUDGET					
	ORIGINAL ANNUAL BUDGET	REVISED ANNUAL BUDGET	YTD EXPENSES	STATE SUPPORT	GENERAL OBLIGATION BOND	NONGENERAL FUND	REVENUE BOND	TOTAL BUDGET	CUMULATIVE EXPENSES
Auxiliary Enterprises Projects									
<u>Auxiliary Maintenance Reserve</u>									
Maintenance Reserve	7,000	7,000	5,888	0	0	18,526	0	18,526	5,888 (1)
<u>Design Phase</u>									
Airport Hangar	0	62	0	0	0	2,520	0	2,520	0 (2)
Health Center Improvements	190	190	72	0	0	0	200	200	72 (3)
Planning: Softball and Track Improvements	0	10	0	0	0	500	0	500	0 (4)
Residential Connectivity	0	2,309	0	0	0	4,000	0	4,000	0 (5)
<u>Construction Phase</u>									
Indoor Athletic Training Facility	18,900	18,900	12,703	0	0	21,300	3,700	25,000	13,922 (6)
South Recreation Field Surface Replacement	165	3,400	100	0	0	0	4,600	4,600	134 (7)
Unified Communications & Network Renewal	2,809	1,000	704	0	0	7,705	8,803	16,508	12,053 (8)
Upper Quad Residential Facilities	14,400	26,900	16,903	0	0	23,377	67,623	91,000	26,001 (9)
<u>Close-Out</u>									
Phase IV of Oak Lane Community (House 1)	121	121	0	0	0	6,002	0	6,002	5,881 (10)
<u>On Hold and Not Funded</u>									
New Residence Hall II	0	0	0	0	0	0	27,000	27,000	182 (11)
Parking Blanket Authorizations Balance	0	0	0	0	0	0	16,547	16,547	0 (12)
Phase IV of Oak Lane Community (Houses 2 - 5)	0	0	0	0	0	0	17,498	17,498	0 (13)
TOTAL	43,585	59,892	36,370	0	0	83,930	145,971	229,902	64,133
GRAND TOTAL	<u>\$ 89,566</u>	<u>\$ 105,874</u>	<u>\$ 63,427</u>	<u>\$ 229,556</u>	<u>\$ -</u>	<u>\$ 149,984</u>	<u>\$ 267,857</u>	<u>\$ 647,397</u>	<u>\$ 416,878</u>

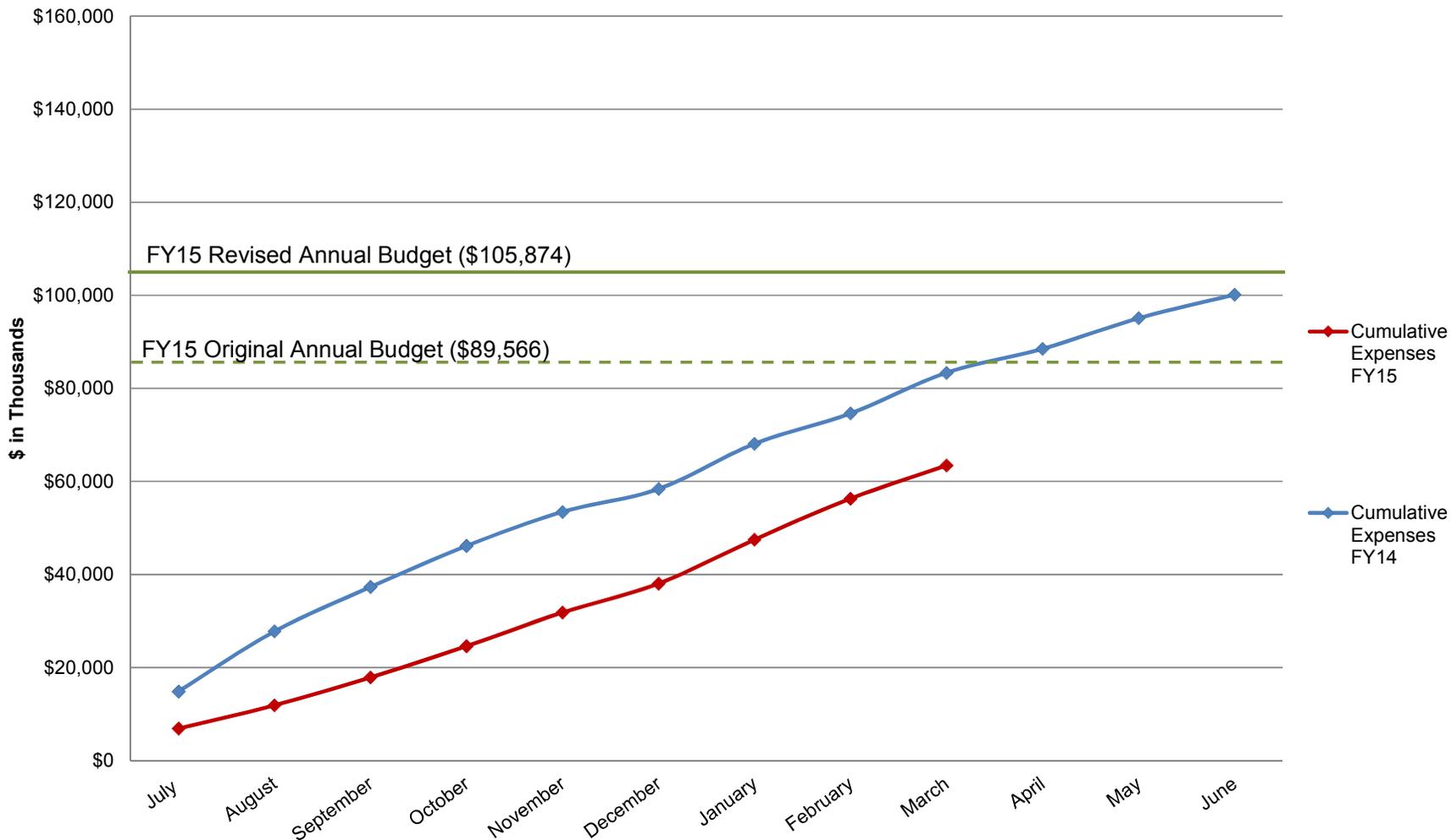
**RECOMMENDATION:**

That the report of income and expenditures for the University Division and the Cooperative Extension/Agricultural Experiment Station Division for the period of July 1, 2014 through March 31, 2015 and the Capital Outlay report be accepted.

June 1, 2015

### CAPITAL PROGRAM ANNUAL PERFORMANCE Cumulative Monthly Expenditures

Fiscal Year 2014 and Fiscal Year 2015



## **Approval of 2015-2016 University Budgets**

**The Committee will review for approval the following  
2015-2016 University Budgets:**

## **Proposed 2015-16 Operating and Capital Budgets**

### **FINANCE AND AUDIT COMMITTEE**

**May 4, 2015**

Each June, the university provides the Board of Visitors with an overview of the operating and capital budgets for the upcoming fiscal year.

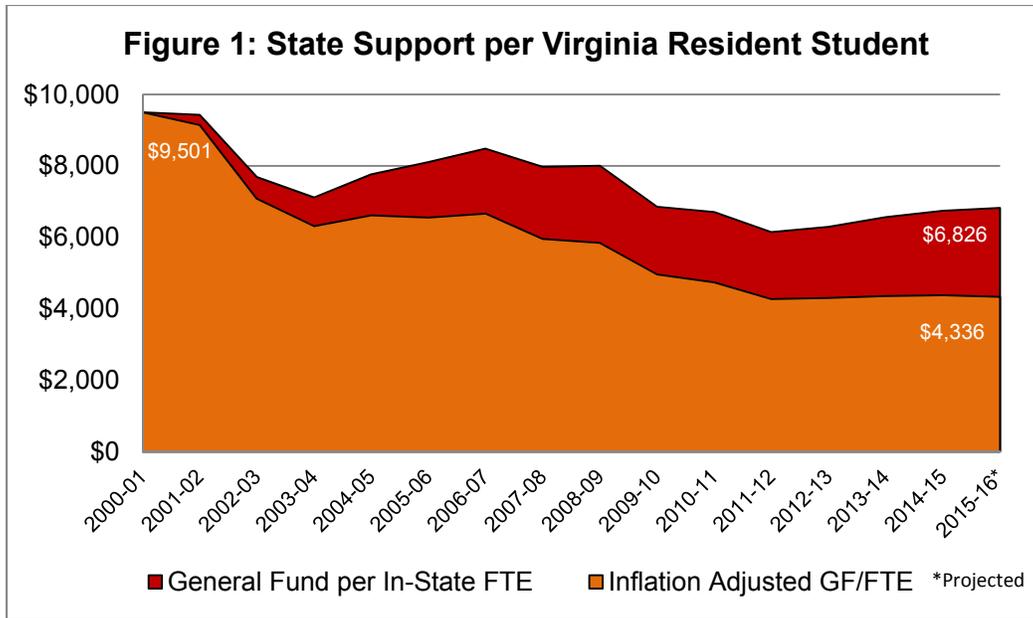
#### **State Appropriations**

With the close of the General Assembly session, the university is able to develop its internal budgets for the upcoming fiscal year. Virginia Tech anticipates an initial authorization of \$1.33 billion during 2015-16 to carry out all of its programs, based on the forecast of direct appropriations to the university. However, the annual internal budget varies from this external expenditure authorization for several reasons, some of which increase the annual expenditure authority while others reduce the expenditure plans. For example, the university's expenditure authorization will be adjusted during 2015-16 when the state transfers funds to clear the Central Appropriation accounts and distributes the appropriation for nongeneral fund increases. Additionally, under the sum sufficient authority granted as part of restructuring, nongeneral fund appropriations may be established as needed by the institution.

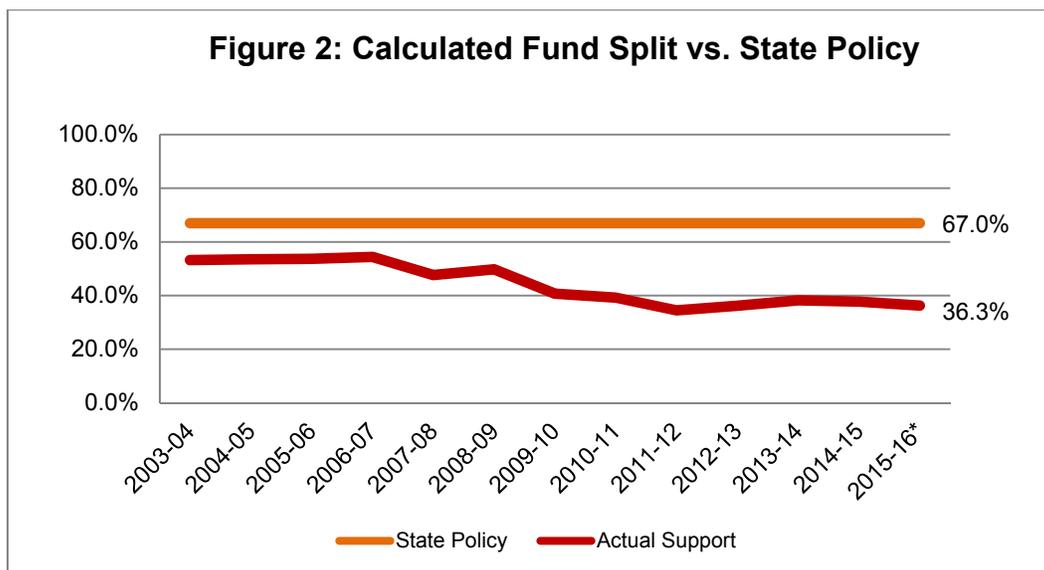
#### **Impact of State Budget Revenue Changes**

For 2015-16, the previously assigned \$6.13 million reduction was affirmed, however, the state increased the university's General Fund appropriation \$8.3 million from the adjusted 2014-15 budget. This includes \$5.8 million for the University Division's Educational and General program, \$1.4 million for the land-grant programs in Agency 229, and support for research. This includes direct appropriations as well as the university estimate of Central Appropriation fund transfers during the fiscal year, enrollment support, enhanced brain disorder research, and the state's share of faculty and staff salary increases. The details of the state support are described further in each budget section.

Even with these state resources, total state support per Virginia student for 2015-16 is projected to be an estimated 28 percent below the funding of 2001. The university enrolls over 2,400 additional Virginia undergraduates as compared to 2005. Inflation adjusted, the university will receive 54 percent less General Fund support per student than in fiscal year 2001, as seen in Figure 1. It is important to note that this analysis presents the state support in the most favorable light since it includes all General Fund resources allocated to E&G, including support for activities beyond instruction such as research and public service. The display below is presented in this manner because it is a commonly utilized perspective by external groups.

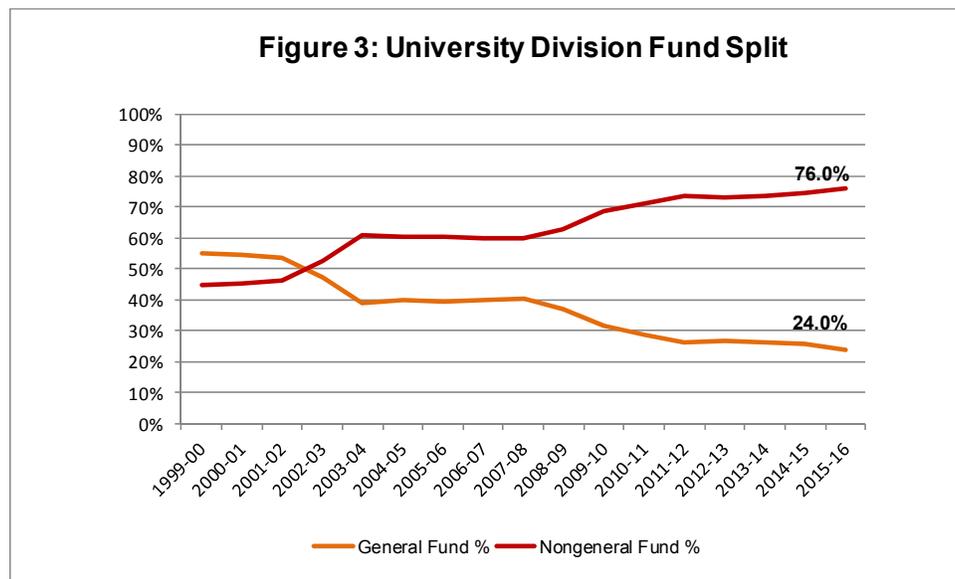


The state policy for funding higher education is to fund 67 percent of the cost of education of each Virginia resident at the institution. Figure 2 below displays the status of actual funding for instruction in relation to this policy over time. In 2015-16, the state will provide an estimated 36.3 percent of this cost. In response, the university has worked to reduce costs and streamline operations, but the shortfall in General Fund support has also created pressure to grow nongeneral fund resources.



## Proposed Budgets for 2015-16

For 2015-16, the recommended internal budget for all operations is \$1.4 billion. This is an increase of \$40.7 million, approximately 3 percent, over the adjusted 2014-15 budget. This increase reflects changes in nongeneral fund revenues for 2015-16 and actions of the 2015 General Assembly sessions that will impact the 2015-16 General Fund appropriation. The overall change includes an increase of \$32.4 million attributable to the Educational and General program and \$5.3 million of projected growth in auxiliary enterprises. The total General Fund allocation is estimated to be approximately \$249.1 million, an increase of \$8.3 million from the 2014-15 adjusted budget. General Fund revenues will provide \$227.2 million in support for the instructional, research, and extension programs, \$19.8 million for student financial assistance, and \$2.1 million for the Unique Military Activities program. The General Fund appropriation represents 24.0 percent of the University Division's Educational and General budget (as compared to 53.6 percent in the 2001-02 budget, as seen below in Figure 3) and 17.8 percent of the total budget. (See Schedule 1)



Schedule 1 displays the proposed operating budgets for 2015-16, by major program and revenue and expense category. Schedule 2 is an expansion of the projected auxiliary operations budgets, categorized by major activity. These schedules display the comparative 2014-15 budget, as approved in June 2014, and the current revised 2014-15 budget as an additional comparison point. This report provides a brief discussion of the changes in the operating budget for each of the major programs.

### Educational and General

The university's Educational and General budget will be \$724.5 million in 2015-16. The Educational and General budgets for the University Division (208) and the Cooperative Extension/Agricultural Experiment Station Division (229) are presented below by source of funding.

	(Dollars in Thousands)		
	Univ. Division	CE/AES Division	Total
General Fund	\$ 153,336	\$68,509	\$221,845
Tuition and Fees	445,747	-	445,747
Federal Funds	-	15,643	15,643
Other	40,333	893	41,226
<b>Total Educational and General</b>	<b>\$639,416</b>	<b>\$85,045</b>	<b>\$724,461</b>
<b>Percent of Total</b>			
General Fund	24.0%	80.6%	30.6%
Tuition and Fees	69.7%	-	61.5%
Federal Funds	0.0%	18.4%	2.2%
Other	6.3%	1.0%	5.7%
<b>Total Percentage</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

The year-to-year comparison of the budget in Schedule 1 shows an overall revenue increase in the Educational and General program of \$32.4 million, or 4.7 percent, over the adjusted 2014-15 budget.

The university has developed its 2015-16 operating and capital budget utilizing the approved state funding support for the university in 2015-16. Though the final state budget affirmed a previously communicated \$6.1 million General Fund budget reduction in both 2014-15 and 2015-16, the 2015 General Assembly restored a portion of that funding for 2015-16 through new allocations of state General Fund support in the amounts of \$1.6 million for resident enrollment growth and \$0.3 million to support targeted research. In addition, the General fund support includes:

- \$2.1 million for the state share of a 2 percent faculty merit increase (\$1.6 million in 208 and \$0.5 million in 229),
- \$1.4 million for the estimated state share of the a 2 percent staff merit increase and compression action (\$1.0 million in 208 and \$0.4 million in 229), and
- \$1.7 million for the estimated state share of prospective fringe benefit rate changes (\$1.2 million in 208 and \$0.5 million in 229).

The percentage of the Educational and General budget for the University Division provided by the General Fund decreased from 24.3 percent in the 2014-15 adjusted budget to 24.0 percent in 2015-16.

The 2015-16 tuition and fee budget increased by \$25.9 million, or 6.2 percent, over the adjusted 2014-15 budget. The difference in the tuition and fee budget reflects the

increase in the tuition rates (approved by the Board of Visitors in March) including Veterinary Medicine, as well as strategic undergraduate enrollment growth, the final year of a multi-year enrollment growth plan in the College of Veterinary Medicine, specialized program fees, the library fee, the technology fee, unfunded and tuition funded scholarships to student aid programs, and adjustments to the other E&G fee budgets. Unfunded scholarships support both undergraduate need based aid and a portion of the graduate tuition remission program. Tuition and Fee funded scholarships are targeted to support the institution's strategic priorities, including enrollment growth. Additionally, the revenue from the Facility and Equipment fee will be transferred to the Commonwealth for debt service on new facilities and equipment; thus, it is not reflected in the net revenue total.

### **Enrollment Growth**

The university is experiencing a significant increase in student demand. Applications have reached a new high for fall 2015, increasing 7.6 percent from the previous year. Demand is broad-based and includes several areas where Virginia Tech is in a strong or unique position to provide additional access to qualified students. To meet demand for undergraduate enrollment, particularly in the STEM-H disciplines, the university is planning the strategic addition of freshman for 2015-16 by 500 students. The additional enrollment growth is expected to generate an additional \$8.5 million of E&G tuition and fee resources.

### **Auxiliary Enterprises**

The total 2015-16 auxiliary revenue budget is \$308.8 million, a growth of \$5.3 million or 1.7 percent over the adjusted 2014-15 budget, with a significant portion of the increase attributable to growth in Residential and Dining Programs, Intercollegiate Athletics, Center for the Arts, and increased business volume in the Virginia Tech Electric Services utility. This increase includes resources to cover - legislated changes in compensation and benefits, increased energy costs, enhancements to student health services, student programming, maintenance of existing facilities, the cost of new facilities, and campus-wide telecommunications improvements.

### **Financial Assistance for Educational and General Programs**

The projected annual budget for Financial Assistance for Educational and General Programs is \$338 million, a growth of \$1.2 million or 0.4 percent over the adjusted 2014-15 budget. This is comprised primarily of sponsored program activities, the Eminent Scholars program, the Institute for Distance and Distributed Learning (IDDL) Enterprise Fund, and the Commonwealth's General Fund support for research. The most significant activity in this category is externally sponsored research. The current General Fund support of \$4.1 million for research is forecasted to increase by \$1.3 million to \$5.4 million as a result of the state's additional \$1.3 million investment to enhance brain disorder research. Although Sponsored Programs is expected to grow

4.0 percent over 2014-15 actuals, the 2015-16 budget accommodates much of the growth within existing budget capacity.

### **Appropriated Student Financial Assistance**

The projected annual appropriation for Student Financial Assistance Program is \$20.5 million. This includes state General Fund support for Undergraduate Scholarships, Graduate Fellowships, Soil Scientist Scholarships, and the Multicultural Academic Opportunity Program in 2015-16. The 2015-16 budget reflects an increase of \$0.6 million over the 2014-15 adjusted budget in additional undergraduate financial aid. The projected annual nongeneral fund student financial assistance appropriation is \$0.7 million in 2015-16. This new program leverages recent state authorization to utilize tuition and fee revenue in support of student financial aid programs. The university plans to utilize this authority to advance strategic initiatives such as access, study abroad, and enrollment growth.

### **All Other Programs**

The All Other Programs component is comprised of the Unique Military Activities appropriation, surplus property, federal work study program, local funds, and Alumni Affairs. The annual budget for these funds is based on historic trends and projections of activity levels by program managers. These programs are funded by resources that are designated for specific purposes. The current General Fund support for Unique Military Activities remains constant in 2015-16 at \$2.1 million. For All Other Programs, the recommended budget is \$7.9 million, and reflects an increase of \$1.2 million over the adjusted budget for 2014-15.

### **Planned Change in Reserves**

Existing state requirements, along with the university's budgeting and financial management strategies, generally result in the establishment of breakeven budgets for the major budget components, with the exception of auxiliary enterprises. That is the case for 2015-16, where only the auxiliary budgets project an addition to the reserves as of June 30, 2016. The projected addition of \$5.5 million is the result of the intentional rebuilding of reserves in specific auxiliaries where expenditures in prior years created the need for restoring the reserves so that it may operate as a revolving fund. In other cases, the projected addition to reserves reflects the temporary positive impact of planning activities for new capital projects. The 2015-16 budget for auxiliary enterprises is also designed to ensure that the reserve levels remain in compliance with the tenants of bond covenants as well as SCHEV reserve targets.

## **Budget Allocations**

The process of finalizing the 2015-16 operating budget allocations for the colleges and major operating units is currently underway. This process will be completed during June 2015 and issued to the university community by the Vice President for Finance and Chief Financial Officer. The Office of Budget and Financial Planning will allocate these budgets to the colleges and vice presidential areas in time for the departments to open the new fiscal year with the allocations in place in the university accounting system. The university develops the annual budget as a one year quantification of the university's strategic plan. The strategic plan is the framework for enacting the university's mission.

## **Compensation Plan**

Contingent upon state revenue target achievement and approval of the 2015-16 operating budget, the 2015 General Assembly authorized institutions to implement a statewide compensation program including a staff increase and a faculty merit program for fiscal year 2015-16. The attached operating budget includes funding, consistent with traditional funding principles, for the following employee compensation actions effective August 10, 2015.

The faculty merit program is consistent with the Faculty Compensation Plan, and is comprised of the following:

- A 3.5 percent teaching and research faculty merit program with funding comprised of two components, a 2.5 percent increase of base faculty salary allocation, and a minimum expected reallocation by the vice-presidents and deans of an additional 1.0 to this base allocation.
- A 2.0 percent administrative and professional faculty merit program with funding comprised of a 1.0 percent increase of base faculty salary allocation, and a minimum expected reallocation by the vice-presidents and deans of an additional 1.0 to this base allocation.

The staff program is consistent with state authorizations, is comprised of the following:

- A 2.0 percent classified and university staff compensation program with funding comprised of a 1.0 percent increase of base staff salary allocation, and a minimum expected reallocation by the vice-presidents and deans of an additional 1.0 to this base allocation.
- A classified staff compression program of a \$65 per year of service increase for years of service between 5-30 years.

The one percent reallocation to help achieve compensation goals is critical to achieving the strategic objectives of the programs while working to contain costs.

## Capital Outlay Projects

Virginia Tech's capital outlay program includes projects for the University Division and the Cooperative Extension/Agricultural Experiment Station Division. Initiation of a capital project requires authorization of a budget and funding sources from the state and/or the Board of Visitors. The state authorizes projects supported entirely or partially with General Fund revenues. Under the restructuring legislation and the 2006 Management Agreement between the Commonwealth and the university, the Board of Visitors has the authority to approve capital projects funded entirely with nongeneral fund resources. New state authorized projects are requested as part of the state budget cycle, with authorizations approved in the Appropriation Act or through special action by the Governor. These projects normally become effective and are added to the program at the beginning of a fiscal year. New projects approved by the Board of Visitors become effective upon approval of a university resolution and are reflected on the subsequent Financial Performance Report. Existing capital projects carry forward to the next fiscal year until the projects are closed. Completed projects are closed and removed from the program at the end of a fiscal year.

Schedule 3 shows the total capital authorization by fund source and an estimated annual budget for each capital outlay project that will be active in fiscal year 2015-16. The program includes only projects appropriated by the state or authorized by the Board of Visitors. Each project for fiscal year 2015-16 is listed with expected amounts for the total authorization by revenue source, available balance for the fiscal year, estimated budget, and estimated balance at the close of the fiscal year.

The portfolio of the capital outlay program for fiscal year 2015-16 (Schedule 3) is comprised of nine Educational and General projects and 12 Auxiliary Enterprise projects for a total of 21 projects. The projects are in various phases of design and construction with a life span normally lasting two to four years, depending on the size and complexity of the facility. The total capital outlay budget for fiscal year 2015-16 includes approximately \$483 million of authorizations with an estimated available balance of about \$235 million. Of the available balance, the university plans to spend about \$113 million in fiscal year 2015-16.

The revenues to support capital outlay expenses are a mix of state support, university supported debt, and self-generated resources. When projects have multiple sources of funding, the university generally utilizes the resources in the following order: state support, bond proceeds, and then nongeneral funds. This order allows the most effective use of the university's nongeneral fund resources.

### **RECOMMENDATION:**

That the proposed 2015-16 operating and capital budgets, as displayed on Schedules 1, 2, and 3, be approved.

June 1, 2015

## TOTAL OPERATING BUDGET FOR VIRGINIA TECH

Fiscal Year 2015-16  
(Dollars in Thousands)

	2014-15 Original Budget	2014-15 Adjusted Budget	2015-16 Recommended Budget
<b>Revenues</b>			
Educational and General			
University Division			
General Fund	\$158,805	\$147,533	\$153,336
Tuition and Fees	410,277	419,868	445,747
All Other Income	39,344	39,728	40,333
Subtotal	608,426	607,129	639,416
CE/AES Division			
General Fund	68,100	67,118	68,509
Federal Funds	14,483	16,983	15,643
All Other Income	865	866	893
Subtotal	83,448	84,967	85,045
Total Educational and General	691,874	692,096	724,461
Auxiliary Enterprises	294,243	303,523	308,818
Financial Assistance for E&G Programs <sup>(a)</sup>			
General Fund	7,339	4,139	5,389
Nongeneral Fund	332,629	332,629	332,583
Total	339,968	336,768	337,972
Student Financial Assistance			
General Fund	19,977	19,924	19,806
Nongeneral Fund	0	0	710
Total	19,977	19,924	20,516
All Other Programs <sup>(b)</sup>			
General Fund (UMA)	2,084	2,084	2,084
Nongeneral Fund	4,547	4,625	5,857
Total	6,631	6,709	7,941
Total	\$1,352,693	\$1,359,020	\$1,399,708
<b>Expense</b>			
Educational and General			
University Division	\$608,426	\$607,129	\$639,416
CE/AES Division	83,448	84,967	85,045
Subtotal	691,874	692,096	724,461
Auxiliary Enterprises	289,602	305,129	303,366
Financial Assistance for E&G Programs <sup>(a)</sup>	339,968	336,768	337,972
Student Financial Assistance	19,977	19,924	20,516
All Other Programs <sup>(b)</sup>	6,631	7,013	7,941
Total	\$1,348,052	\$1,360,931	\$1,394,256
<b>Planned Change in Reserve</b>			
Reserve Drawdown/(Deposit) <sup>(c)</sup>	(4,641)	1,911	(5,453)
Net	\$0	\$0	\$0

(a) Financial Assistance for E&G Programs includes Sponsored Programs, the Eminent Scholars Program, and General Fund Research Initiative.

(b) All Other Programs include Unique Military Activities, Surplus Property, Local Funds, Federal Work Study, and Alumni Affairs.

(c) Reserve contributions are based on the budget plans of Auxiliary Enterprise units.

Presentation Date: June 1, 2015

**TOTAL OPERATING BUDGETS FOR AUXILIARY ENTERPRISES**  
**Fiscal Year 2015-16**  
**(Dollars in Thousands)**

	2014-15 Original Budget	2014-15 Adjusted Budget	2015-16 Recommended Budget
<b>Residence and Dining Hall System</b>			
Revenues	\$105,084	\$107,878	\$112,712
Expenses	-102,045	-107,427	-109,647
Reserve Drawdown (Addition)	-3,039	-451	-3,065
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Parking and Transportation</b>			
Revenues	\$13,107	\$13,756	\$13,353
Expenses	-13,537	-13,482	-13,595
Reserve Drawdown (Addition)	430	-274	242
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Telecommunications Services</b>			
Revenues	\$18,804	\$18,806	\$19,110
Expenses	-18,615	-19,341	-18,977
Reserve Drawdown (Addition)	-189	535	-133
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>University Services System</b>			
Revenues	\$41,565	\$41,620	\$43,489
Expenses	-40,357	-40,860	-42,571
Reserve Drawdown (Addition)	-1,208	-760	-918
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Intercollegiate Athletics</b>			
Revenues	\$57,798	\$63,862	\$60,659
Expenses	-56,421	-65,644	-58,320
Reserve Drawdown (Addition)	-1,377	1,782	-2,339
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Electric Service System</b>			
Revenues	\$36,853	\$36,721	\$37,962
Expenses	-36,040	-36,646	-39,790
Reserve Drawdown (Addition)	-813	-75	1,828
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Inn at Virginia Tech and Skelton Conference Center</b>			
Revenues	\$10,876	\$10,876	\$11,249
Expenses	-11,544	-11,632	-11,205
Reserve Drawdown (Addition)	668	756	-44
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>Other Enterprise Functions</b>			
Revenues	\$10,156	\$10,004	\$10,284
Expenses	-11,043	-10,097	-9,261
Reserve Drawdown (Addition)	887	93	-1,023
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
<b>TOTAL</b>			
Revenues	\$294,243	\$303,523	\$308,818
Expenses	-289,602	-305,129	-303,366
Reserve Drawdown (Addition)	-4,641	1,606	-5,452
Net	<u><u>\$0</u></u>	<u><u>\$0</u></u>	<u><u>\$0</u></u>

## EDUCATIONAL AND GENERAL CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2016

(Dollars in Thousands)

as of April 30, 2015

	TOTAL PROJECT AUTHORIZATION				ESTIMATED TOTAL EXPENSES June 30, 2015	ESTIMATED BALANCE AVAILABLE FOR FY2016	ESTIMATED ANNUAL BUDGET FY2016	ESTIMATED BALANCE AT CLOSE OF FY2016	
	STATE SUPPORT	GENERAL OBLIGATION BONDS	NONGENERAL FUND	AGENCY DEBT					TOTAL
<u>Educational and General Projects</u>									
<u>Educational and General Maintenance Reserve</u>									
Maintenance Reserve	\$ 17,728	\$ 0	\$ 0	\$ 0	\$ 17,728	\$ 7,095	\$ 10,633	\$ 10,633	\$ 0
<u>Design Phase</u>									
Academic Buildings Renewal	27,389	0	0	0	27,389	1,853	25,536	6,750	18,786
Improve Kentland Facilities	7,510	0	0	0	7,510	400	7,110	1,020	6,090
<u>Construction Phase</u>									
Address Fire Alarms and Access	4,891	0	0	0	4,891	2,012	2,879	2,140	739
Classroom Building	42,652	0	0	0	42,652	12,646	30,006	24,000	6,006
Marching Virginians Practice Facility	0	0	4,750	0	4,750	3,489	1,261	1,261	0
McBryde 100 Classroom Renovation	0	0	2,800	0	2,800	500	2,300	2,300	0
<u>Close-Out</u>									
Human & Agricultural Biosciences Building I	53,759	0	0	0	53,759	53,550	209	209	0
Signature Engineering Building	47,609	0	18,650	28,959	95,218	91,825	3,393	3,393	0
<u>On Hold and Not Funded</u>									
Total Educational and General Projects	\$ 201,538	\$ 0	\$ 26,200	\$ 28,959	\$ 256,697	\$ 173,370	\$ 83,327	\$ 51,707	\$ 31,621

## AUXILIARY ENTERPRISE CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2016

(Dollars in Thousands)

as of April 30, 2015

	TOTAL PROJECT AUTHORIZATION				ESTIMATED TOTAL EXPENSES June 30, 2015	ESTIMATED BALANCE AVAILABLE FOR FY2016	ESTIMATED ANNUAL BUDGET FY2016	ESTIMATED BALANCE AT CLOSE OF FY2016	
	STATE SUPPORT	GENERAL OBLIGATION BONDS	NONGENERAL FUND	AGENCY DEBT					TOTAL
<u>Auxiliary Enterprises Projects</u>									
<u>Auxiliary Maintenance Reserve</u>									
Maintenance Reserve	\$ 0	\$ 0	\$ 20,873	\$ 0	\$ 20,873	\$ 0	\$ 20,873	\$ 7,000	\$ 13,873
<u>Design Phase</u>									
Airport Hangar Replacement	0	0	2,520	0	2,520	62	2,458	2,000	458
Planning: Health Center Improvements	0	0	0	200	200	190	10	10	0
Planning: Softball and Track Improvements	0	0	500	0	500	10	490	490	0
<u>Construction Phase</u>									
Residential Connectivity	0	0	4,000	0	4,000	2,309	1,691	1,691	0
Unified Communications and Network Renewal	0	0	7,705	8,803	16,508	12,349	4,159	2,350	1,809
Upper Quad Residential Facilities	0	0	23,377	67,623	91,000	35,997	55,003	46,753	8,250
<u>Close-Out Phase</u>									
Indoor Athletic Training Facility	0	0	21,300	3,700	25,000	20,119	4,881	1,181	3,700
South Recreation Field Surface Replacement	0	0	0	4,600	4,600	3,434	1,166	276	890
<u>On Hold and Not Funded</u>									
New Residence Hall II	0	0	0	27,000	27,000	182	26,818	0	26,818
Parking Blanket Authorizations Balance	0	0	0	16,547	16,547	0	16,547	0	16,547
Phase IV Oak Lane Community	0	0	0	17,498	17,498	0	17,498	0	17,498
Total Auxiliary Enterprise Projects	\$ 0	\$ 0	\$ 80,275	\$ 145,971	\$ 226,246	\$ 74,652	\$ 151,594	\$ 61,751	\$ 89,843
GRAND TOTAL ALL CAPITAL PROJECTS	<u>\$ 201,538</u>	<u>\$ 0</u>	<u>\$ 106,475</u>	<u>\$ 174,930</u>	<u>\$ 482,943</u>	<u>\$ 248,022</u>	<u>\$ 234,921</u>	<u>\$ 113,457</u>	<u>\$ 121,464</u>

## **Hotel Roanoke Conference Center Commission Budget**

### **FINANCE AND AUDIT COMMITTEE**

**April 20, 2015**

The Hotel Roanoke Conference Center Commission was established by resolutions adopted by Virginia Tech on November 18, 1991 and by the City Council of the City of Roanoke, Virginia on April 14, 1992, pursuant to Chapter 440 of the 1991 Acts of Assembly of the Commonwealth of Virginia, adopted March 20, 1991. Section 21 B of the enabling legislation provided that the Commission shall annually prepare and submit to both the City of Roanoke and Virginia Tech (the "Participating Parties") a proposed operating budget showing its estimated revenues and expenses on an accrual basis for the forthcoming fiscal year and if such estimated expenses exceed such estimated revenues, the portion of the deficit proposed to be borne by each Participating Party.

The Commission has adopted and approved its operating budget for the fiscal year 2015-16. Virginia Tech and the City of Roanoke will make equal contributions of \$80,000 to the Commission for fiscal year 2015-16. The recommended budget is shown on the following page.

**HOTEL ROANOKE CONFERENCE CENTER COMMISSION  
BUDGET  
JULY 2015 - JUNE 2016**

**Revenues**

City of Roanoke	\$ 80,000
Virginia Tech	<u>80,000</u>
	<u>\$160,000</u>

**Expenses**

Personal Services for part-time director	\$ 75,185
Professional Fees – legal, audit, advisory services	78,000
Technology support services and equipment	3,815
Commission Operations	3,000
	<hr/>
	\$ 160,000

**RECOMMENDATION:**

That the budget for The Hotel Roanoke Conference Center Commission for 2015-2016 be approved.

June 1, 2015

**Virginia Tech-Wake Forest University  
School of Biomedical Engineering and Sciences  
2015-16 Operating Budget**

**FINANCE AND AUDIT COMMITTEE  
April 30, 2015**

The Board of Visitors of Virginia Tech adopted a resolution that authorized the establishment of the Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences on August 26, 2002. Subsequently, Virginia Tech and Wake Forest University entered into a collaboration agreement which outlines the relationship and responsibilities of each party. As stated in the collaboration agreement, the annual operating budget for the School of Biomedical Engineering and Sciences requires approval by the governing boards of each university.

The 2015-16 recommended budget of \$4,321,747 for Virginia Tech's contribution to the School of Biomedical Engineering and Sciences is shown on the following page.

**Virginia Tech-Wake Forest University  
School of Biomedical Engineering and Sciences  
2015-16 Operating Budget**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

**Revenues**

University Allocation	\$ 4,321,747
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**Expenses**

Faculty	\$ 2,336,036
Staff	436,882
Graduate Students	305,680
Fringes	958,726
Subtotal Personnel Costs	4,037,324
Operating Costs	284,423
Total Expenses	\$ 4,321,747

Net	-
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**RECOMMENDATION:**

That the 2015-16 budget for the Virginia Tech - Wake Forest School of Biomedical Engineering and Sciences be approved.

June 1, 2015

## **Approval of 2015-2016 Auxiliary Systems Budgets**

**The Committee will review for approval the following  
2015-2016 Auxiliary Systems Budgets:**

**Dormitory and Dining Hall System  
2015-16 Operating Budget**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

The resolution authorizing and securing the Dormitory and Dining Hall System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the Dormitory and Dining Hall System during the fiscal year. In compliance with Section 5.5, Article V, of the resolution authorizing and securing the Dormitory and Dining Hall System revenue bonds, there is submitted herewith an estimate of the resources to be used for the operation of the Dormitory and Dining Hall System during the fiscal year July 1, 2015 to June 30, 2016 and a recommended budget of current expenses for the System for the same period.

	<u>Dormitories</u>	<u>Dining Halls</u>	<u>Total</u>
<u>Estimated Revenues</u>			
Student Fees	\$52,437,623	\$53,332,268	\$105,769,891
Other Income	-1,121,066	8,062,788	6,941,722
Total Resources	<u>\$51,316,557</u>	<u>\$61,395,056</u>	<u>\$112,711,613</u>
<u>Current Expenses</u>			
Personnel Services	\$10,822,367	\$22,706,453	\$33,528,820
Operations	19,885,551	28,057,619	47,943,170
Administrative Charge	1,814,341	4,275,995	6,090,336
Maintenance Reserve	3,898,987	898,039	4,797,026
Debt Service	13,578,783	3,708,387	17,287,170
Total Expenses	<u>\$50,000,029</u>	<u>\$59,646,493</u>	<u>\$109,646,522</u>
Reserve Contribution (Draw)	\$1,316,528	\$1,748,563	\$3,065,091
Net	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

I certify that in my opinion the estimates of revenues and current expenses for the period July 1, 2015 to June 30, 2016 represent an accurate estimate of the income to be received and current expenses of operating the Dormitory and Dining Hall System for the fiscal year.

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

**Annual Inspection and Recommendations Concerning  
Dormitory and Dining Hall System**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

Section 5.4, Article V, of the resolution authorizing and securing the Dormitory and Dining Hall System revenue bonds requires that an inspection be made of the System at least once each year and a report and recommendation be submitted to the Board of Visitors.

An inspection has been made of the System, and it is my opinion that the System has been maintained in good repair, working order, and condition. The following recommendations are made for the fiscal year July 1, 2015 to June 30, 2016:

1. That the necessary minor repairs be made to all equipment and buildings in the System. Funds have been included in the annual budget of current expenses to cover the cost of these items.
2. That the State's all-risk policy which provides protection from loss by fire, lightning, wind, hail, explosion, theft, vandalism, malicious mischief, and other extended coverage be continued. This provides \$1,000,000,000 coverage for any one property occurrence, \$100,000,000 coverage for any one fine arts occurrence and \$1,000,000,000 coverage for any one boiler and machinery occurrence, without any coinsurance and with an effective deductible of \$1,000.
3. That fees, rents, and charges for the next fiscal year are sufficient for the purpose set forth in Section 5.1, Article V, of the resolution.

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

**RECOMMENDATION:**

That the recommended budget for the fiscal year July 1, 2015 to June 30, 2016 for the operation of the Dormitory and Dining Hall System and the report of the Annual Inspection be approved.

June 1, 2015

**Electric Service System  
2015-16 Operating Budget**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

The resolution authorizing and securing the Electric Service System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the Electric Service System during the fiscal year. In compliance with Section 5.5, Article V, of the resolution authorizing and securing the Electric Service System revenue bonds, there is submitted herewith an estimate of the resources to be used for the operation of the Electric Service System during the fiscal year July 1, 2015 to June 30, 2016 and a recommended budget of current expenses for the System for the same period.

Estimated Revenues

Sales to University Departments	\$22,035,821
All Other Sales	15,870,430
Investment Income	55,823
Total Revenues	\$37,962,074

Current Expenses

Personnel Services	\$2,860,203
Purchase of Electricity	27,678,101
Operating Expenditures	7,471,302
Capital Maintenance Reserve Projects	710,000
Maintenance, Repairs and Equipment Replacement	477,890
Debt Service	592,005
Total Expenses	\$39,789,501

Reserve Contribution (Drawdown)	(\$1,827,427)
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Net	\$0
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I certify that in my opinion the estimates of revenues and current expenses for the period July 1, 2015 to June 30, 2016 represent an accurate estimate of the income to be received and current expenses of operating the Electric Service System for the fiscal year.

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

**Annual Inspection and Recommendations Concerning  
Electric Service System**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

Section 5.4, Article V, of the resolution authorizing and securing the Electric Service System revenue bonds requires that an inspection be made of the System at least once each year and a report and recommendation be submitted to the Board of Visitors.

An inspection has been made of the System, and it is my opinion that the System has been maintained in good repair, working order, and condition. The following recommendations are made for the fiscal year July 1, 2015 to June 30, 2016:

1. That the necessary minor repairs be made to all equipment and buildings in the System. Funds have been included in the annual budget of current expenses to cover the cost of these items.
2. That the State's all-risk policy which provides protection from loss by fire, lightning, wind, hail, explosion, theft, vandalism, malicious mischief, and other extended coverage be continued. This provides \$1,000,000,000 coverage for any one property occurrence, \$100,000,000 coverage for any one fine arts occurrence and \$1,000,000,000 coverage for any one boiler and machinery occurrence, without any coinsurance and with an effective deductible of \$1,000.
3. That rates and charges for the next fiscal year are sufficient for the purpose set forth in Section 5.1, Article V, of the resolution.

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

**RECOMMENDATION:**

That the recommended budget for the fiscal year July 1, 2015 to June 30, 2016 for the operation of the Electric Service System and the report of the Annual Inspection be approved.

June 1, 2015

**University Services System  
2015-16 Operating Budget**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

The resolution authorizing and securing the University Services System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the University Services System during the fiscal year. In compliance with Section 5.5, Article V, of the resolution authorizing and securing the University Services System revenue bonds, there is submitted herewith an estimate of the resources to be used for the operation of the University Services System during the fiscal year July 1, 2015 to June 30, 2016 and a recommended budget of current expenses for the System for the same period.

Estimated Revenues

Student Fees	\$37,580,435
Sales and Services	3,417,925
Other Income	2,490,415
Total Revenues	\$43,488,775

Current Expenses

Personnel Services	\$19,807,053
Operating	13,130,431
Debt Service	6,380,065
Capital Maintenance Reserve	1,618,121
Non-Capital Maintenance Reserve	139,984
Student Organization Allocation	1,468,874
One-Time Expenses	26,500
Total Expenditures	\$42,571,028

Reserve Contribution (Drawdown)	\$917,747
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Net	\$0
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I certify that in my opinion the estimates of revenues and current expenses for the period July 1, 2015 to June 30, 2016 represent an accurate estimate of the income to be received and current expenses of operating the University Services System for the fiscal year.

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

**Annual Inspection and Recommendations Concerning  
University Services System**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

Article V, Section 5.4, of the resolution authorizing and securing the University Services System revenue bonds requires that an inspection be made of the System at least once each year and a report and recommendation be submitted to the Board of Visitors.

An inspection has been made of the System, and it is my opinion that the System has been maintained in good repair, working order, and condition. The following recommendations are made for the fiscal year July 1, 2015 to June 30, 2016:

1. That the necessary minor repairs be made to all equipment and buildings in the System. Funds have been included in the annual budget of current expenses to cover the cost of these items.
2. That the State's all-risk policy which provides protection from loss by fire, lightning, wind, hail, explosion, theft, vandalism, malicious mischief, and other extended coverage be continued. This provides \$1,000,000,000 coverage for any one property occurrence, \$100,000,000 coverage for any one fine arts occurrence and \$1,000,000,000 coverage for any one boiler and machinery occurrence, without any coinsurance and with an effective deductible of \$1,000.
3. That rates and charges for the next fiscal year are sufficient for the purpose set forth in Section 5.1, Article V, of the resolution.

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

**RECOMMENDATION:**

That the recommended budget for the fiscal year July 1, 2015 to June 30, 2016 for the operation of the University Services System and the report of the Annual Inspection be approved.

June 1, 2015

**Intercollegiate Athletics System  
2015-16 Operating Budget**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

The resolution authorizing and securing the Athletics System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the Athletics System during the fiscal year. In compliance with Section 5.5, Article V, of the resolution authorizing and securing the Athletics System revenue bonds, there is submitted herewith an estimate of the resources to be used for the operation of the Athletics System during the fiscal year July 1, 2015 to June 30, 2016 and a recommended budget of current expenses for the System for the same period.

Estimated Revenues

Student Fees	8,353,204
Sales and Services	51,094,437
Other Income	1,210,871
Total Revenues	60,658,512

Current Expenses

Personnel Services	27,565,600
Operations	18,283,818
Administrative Charge	4,004,752
Capital Maintenance Reserve	1,232,585
Maintenance, Repairs, & Equipment Replacement	1,928,649
Debt Service	5,304,451
Total Expenses	58,319,855

Reserve Contribution (Drawdown)	2,338,657
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Net	0
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I certify that in my opinion the estimates of revenues and current expenses for the period July 1, 2015 to June 30, 2016 represent an accurate estimate of the income to be received and current expenses of operating the Athletics System for the fiscal year.

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

**Annual Inspection and Recommendations Concerning  
Intercollegiate Athletics System**

**FINANCE AND AUDIT COMMITTEE**

**April 30, 2015**

Section 5.4, Article V, of the resolution authorizing and securing the Athletics System revenue bonds requires that an inspection be made of the System at least once each year and a report and recommendation be submitted to the Board of Visitors.

An inspection has been made of the System, and it is my opinion that the System has been maintained in good repair, working order, and condition. The following recommendations are made for the fiscal year July 1, 2015 to June 30, 2016:

1. That the necessary minor repairs be made to all equipment and buildings in the System. Funds have been included in the annual budget of current expenses to cover the cost of these items.
2. That the State's all-risk policy which provides protection from loss by fire, lightning, wind, hail, explosion, theft, vandalism, malicious mischief, and other extended coverage be continued. This provides \$1,000,000,000 coverage for any one property occurrence, \$100,000,000 coverage for any one fine arts occurrence and \$1,000,000,000 coverage for any one boiler and machinery occurrence, without any coinsurance and with an effective deductible of \$1,000.
3. That rates and charges for the next fiscal year are sufficient for the purpose set forth in Section 5.1, Article V, of the resolution.

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

**RECOMMENDATION:**

That the recommended budget for the fiscal year July 1, 2015 to June 30, 2016 for the operation of the Intercollegiate Athletics System and the report of the Annual Inspection be approved.

June 1, 2015

## **Pratt Funds Overview**

### **FINANCE AND AUDIT COMMITTEE**

**April 28, 2015**

In 1975, the university received a significant bequest from the estate of Mr. John Lee Pratt of Stafford County, following his death on December 20, 1975. The bequest was divided equally into two distinct parts, one to support Animal Nutrition and one to support the College of Engineering. According to the will, the bequest for Animal Nutrition was to be used to promote the study of animal nutrition by supplementing salaries, providing equipment and materials to be used for experiments in feeding and in the preparation of feeds for livestock and poultry, and publishing and disseminating the research results of the studies. The will provided that the bequest for the College of Engineering should be used to support research and scholarships.

Distributions of the Pratt Estate were received in several installments: \$9,561,819 in 1976, \$1,330,000 in 1977, \$47,000 in 1979, and \$30,164 in 1981, for a total of \$10,968,983. The Pratt endowment has grown to \$45.6 million as of March 31, 2015. The following paragraphs summarize some of the major accomplishments of the College of Engineering and the Animal Nutrition Programs that are directly tied to the funding provided by the Pratt estate.

When the Pratt Endowment was originally established, the College of Engineering was in the early stages of becoming a nationally recognized leader in engineering education. The Pratt Endowment has played a significant role in allowing the College to enrich its pool of students and to offer additional international study opportunities to students and faculty. Additionally, the Pratt funds currently allow the College to invest resources in three research areas: biomedical engineering, microelectronics, and energy and advanced vehicles.

Income from the Pratt Endowment provides an unusual opportunity to support an animal nutrition program of high quality. Use of these Endowment earnings have concentrated on enhancing research and educational opportunities beyond what departments could do with state and federal funding. The main funding strategy remains with strong support for Ph.D. training, direct research support, scientific equipment, and visiting professors that stimulate and inspire the faculty and students engaged in nutrition research.

*Presentation Date: June 1, 2015*

## 2015-2016 PRATT FUND BUDGET PROPOSAL

Pursuant to the spending policy adopted for the Pratt Estate Fund, it is anticipated that additional income of \$1,875,620 will be available for expenditure in FY 2015-2016. Targets of \$951,859 and \$923,761 were given respectively to the College of Engineering and to the Animal Nutrition Programs.

### **College of Engineering**

Source of Funds:

Endowment Income	<b><u>\$951,859</u></b>
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Proposed Expenditures:

Undergraduate Scholarships	\$362,389
Undergraduate International Scholarships	60,000
Graduate International Scholarships	30,000
Graduate Tuition Scholarships	90,000
Graduate Research Fellowships	182,000
Graduate Recruitment for Research Programs	123,430
Equipment for Research Programs	<u>104,040</u>
<b>Total Proposed Expenditures</b>	<b><u>\$951,859</u></b>

### **Animal Nutrition**

Source of Funds:

Endowment Income	<b><u>\$923,761</u></b>
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Proposed Expenditures:

Animal Nutrition Research and Scholarship	\$923,761
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<b>Total Proposed Expenditures</b>	<b><u>\$923,761</u></b>
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### **RECOMMENDATION:**

That the proposed 2015-2016 allocation and use of Pratt Funds be approved.

**RESOLUTION TO APPOINT UNIVERSITY COMMISSIONER  
TO THE HOTEL ROANOKE CONFERENCE CENTER COMMISSION**

**WHEREAS**, the Virginia General Assembly approved legislation known as the “Hotel Roanoke Conference Center Commission Act” to provide for the establishment of a conference center commission; and,

**WHEREAS**, the Act provides for the appointment of three commissioners each from the City of Roanoke and from Virginia Polytechnic Institute and State University; and,

**WHEREAS**, the Act provides that the commissioner appointments be staggered; and,

**WHEREAS**, the terms of the appointments shall be four years, and shall end on June 30 of the respective year; and,

**WHEREAS**, pursuant to the Act, the Board of Visitors of Virginia Polytechnic Institute and State University reappoints effective July 1, 2015, the following as commissioner:

- Chief Executive Officer, Virginia Tech Foundation    June 30, 2019

**NOW, THEREFORE, BE IT RESOLVED** that the appointment of the Chief Executive Officer of Virginia Tech Foundation shall continue effective July 1, 2015 with the approval of this resolution.

**RECOMMENDATION:**

That the above resolution for the appointment of the Chief Executive Officer of Virginia Tech Foundation as the university’s representative on the Hotel Roanoke Conference Center Commission be approved.

June 1, 2015

**RESOLUTION TO COMPLY WITH TUITION RESIDENCY REQUIREMENTS OF  
THE VETERANS ACCESS, CHOICE AND ACCOUNTABILITY ACT OF 2014**

**FINANCE AND AUDIT COMMITTEE**

**April 28, 2015**

**WHEREAS**, the Board of visitors of Virginia Tech has the authority to set tuition and fee charges; and

**WHEREAS**, 38 U.S.C. 3679(c), the Veterans Access, Choice and Accountability Act of 2014 ("the Act") requires the U.S. Department of Veterans Affairs to disapprove programs of education for payment of benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty at public institutions of higher education if such institutions charge qualifying veterans and other qualified individuals ("covered individuals") tuition and fees in excess of the rate for in-state students for terms beginning after July 1, 2015; and

**WHEREAS**, "covered individuals" under the Act include:

- A veteran who lives in Virginia, regardless of formal state of residence or domicile, and enrolls in this institution within three years of discharge from a period of active duty service of 90 days or more using benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty.
- Anyone using transferred benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty who lives in Virginia, regardless of formal state of residence or domicile, and enrolls in this institution within three years of the transferor's discharge from a period of active duty service of 90 days or more.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship who lives in Virginia, regardless of formal state of residence or domicile, and enrolls in this institution within three years of the Service member's death in the line of duty following a period of active duty service of 90 days or more; and
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge, release, or death described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code; and

**WHEREAS**, pursuant to Virginia Code § 23-7.4:2 (H), all veterans residing within the Commonwealth shall be eligible for in-state tuition charges.

**NOW, THEREFORE BE IT RESOLVED**, that the tuition and fee rate for a course of education pursued by the following categories of students shall be equal to the tuition and fee rate for that course of education charged to in-state students:

- Anyone using transferred benefits under the Post-9/11 GI Bill and Montgomery GI Bill-Active Duty who lives in Virginia, regardless of formal state of residence or domicile, and enrolls in this institution within three years of the transferor's discharge from a period of active duty service of 90 days or more.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship who lives in Virginia, regardless of formal state of residence, and enrolls in this institution within three years of the Service member's death in the line of duty following a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge, release, or death described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.

**BE IT FURTHER RESOLVED** that the President of Virginia Tech is delegated the authority to attest to (1) this action by the Board of Visitors; and (2) that Virginia Tech charges tuition and fees to uniformed services veterans and other qualified individuals covered under 38 U.S.C. 3679(c) at a rate equal to in-state tuition and fees for that course of education.

**RECOMMENDATION:**

That the resolution to comply with tuition requirements of the Veterans Access, Choice and Accountability Act of 2014 be approved.

June 1, 2015

## **Capital Project for Lane Electric Substation Expansion**

### **JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE**

**April 28, 2015**

Virginia Tech Electric Service supplies power to Virginia Tech, the Corporate Research Center (CRC), and approximately 6,000 customers in the town of Blacksburg. As campus and the CRC have grown and more buildings are air conditioned, the load at the Lane Electric Substation becomes critical in the summer. The substation operates with two transformers in parallel, each at 22,400 kVA, to maintain reliable electric supply for the university. For several years, peak summer demand on the substation has approached the full-load sustained output limit and has once exceeded the limit. Additional distribution capacity at the Lane Electric Substation is needed to support the ongoing development of both campus and the Corporate Research Center. To meet the increasing demand, the university proposes an expansion of the Lane Electric Substation.

The proposed substation expansion will be located adjacent to the existing Lane Substation on Innovation Drive. The project includes the purchase and installation of two 28,000 kVA transformers, two circuit switchers, six distribution reclosers with space for an additional four reclosers, a control house and associated relay, and control equipment. The improvements would alleviate the loading problems at the Lane Substation and service future construction in the Life Sciences area, Special Purpose Housing area, and the second phase of the CRC. As proposed, an improved Lane Substation would maintain the quality and reliability of the power supply for an anticipated 20 years.

The estimated project costs inclusive of design, construction, and equipment is \$6.5 million. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of the project. This funding plan calls for the use of debt which may be serviced from Electric Service auxiliary revenue. Any cash designated for the project accumulated prior to the issuance of permanent debt may be used directly for project costs and to lower the total debt issuance. The Town of Blacksburg and Corporate Research Center customers will bear an appropriate portion of the project cost through their electric service rates.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, and overall funding of nongeneral fund capital outlay projects. This request is for a \$6.5 million authorization for the Lane Electric Substation Expansion project.

## **RESOLUTION ON CAPITAL PROJECT FOR LANE ELECTRIC SUBSTATION EXPANSION**

**WHEREAS**, Virginia Tech Electric Service supplies power to Virginia Tech, the Corporate Research Center, and approximately six thousand customers in the town of Blacksburg; and,

**WHEREAS**, the load at the Lane Substation becomes critical in the summer and additional distribution capacity is required to support the existing and projected load growth in the Life Science area, Special Purpose Housing area, and the second phase of the Corporate Research Center; and, **WHEREAS**, the university proposes an expansion of the Lane Electric Substation to meet the increased demand; and,

**WHEREAS**, the project includes the purchase and installation of two 28,000 kVA transformers, two circuit switchers, six distribution reclosers with space for an additional four reclosers, a control house and associated relay, and control equipment; and,

**WHEREAS**, the improvements will maintain the quality and reliability of the power supply for an anticipated 20 years; and,

**WHEREAS**, the cost of project is \$6.5 million and the university has developed a 100 percent nongeneral fund resource plan to support the costs; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the university has the authority to issue bonds, notes or other obligations that do not constitute State tax supported debt; and,

**WHEREAS**, the Finance and Audit Committee will further review and approve a financing resolution prior to securing permanent financing for the debt component of the project plus amounts needed to fund issuance costs, reserve funds, and other financing expenses; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and Virginia Tech, the Board of Visitors has authority to approve the budget, size, scope, and overall funding of nongeneral funded major capital outlay projects;

**NOW, THEREFORE BE IT RESOLVED**, that the university be authorized to move forward with the Lane Electric Substation Expansion project at a total project cost of \$6.5 million and to secure temporary short-term financing through any borrowing mechanism that, prior to such borrowing, has been approved by the Board, as applicable, in an aggregate principal amount not to exceed the \$6.5 million project authorization, plus related issuance costs and financing expenses.

### **RECOMMENDATION:**

That the resolution authorizing Virginia Tech to complete the Lane Electric Substation Expansion project be approved.

June 1, 2015

## **Capital Project for Constructing the Health Center Improvements**

### **JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE**

**April 13, 2015**

In March 2014, the Board of Visitors approved a \$200 thousand planning authorization for the Health Center Improvements project. The planning work is nearing completion of schematic designs and will be ready to enter the construction phase this summer. In accordance with the scope of the authorized planning project, the designed solution proposes a 3,500 gross square foot one-story addition to the east wing of McComas Hall and 1,700 square feet of interior renovations of the existing Schiffert Health Center for a total 5,200 gross square foot project.

The proposed addition includes space to house the Campus Alcohol and Prevention Center, expanded infirmary space to ensure separation of wound care cases from Methicillin-resistant Staphylococcus Aureus (MRSA) cases, and an isolation area which could serve to handle highly contagious cases and assist with emergency preparedness. The proposed renovations create three intake rooms, a phlebotomy area, an orthopedic room, a nebulizer room, a dietitian's office, and a biohazard waste storage space.

As with all self-supporting projects, the university has developed a financing plan to support the project. The total project budget is \$3.071 million and annual debt service is estimated to be \$250 thousand. The timing of the project request has been coordinated with the 2016 retirement of debt for the original construction of McComas Hall. The funding plan for debt service calls for the redirection of existing Student Health fee revenues when debt on the original McComas Hall project is retired. Thus, student fees will not be increased for this project and the revenue source is sufficient to cover this amount. Temporary financing will be secured to cover project costs until permanent debt is issued.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral fund capital outlay projects. This request is for a \$2.871 million authorization supplement to the existing \$200 thousand planning authorization for a \$3.071 adjusted total project budget authorization to complete the Health Center Improvements project.

## **RESOLUTION ON CAPITAL PROJECT FOR CONSTRUCTING THE HEALTH CENTER IMPROVEMENTS**

**WHEREAS**, the Board of Visitors approved a \$200 thousand planning authorization for the Health Center Improvements project in March 2014; and,

**WHEREAS**, the project scope is to construct 3,500 gross square feet of new space to incorporate the Campus Alcohol and Prevention Center and infirmary space into the Schiffert Health Center and to renovate 1,700 gross square feet of existing space in the Schiffert Health Center to create three intake rooms, a phlebotomy area, an orthopedic room, a nebulizer room, dietitian's office, and a biohazard waste storage space; and,

**WHEREAS**, planning work is nearing completion of schematic designs and will be ready to enter the construction phase this summer; and,

**WHEREAS**, the total project budget is \$3.071 million, including the previous authorization of \$200 thousand plus this supplement request of \$2.871 million; and,

**WHEREAS**, the university has developed a 100 percent nongeneral fund resource plan for the project; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the university has the authority to issue bonds, notes or other obligations that do not constitute State tax supported debt; and,

**WHEREAS**, the Finance and Audit Committee will further review and approve a financing resolution prior to securing permanent financing for the debt component of the project plus amounts needed to fund issuance costs, reserve funds, and other financing expenses; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral funded major capital outlay projects; and,

**NOW, THEREFORE BE IT RESOLVED**, that the university be authorized to move forward with a \$2.871 million supplement authorization to complete the Health Center Improvements project and to secure temporary short-term financing through any borrowing mechanism that, prior to such borrowing, has been approved by the Board, as applicable, in an aggregate principal amount not to exceed the \$3.071 million total project costs, plus related issuance costs and financing expenses.

### **RECOMMENDATION:**

That the resolution authorizing Virginia Tech to complete the design, construction, and equipping of the Health Center Improvements project be approved.

June 1, 2015

## Committee Minutes

### Committee on Research

Duck Pond Room  
The Inn at Virginia Tech and Skelton Conference Center  
4:00-5:15 p.m.

May 31, 2015

#### Committee Members Present:

Mr. John C. Lee, IV  
Dr. Nancy Dye  
Dr. J. Thomas Ryan  
Mr. Mehul Sanghani

#### Guests:

Dr. Timothy Sands, Dr. Mark McNamee, Mr. Dwight Shelton Jr., Mr. James L. Chapman, Ms. Sue Chapman, Dr. Mr. William D. Fairchild III, Mr. B. Keith Fulton, Ms. Deborah Petrine, Mr. Martin Daniel, Dr. Dennis Dean, Mr. Bien Doung, Mr. Srinath Ekkad, Ms. S. Ashley Francis, Ms. Natalie Hart, Ms. Kay Heidbreder, Mr. T. Austin Larrowe, Dr. Steven McKnight, Ms. Sharon Kurek, Mr. John Pastor, Dr. Steve McKnight, Dr. Scott Midkiff, Ms. Kim O'Rourke, Mr. Michael J. Quillen, Mr. J. Scot Ransbottom, Rev. Wayne Robinson, Ms. Savita Sharma, Mr. Stephen Sturgis, Mr. Dennis H. Treacy, Mr. Horatio Valerias, Dr. Sherwood Wilson, and Ms. Beth Tranter.

1. **Opening Remarks and Approval of March 29, 2015 Minutes.** Mr. Lee called the meeting to order and welcomed those in attendance. The minutes were unanimously approved.
2. **Remarks from the President.** Dr. Sands welcomed those in attendance and thanked Dr. Dennis Dean for his continued service as Interim Vice President for Research. Dr. Sands noted that the policy revision on intellectual property on today's agenda is indicative of a priority on innovation programs that will characterize program development in the next year, with the intention of making the university environment more favorable to both collaborative partners and university stakeholders.
3. **Resolution for the Revision to Policy No. 13000: Policy on Intellectual Properties.** Dr. Dean reviewed the resolution, which contains three changes to the Intellectual Property Policy; documenting instances in which the university will not claim ownership of student inventions, describing circumstances in which intellectual property may be released back to the inventor, and including language when the President, upon recommendation by the Intellectual Property Committee and Vice

President for Research, may authorize exceptions to this policy in the best interests of the university. These changes are intended to enhance the innovation ecosystem at Virginia Tech, and to encourage student entrepreneurship. The resolution was unanimously approved.

4. **Resolution for Revision to Policy No. 13015: Policy on Ownership and Control of Research Results:** Dr. Dean reviewed the proposed changes to this policy, which was updated to include references to digital files and notebooks, and to note that when appropriate, access to research results and materials will be limited to the university faculty, staff, and students who generate them and/or need access to them for bona fide research or administrative purposes. The resolution was unanimously approved.
  
5. **Advanced Propulsion and Power Lab Overview:** Dr. Srinath Ekkad, Associate Vice President for Research, Director of the Rolls-Royce University Technology Center and Rolls-Royce Commonwealth Professor for Aerospace Propulsion Systems, provided an overview of the new Advanced Propulsion and Power Lab at Virginia Tech, which opened this month. Located in the Virginia Tech Corporate Research Center, this facility leverages forty years of advanced propulsion and power research, while also serving as a one-stop shop opportunity for aerospace and gas turbine companies to test and develop new technology. The mission of the Virginia Tech Advanced Propulsion and Power Laboratory is to be the leading-edge facility dedicated to the study of jet propulsion and the internal design of gas turbine engines.

#### **Adjournment.**

There being no further business, the meeting adjourned at 5:07 p.m.

# Virginia Tech

## Advanced Propulsion and Power Lab (VT APPL)

**Srinath V. Ekkad**

Associate Vice President for Research Programs  
Director, Rolls-Royce University Technology Center  
Rolls-Royce Commonwealth Professor for Aerospace Propulsion Systems  
Professor of Mechanical Engineering  
Virginia Tech  
Blacksburg VA 24061  
sekkad@vt.edu

# Virginia Tech Advanced Propulsion and Power Lab

- Leveraging 40 years of advanced propulsion and power research
- A one-stop shop opportunity for Aerospace and Gas Turbine Companies to test and develop new technology



*Groundbreaking April 2013*

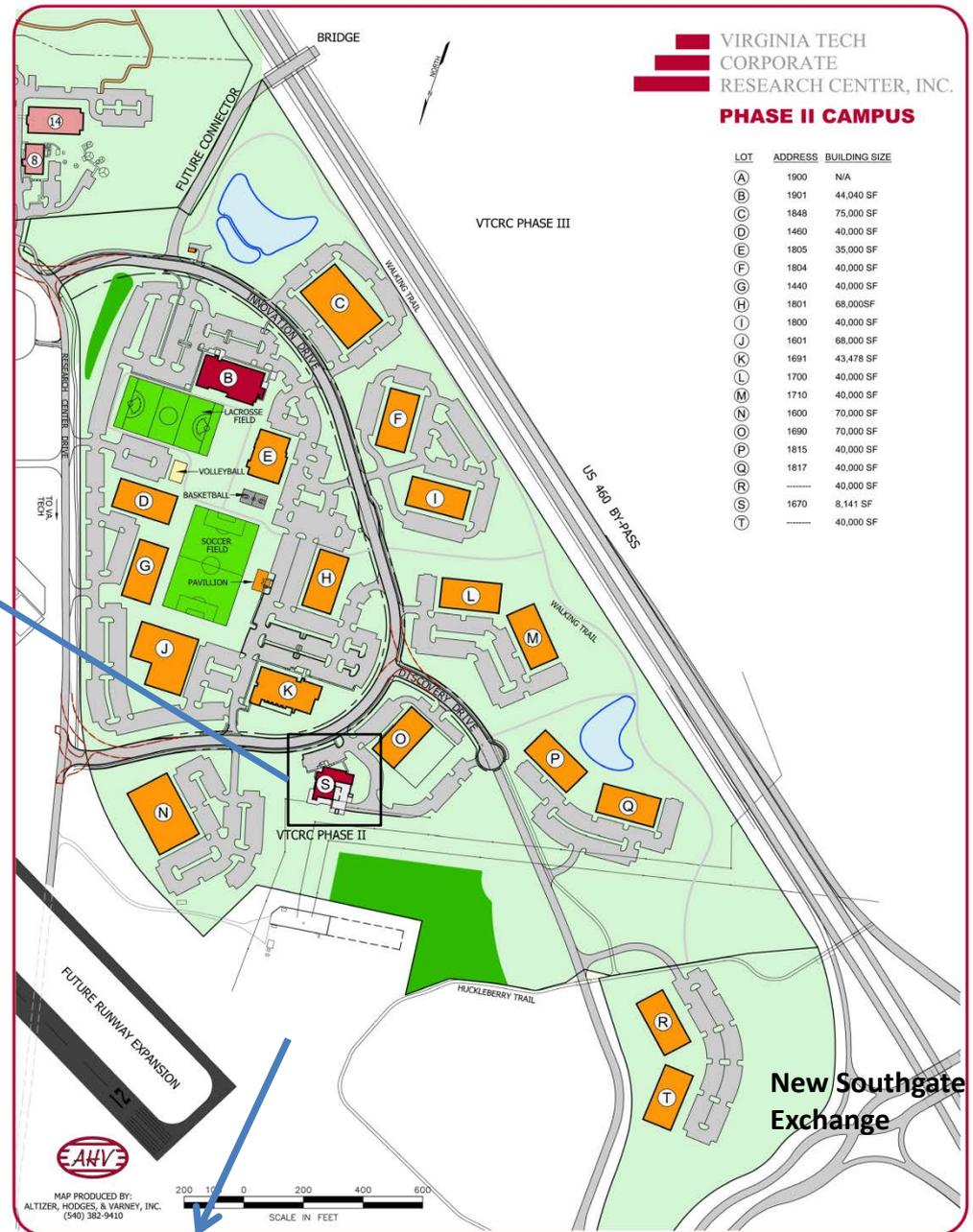
## Mission Statement

*“The Virginia Tech Advanced Propulsion and Power Laboratory will be the leading-edge facility dedicated to the study of jet propulsion and the internal design of gas turbine engines”*

# LOCATION



- Virginia Tech Corporate Research Center Phase II
- A 8,141 SF facility
- Located near Virginia Tech campus and local airport
- Overall budget for building - \$4.0M



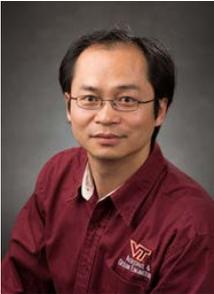
Towards Main Campus

# Timeline

- First discussion – April 2011 (Rolls-Royce Commonwealth of Virginia Initiative)
- Architect – LORD, AECK & SARGENT ARCHITECTURE
- April 2013 – Break ground
- June 2013 – First stage of construction
- June 2014 – Complete construction
- March 2015 – Operation ready



# Faculty Team



- **Core Faculty**
  - **Srinath Ekkad**, Director, Thermal-Fluids, Thermal Diagnostics (Mechanical Engineering)
  - **Todd Lowe**, Fluids, Laser Diagnostics (Aerospace & Ocean Engineering)
  - **Lin Ma**, Laser Diagnostics, Combustion & Fluids (Aerospace & Ocean Engineering)
  - **Wing Ng**, Thermal-Fluids, Aerodynamics (Mechanical Engineering)
- **Other Faculty Expertise**
  - **Walter O'Brien**, Engine Testing and Diagnostics, Compressors (Mechanical Engineering)
  - **Eric Paterson**, Marine Hydodynamics, CFD (Aerospace & Ocean Engineering)
  - **Joe Schetz**, Hypersonics (Aerospace & Ocean Engineering)
  - **Danesh Tafti**, CFD (Mechanical Engineering)
  - **Pablo Tarazaga**, Vibrations Sensing (Mechanical Engineering)
  - Additional faculty from Materials Science & Engineering, Industrial Systems Engineering, and Biomedical Engineering & Applied Mechanics may also get involved in the future



New hiring in Mechanical Engineering and Aerospace & Ocean Engineering will complement existing expertise

# Organizational Structure

- Lab Directors – Srinath Ekkad and Joe Schetz
- Lab Manager – Jaideep Pandit, PhD
- Lab Technician – To be decided
- Stakeholders Committee
  - Mechanical Engineering & Aerospace and Ocean Engineering Department Heads
  - College of Engineering Associate Deans
  - Dean of Engineering
- Advisory Committee
  - To be constituted and will include members from major aeropropulsion and gas turbine energy companies

# Research Relevance

- Propulsion Systems
  - Commercial Aircraft Engines
  - Military Aircraft Engines
  - Rocket Systems



- Power Systems
  - Gas Turbine Power Plants
  - Marine Power Units



# Building Details

## Test Cells

- **Diagnostics & Instrumentation Cell**
- **High Speed Flow Test Cell**
- **Combustion Test Cell**
- **Large Scale Rotor Rig Test Cell**
- **Jet Engine Test Cell**
- **Future Growth Test Cell**

## Facilities

- Compressor with 180-psig and 3.5 lbm/s continuous flow
- Buffer storage tank – 5,000-gallon compressed air
- High pressure natural gas
- Storage tanks for jet-A
- Water supply at 500-psig with pump
- 480V, 100 A power supply to all test cells and bay area

# VT APPL Finished Pictures (May 2015)



Front View



Rear View (from West)



Large Test Cell



Standard Test Cell

# Transonic Blowdown Rig

- Currently in Randolph Hall basement
- Provides high Mach number flows for short duration experiments

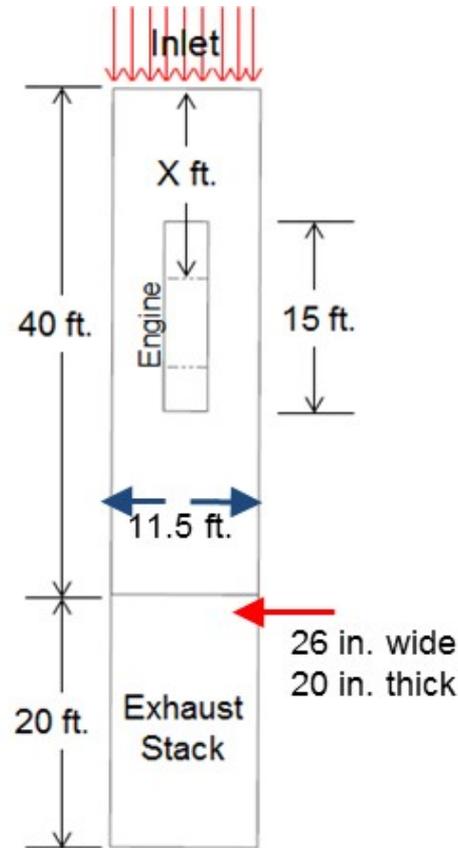


## Combustion Test Cell

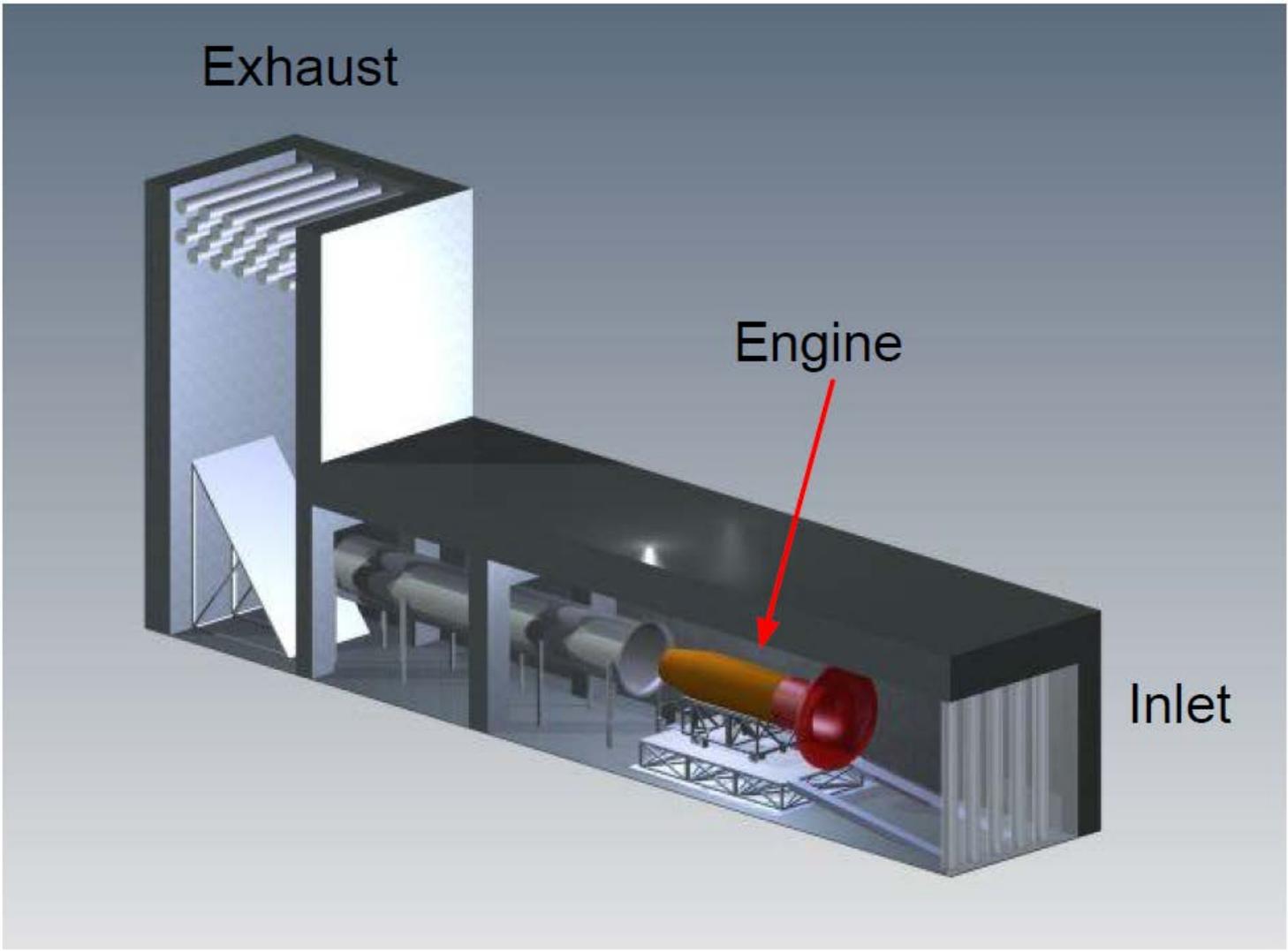
- Will house two combustion test rigs



# Jet Engine Test Cell



# Final Jet Test Cell Design



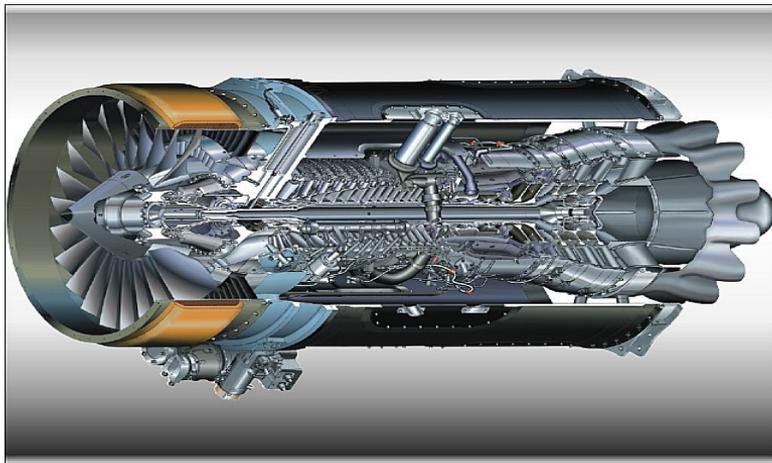
# Rolls-Royce AE 3007 Engine Specs

**General characteristics Type:** Turbofan

**Length:** 106.5 in (2,705 mm)

**Diameter:** 38.5 in (978 mm)

**Dry weight:** 1,585 lb (719 kg)



## Components

**Compressor:** 14-stage high pressure axial compressor and single-stage fan

**Turbine:** 2-stage high pressure and 3-stage low pressure

## Performance

• **Maximum thrust:** 6,495–9,440 lbf (28.9–42.0 kN)

• **Overall pressure ratio:** 18–20:1

• **Turbine inlet temperature:** 994°C

• **Thrust-to-weight ratio:** : 4.1–5.6

# Rolls-Royce University Technology Center (UTC) for Advanced System Diagnostics Designated: April 2014

- Advanced Diagnostics Development
- Non contact and minimally invasive (e.g. fibre optic sensors etc.) methods
- Deployment to flying test beds
- Support to other UTCs for concept testing on engine test bed – AE 3007 Engine
- Virginia Tech current research is on inlet and exhaust systems – focused on particle ingestion and behavior



# Leveraging Virginia Tech Role in Rolls-Royce Center Network

- Share our diagnostics expertise in thermal-fluids systems
- Provide experimental verification with high resolution measurements and for validation of analytical codes (all types) including Computational Fluid Dynamics
- Work to identify diagnostic requirements and generic problems
- Complement, not duplicate, existing expertise in the network
- Offer testing options in an engine environment for University Technology Center partners and Rolls-Royce

# Selected Ongoing Projects

- Rolls-Royce (S. Ekkad, W. Ng, K.T. Lowe, L. Ma) - \$430K/year
  - Non-contact Thrust Measurement
  - Inlet Particle Count and Mass Measurement
  - Sand and Dust Ingestion Effects on Hot Gas Path Components
  - Engine Test Cell
- Department of Energy (S. Ekkad) - \$325K/year
  - Combustor Heat Transfer
  - Advanced Cooling Configurations
- Honeywell (W. Ng, K.T. Lowe, S. Ekkad) - \$160K/year
  - Turbine Endwall Aerodynamics
- Solar Turbines (W. Ng, S. Ekkad) - \$175K/year
  - Turbine Blade Tip Cooling
  - Combustor Cooling
- Pratt & Whitney (K.T. Lowe) - \$170K/year
  - Total Temperature Probe Design Space Extension
- Wyle/NAVAIR (K.T. Lowe, W. Ng) - \$283K/year
  - VT Response to Wyle RFQ: Naval Air Technical Information Systems Interoperability & Reliability Airworthiness Products, Subtask: *In Situ TACAIR Exhaust Velocimetry for Noise Reduction* “

# Future Funding Opportunities

- Industry Partnerships
  - Continue as Rolls-Royce Center for Advanced System Diagnostics – to increase to \$750K/year from 2016
  - Siemens Power Generation
  - United Technologies Aerospace Systems (UTAS)
  - GE Aircraft Engines
  - Pratt & Whitney Engines
  - Solar Turbines
  - Honeywell
  - BAE Systems
- Federal Government Programs
  - Department of Energy Fossil Fuels Program
  - Department of Defence flow through funding programs – GE & Pratt & Whitney

# Other Related Activities

- Educating students to become future aerospace and turbomachinery engineers
- Outreach to K-12 students via tours of facility and demonstrations
- Potential development of future local sites for major aerospace and energy companies (United Technologies Aerospace Systems is already looking at possibility)
- Technology demonstrations

# *Where do we want to be in a few years?*

- Premier research lab for propulsion and energy gas turbines
- Be at the cutting edge of advanced diagnostics for non-contact measurements for engineering systems
- Be the leading educator of next generation aerospace and energy gas turbine industry and academic leaders
- One-stop shop for all research activity in gas turbine based power systems: aerospace, energy, marine



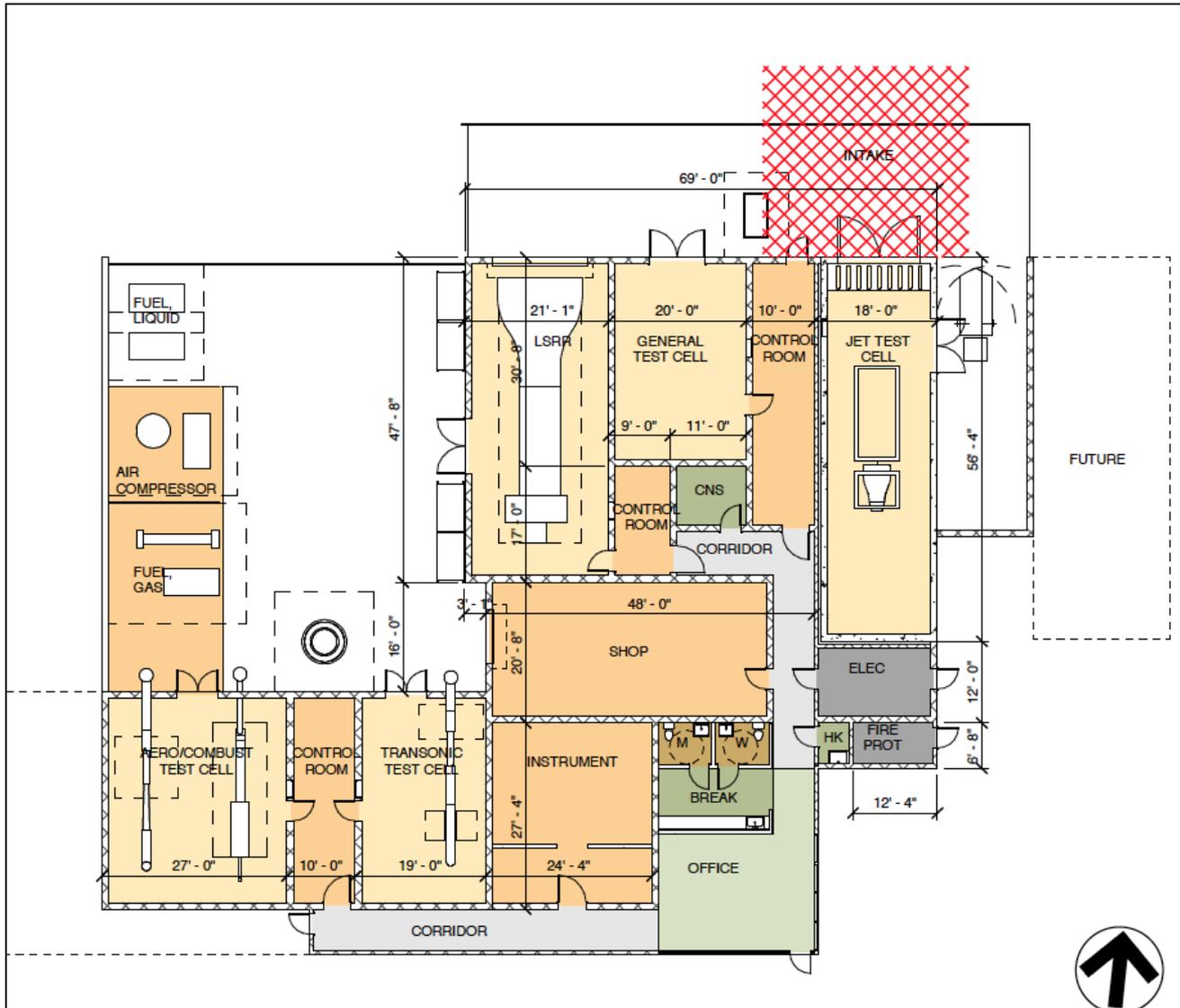
*Motorcycle powered by a gas turbine – one of them is owned by Jay Leno*

# Questions?



*Art by Pritish Parida, Former Graduate Student in my Lab*

# Plan View



**REVISION OF POLICY 13000  
POLICY ON INTELLECTUAL PROPERTIES  
Commission on Research  
COR Resolution FY2014-2015C**

**WHEREAS**, scholarly activities in a university setting create Intellectual Properties (IP) and the university's mission includes the protection of the ownership rights of both the individual and the university; and

**WHEREAS**, the existing policy does not sufficiently address student ownership of IP and does not clearly articulate circumstances under which students give up ownership of IP;

**WHEREAS**, the existing policy does not clearly address ownership of IP for volunteers and visiting scholars;

**WHEREAS**, concerns exist that the policy does not address the process by which IP may be released back to the inventor;

**WHEREAS**, concerns exist that the existing policy does not address the process for making exceptions to the policy, and a small number of exceptions will likely need to be made for student and community spaces promoting innovation and entrepreneurship programs;

**WHEREAS**, the proposed revised policy has been presented to the Commission on Faculty Affairs, Commission on Undergraduate Studies and Policies, Commission on Student Affairs, Commission on Graduate Studies and Policies, and the Intellectual Property Committee.

**NOW, THEREFORE BE IT RESOLVED** that Policy 13000 be revised to reflect Code of Virginia requirements of state employees regarding disclosure, to provide additional language about student IP, to address the process by which IP can be released back to the inventor, and to address the process by which exceptions to Policy 13000 will be reviewed and approved.

**RECOMMENDATION:**

That the above resolution stating that Policy 13000, Policy on Intellectual Properties, be appropriately revised (see attached) be approved.

June 1, 2015

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**Subject: Policy on Intellectual Property**

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## **1. Purpose**

Publicly (state) supported universities have the multiple missions of teaching, research, support of the public interest and fostering of economic development of the area/state in which they are located.

Scholarly activities in a University setting create Intellectual Properties (IPs). IPs include research papers, books, software programs, new inventions, journal articles, etc.

The University's mission includes dissemination of IPs in the most efficient and effective manner possible. The identification and optimization of opportunities for the industrial/commercial utilization of some IPs is also part of this mission, as is the protection of the ownership rights of both the individuals and the University.

While many IPs are best disseminated by publication and placing in the public domain, there are a significant number that are most effectively handled by protection under the IP laws (i.e., patenting and copyright) and licensing (or other transfer) to private sector entities, with attendant financial considerations.

This Policy is designed to establish the rationale and the mechanisms to:

1. Establish ownership criteria and resolve ownership questions if such arise.
2. Define the responsibilities, rights and privileges of those involved.
3. Develop basic guidelines for the administration of the IP Policy.

This Policy applies to all employees, students, and all other persons or entities using University resources pursuant to this policy.

## **2. Policy**

### **2.1 Organization**

The Intellectual Properties Committee (IPC) membership shall be as stated in the By-Laws of University Council.

### **2.2 Authority and Responsibility of the Committee**

The IPC shall have the following authority and responsibility with respect to Intellectual Property:

- A. To develop and recommend University policy and policy changes dealing with IP to the Commission on Research.
- B. To review all disputed invention disclosures submitted by Virginia Tech faculty, staff and/or students for:
  1. Complete and appropriate disclosure of individuals involved in the invention and/or creation of the IP.
  2. Confirm the determination of IP ownership by University, originating individuals, research sponsors and/or governmental agencies.
  3. Examination and recommendation to the Provost for disposition of (1) and/or (2) above in those cases where a dispute remains.
  4. Coordination of evaluation and recommendation to Virginia Tech Intellectual Properties, Inc. (VTIP) of technical merit, economic potential and protection/marketing priority as needed.
- C. To make recommendations to the Provost for the sharing of royalties between the University and the authors or inventor(s) of the IPs owned by the University.
- D. To promulgate such guidelines and procedures as may be necessary for the implementation of this Policy.

Much of the work of the IPC as defined above will be addressed through the normal business of the full committee. However, it may be prudent in the review of certain disputed invention disclosures to have a subgroup of the entire IPC to more fully consider all necessary aspects of the dispute. This shall be the role of the Ownership Review Group, which will be composed of three at-large members of the IPC (selected by the IPC Chair) and be chaired by the IPC Chair. This group shall meet as needed with the following agenda:

1. Review all disclosures submitted that have ownership in dispute.
2. Confirm University ownership as necessary for those disclosures in which originator(s) have indicated Virginia Tech ownership.
3. Review disputes involving sponsor ownership/rights.
4. Review, discuss and reach preliminary conclusions on ownership disputes and forward recommendations to the full IPC.

## **2.3 Policy Guidelines**

This section outlines the criteria to be used by the IPC and its working groups in their deliberations, findings and recommendations. To the extent that individual questions are not specifically addressed, these guidelines will, at the least, give a general indication of intent and philosophy and allow proper interpretation.

### **A. Ownership of IP**

For purposes of this policy creations are divided into two groups:

1. The traditional results of academic scholarship, i.e. textbooks, literary works, artistic creations and artifacts.
2. The novel results of research such as products, processes, machines, software, biological technology, etc.

Intellectual properties in the first (traditional) group are considered to make their full contribution to the University's benefit by their creation and by continued use by the University in teaching, further development, and enhancement of the University's academic stature; the presumption of ownership is to the author(s). Thus, unless there is explicit evidence that the work was specifically commissioned by the University, the IP rights remain with the author(s) and the University rights are limited to free (no cost) use in teaching, research, extension, etc. in perpetuity.

In the second group, as a condition of employment or other involvement in research and/or related activities using University resources, the ownership is to the University (with the originator having a right to share in the benefits derived therefrom in accord with University sharing guidelines). Thus unless there is convincing and explicit evidence that the IP was developed without the use of University resources and/or facilities (which may include but is not limited to any of the following: use of equipment, lab or office space, University time of originator and/or personnel under his/her control, funds supplied by the University and/or funds originating from sponsored research projects and/or donations to University/affiliated companies, etc.), ownership of the IP rests with the University and the originator(s) do hereby assign ownership, right, title, and interest in any IP, discovery, or invention to the University.

Within the above general guidelines, the following situations are more specifically defined:

1. Ownership of IP developed by students: The University will not generally claim ownership of IP created by students. However, in the matter of course generated IP, including courses for research or independent credit, the student(s) shall have ownership only if they made use of resources that are a) made available by the College /Department administering the University course to all students enrolled in the course; and b) provided to all students enrolled in the course for academic credit when there are no pre-existing obligations for the University in connection with such course generated intellectual property, and/or the student(s) are not paid by the University in the scope of such course.

A student may choose to assign the ownership right in IP to the University and/or VTIP if all the parties agree to such a transfer.

If students develop IP in their capacity as employees, such IP shall be governed as set forth above and ownership is automatically vested in the University, including novel results of research in which the originator(s) do hereby assign ownership, right, title, and interest in any IP, discovery, or invention to the University.

2. In the event the following condition(s) apply, visiting scholars and volunteers do hereby assign any IP rights to the University when:
  - (a) working on a research project funded by Virginia Tech or an entity outside of Virginia Tech sponsoring the research through Virginia Tech from which the IP was created; or,
  - (b) employed or receiving payment from Virginia Tech related to a project from which the IP was created; or,
  - (c) University resources not available to the public are used in the creation of the IP.
3. Sponsor Rights: In the case in which an IP is generated as a result of research funded by a private sector company under a sponsored research project, the IP rights of the sponsor as defined in the applicable clauses ("Patents & Copyrights," "Intellectual Properties," "Inventions," etc.) of the Sponsored Research Agreement (as approved by the Vice President for Research or their designee and signed by an authorized officer of the University) shall take precedence over the rights of the University/inventor(s). Any residual rights not accruing to the sponsor shall be as defined in the general guidelines above.
4. Federal Agency Rights: Research projects sponsored by an agency of the federal government have statutory IP rights that are limited (in almost all cases) to a non-exclusive non-transferrable royalty-free license to any patent generated by the research, provided the inventor(s)/University advise the agency in a timely manner of their intent to retain their rights and provide for legal protection (i.e. patenting). It is the responsibility of the researcher to advise the agency of the creation of the IP

and (with the assistance of the University IP manager, VTIP) advise of the protection steps being undertaken. The residual rights not belonging to the sponsoring agency shall be as defined in the general guidelines above.

5. Joint Inventorship: For IPs generated by a team of inventors in which one or more are not members of the faculty/staff/supported students, each inventor is usually entitled (by law) to shared ownership of the entire right. The University's claim to the shares of University-associated inventors will be as outlined in these guidelines. Ownership of outside inventors will vest in them or their assignees.
6. Special Situations: In the event that an IP ownership situation arises which is not addressed in either the general or specific guidelines outlined above, the IPC shall make a recommendation based on the spirit of the guidelines. A record of the rationale used to arrive at their recommendation shall be kept and used as a precedent for the handling of future special situations if applicable.
7. Commissioned Works: There are times when the University will choose to enter into a contractual arrangement to commission a specific work or undertaking. The University, as the commissioning party, may be expected to maintain certain rights of third parties. These rights are negotiable on a case by case basis, but generally the University expects, at a minimum:
  - a) Exclusive right to give premiere performances of the commissioned work; and,
  - b) Exclusive performance rights for a limited period of time; and,
  - c) Exclusive right to give premieres in other venues; and,
  - d) Right to make the first commercial recording of the work; and,
  - e) The right to be credited as the commissioner of the work in published editions, recordings, and programs for all future performances; and,
  - f) The nonexclusive right to use the commissioned work, without cost, in teaching, research, outreach, etc., in perpetuity.

## **B. Obligation to Disclose**

While it is recognized that faculty and staff mission and expertise is concentrated and directed in areas other than commercial utilization, originators of new technology shall submit a disclosure when any IP is developed. Timely (i.e., before publication or other enabling non-confidential disclosure) submission of a disclosure to VTIP may also be critical to the value of the IP.

To the extent (and as soon as) the researcher/inventor/creator obtains research results that may be considered an IP and recognizes that they may have potential for commercial utilization there exists an obligation to bring these results to the attention of VTIP in the form of a disclosure.

If, in the absence of a timely disclosure, commercial utilization of a technology takes place with the direct or indirect involvement of the originator(s) but without involvement by the University it will be deemed that the originator(s) have not fulfilled their obligation to disclose and the University may:

5. Take whatever legal and/or business action is necessary to protect its rights and rightful share of financial benefits and ownership.
6. Deny to originator(s) any share of revenues which would otherwise accrue to them under this policy.

## **C. Notification and Granting Back Rights to the Inventor(s)**

As a general rule, the IP in question may be released back to the Inventor(s) if VTIP and the University do not wish to pursue protection or other use. The Inventor can request that the rights be released to him or her to pursue other avenues. In the event ownership is released to the Inventor(s), as a condition of the transfer, Virginia Tech shall be granted a non-exclusive, fully paid-up, royalty free license to use the IP for internal teaching, research, and outreach purposes. Any request to release the invention to the inventor(s) should be communicated to VTIP in a timely manner to preserve the potential for IP protection. It is University's discretion to follow such a request (if permissible under University policies, applicable law, sponsorship agreements or other contractual obligations).

#### **D. Revenue Sharing**

Revenues generated by the successful commercialization of IPs owned by the University (whether or not protected by patent and/or copyright) shall be shared equally between the University and the originator(s) of the IP, subject to the conditions and exceptions outlined below.

5. Revenues subject to sharing include royalties, licensing fees, incentives, etc. received by the assignee licensor organization, less the costs/expenses described below. Specifically excepted from sharing are payments received and designated for specific purposes such as sponsored or unrestricted research grants, services to the University, research equipment and/or materials, consulting fees to researchers, etc. These payments will go directly to the designated entity and purpose.
6. Also excepted from sharing are revenues resulting from:
  - a. Tasks and/or activities specifically and explicitly assigned to employees by an administrative unit of the University, or
  - b. Activities and/or tasks clearly defined in the written, University approved, policy of an administrative unit of the University.

Such revenues, flowing through the University assignee organization, will accrue to the originating administrative unit of the University net of development costs.

7. Expenses to be subtracted from gross revenue before sharing shall be limited to documented direct and indirect costs for protection (patenting), marketing and development of the IP. Specifically excluded are costs incurred in the generation of the IP (i.e. research costs). Development costs shall include (but not be limited to) payments made to (or retained by) non-affiliated organizations (e.g. Research Corp. Technologies, CIT, etc.) involved in the process of commercializing the IPs owned by the University.
8. Non-cash compensation for rights to an IP may be accepted but only with the informed consent of the originator(s) of the IP. The share of net revenue not paid to the originator(s) (50 percent) shall be applied as follows:
  - a. A portion equivalent to at least 10 percent of total net revenue may be distributed to the originator(s)' primary unit(s) (e.g. Departments, Centers, etc.).
  - b. The remainder to the University assignee organization (VTIP).

#### **E. Management Responsibility**

Virginia Tech Intellectual Properties, Inc. (VTIP), a non-profit corporation affiliated with the University, has been established and charged with the mission of protecting and utilizing IPs for the benefit of the University.

All IPs assigned to the University shall flow to VTIP by assignment for operational management. The IPC should make appropriate inputs and recommendations as to disposition and priority of individual IPs. Originator(s)' inputs/suggestions to VTIP are also appreciated.

#### F. **Right Of Appeal**

The originator(s) of an IP covered by this Policy shall have the right to appeal application of the policy to the IPC.

The IPC will formulate recommendations relative to each such appeal, and will forward both the appeal and its recommendations to the Office of the Senior Vice President and Provost in a timely manner. The Provost will determine the University's response to each appeal, and will so notify the originator(s) and the IPC.

If the originator(s) disagree with the IPC recommendation regarding ownership, a written appeal to the Provost must be filed within (30) thirty days of receipt of notification of the IPC recommendation. This appeal should contain an exposition of the facts as seen by the originator(s), any information they deem pertinent to the case, as well as any applicable citations of policy guidelines. A copy of the appeal document should be sent to the IPC via its Chair.

Upon receipt of the appeal, the Provost may elect to consult with any and all concerned prior to reaching a decision in the case.

In the event that any member of the University (faculty, staff or student) perceives and/or becomes aware of any irregularity in the inventorship/authorship of an IP disclosed (or about to be disclosed) to VTIP or the IPC he/she should bring it to the attention of the other inventors/authors involved and/or the Department Chair(s) (or the director or unit leader in situations outside the traditional academic departments) concerned in an attempt to resolve the conflict equitably and amicably. Failing such resolution, the facts of the cases should be submitted in writing within (30) thirty days to the Vice President for Research (with copy to the Chair of the IPC) with a request for review by the Ownership Review Group of the IPC.

Upon receipt of such a request, the Ownership Review Group shall review the facts of the case, convene a hearing for all concerned parties, reach a conclusion and present a synopsis of the case and a recommendation to the full IPC who will, in turn, make a recommendation to the Provost.

#### G. **Policy Exceptions**

The President of the University may, upon recommendation by the IPC and the VP for Research and Innovation, authorize exceptions to this Policy. Such exception shall be memorialized in writing and shall set forth the extent of any deviation from this Policy. It is the intent of this clause that such exceptions be granted sparingly and in the best interest of the entire University.

### 3. **Procedures**

### 4. **Definitions**

## 5. References

[Policy Memorandum No. 73, "Policy on Intellectual Properties,"](#) issued March 4, 1987.

[Policy Memorandum No. 121, "Policy on Intellectual Properties,"](#) issued December 9, 1991.

## 6. Approval and Revisions

- Revision 0

Approved by University Council, November 17, 1986.

Approved by the President, November 17, 1986.

Approved by Board of Visitors, December 5, 1986.

- Revision 1

Approved by University Council, December 2, 1991.

Approved by the President, December 2, 1991.

- Revision 2

August 31, 1999: Revised membership titles to reflect changes in titles, responsibilities, and University Council By-laws.

- Revision 3

April 15, 2008: Revised membership titles to reflect changes in titles and responsibilities.

- Revision 4

Revised extensively to reflect Code of Virginia requirements of state employees regarding disclosure, to provide language about student IP, reflect current operating procedures of the IPC, and address "Commissioned Works."

Approved by University Council, April 29, 2013. Approved by President Charles W. Steger, April 29, 2013. Approved by Board of Visitors, June 3, 2013.

- Revision 5

Revised extensively to provide additional language about student ownership of IP, to address the process by which IP may be released back to the inventor, and to address the process by which exceptions to Policy 13000 will be reviewed and approved.

**REVISION to POLICY No. 13015  
Policy on Ownership and Control of Research Results  
Commission on Research  
COR Resolution FY2014-15B**

**WHEREAS**, The Commission on Research (COR) exists to represent the issues and concerns associated with the research mission of the university; and

**WHEREAS**, Policy 13015 Policy on Ownership and Control of Research Results, last reviewed in 2001, made no reference to the possibility of digital files or notebooks; and

**WHEREAS**, data management plans are now commonly required by sponsors; and

**WHEREAS**, policy revisions are intended to clarify the expectations for faculty members for research conducted at Virginia Tech;

**NOW, THEREFORE BE IT RESOLVED** that Policy 13015, Ownership and Control of Research Results, be appropriately revised (see attached).

**RECOMMENDATION:**

That the above resolution stating that Policy 13015, Ownership and Control of Research Results, be appropriately revised (see attached) be approved.

June 1, 2015

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**Subject: Ownership and Control of Research Results**

---

1.	Purpose .....	1
2.	Policy .....	1
3.	Procedures.....	3
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6.	Approval and Revisions .....	3

## **1. Purpose**

This policy is to protect the rights of the university in regard to ownership and retention of research data, results, and related records.

## **2. Policy**

The university asserts its rights to the results of research, funded wholly or in part with university resources. In addition, university ownership of intellectual properties is covered in Policy 13000, "Policy on Intellectual Properties." These ownership rights extend to all permanent and visiting faculty, research faculty, classified staff, wage employees, and students.

Normally, the faculty principal investigator or project leader (including the chairs of student thesis and dissertation committees even if not explicitly noted hereafter) is expected to manage the university's ownership of research results and material (this includes all data) in the ways that best advance the standard routes of publication, presentations, and other usual means of dissemination of research results for that particular field. Creation of intellectual properties must be disclosed to the university by the prescribed route.

It is the responsibility of the faculty principal investigator or project leader to preserve the research material and results in the manner that is customary to the field. This includes notebooks and files (independent of whether they are in analog or digital format), samples, specimens, prototypes, etc. that are germane to the veracity and validity of the research claims, but not any of the following: preliminary analyses, drafts of scientific papers, plans for future research, peer reviews, or communications with colleagues.

In the event that the faculty principal investigator or project leader permanently departs the university, it is the responsibility of that person's department head to determine the disposition of the research materials and results.

It is the responsibility of principal investigators or project leaders to establish appropriate levels of security, confidentiality, and access. Access levels for research data should advance the standard routes of publication, presentations, and other usual means of disseminating research results for that particular field. When appropriate, access to research results and materials will be limited to the university faculty, staff, and students who generate them and/or need access to them for bona fide research or administrative purposes.

The Graduate School may, with the agreement of department heads, major professor(s), and students involved, embargo a thesis or dissertations normally up to one year after successful completion (see the Graduate School Policies section of the Graduate Catalog).

All members of the university community are expected to foster and uphold the principles set forth in the university's Statement of Professional Ethics and Responsibilities (see the Faculty Handbook; as well as the Graduate School Policies section of the Graduate Catalog).

Issues relating to the misinterpretation, incorrect application, or violation of these policies shall be resolved through the appropriate university grievance procedure (see the Faculty Handbook, Graduate School Policies, Procedures and Course as well as the Graduate School Policies section of the Graduate Catalog).

### **3. Procedures**

### **4. Definitions**

### **5. References**

1. Code of Virginia Chapter 7, "The Virginia Public Records Act"
2. Policy 2000, "Management of University Records"
3. Policy 13,000, "Policy on Intellectual Properties"

### **6. Approval and Revisions**

Recommended by the Commission on Research.  
Approved by University Council: February 7, 1994.  
Approved by the President: February 7, 1994.

Annual review October 3, 2001 by the Vice Provost for Research, Leonard K. Peters. No revisions.

Revision 1 Recommended by the Commission on Research.  
Approved by University Council: date  
Approved by the President: date

## **Committee Minutes**

### **STUDENT AFFAIRS AND ATHLETICS COMMITTEE**

**Smithfield Room, The Inn at Virginia Tech  
8:15 a.m.**

**June 1, 2015**

#### **Board Members Present:**

Austin Larrowe, Undergraduate Student Representative  
Wayne Robinson  
Debbie Petrine, Rector  
Steve Sturgis

#### **Guests:**

Andrew Allegretta, Whit Babcock, Suzie Baker, Cynthia Bonner, Katie Boyd, Laurie Brogdon, Tom Brown, Yohna Chambers, Matt Chan, Heather Evans, Ted Faulkner, Rick Ferraro, C.J. Fiala, Eleanor Finger, Bill Foy, Ashley Francis, Randy Fullhart, Martha Glass, Mike Goforth, Hunter Gresham, Thomas Guerry, Hikmet Gursoy, Byron Hughes, Kathy Kaplan, Frances Keene, Cathy Kropff, Jonathan Manz, Ennis McCrery, Susan Pedigo, Patty Perillo, Katie Polidoro, Desiree Reed-Francois, Tim Sands, Ro Settle, Morgan Sykes, Rachel Tulley, and Glenda Young.

**The meeting was called to order at 8:16 a.m.**

#### **Open Session**

- 1. Introductions, Opening Remarks and Approval of March 30, 2015 Minutes.**  
Wayne Robinson, committee member, called the meeting to order in the absence of Cordel Faulk, committee chair. Introductions were offered and the minutes of the March 30, 2015, meeting were presented to the committee for review and acceptance.

**A motion was made and passed unanimously to approve the minutes as written.**

- 2. Updates from the Division of Student Affairs:** Dr. Patty Perillo, vice president for student affairs, provided a quarterly update on the division of student affairs. She offered a top ten list of important things to know, which include: 1) enrollment growth both for the upcoming year and the university's long-term strategic plan, 2) upper quad project status including the upcoming demolition of Brodie Hall, as well as the new facility opening this fall, 3) there is significant hiring underway within the division of student affairs, 4) increased engagement of former student leaders has led to the creation of a quarterly DSA alumni electronic newsletter, 5) creation of a women's leadership education advisory council to be launched this summer, 6) continued commitment to the living-learning experience for resident students (desire to have two-

thirds of our students involved in living-learning communities; currently have approximately one-third participating), 7) Innovate House, in partnership with the Pamplin College of Business, will relocate from Oak Lane to Pritchard Hall and increase participation from 35 to 100 students, with hopes of growing to 200 students (Innovate House will be utilized as a transfer student living-learning community), 8) the creation of an intergroup dialogue program with a planned launch for this fall, 9) discussions underway regarding the opening of a veterans center, and 10) facilitated learning opportunities centered around our collaboration with Gallup regarding Strengths.

3. **Intercollegiate Athletics Report:** Mr. Whit Babcock, director of Athletics, along with a variety of colleagues from the athletic department offered an update largely focused on the football program. Ms. Desiree Reed-Francois, executive associate athletic director, reviewed the “This Is Home” marketing campaign and the Nike Graphic Identity Group. The Nike Graphic Identity Group selected Virginia Tech as one of 3 schools to review, assess, refresh, and proposed revisions of our athletic brand (logo, wordmark, colors, etc.), with a focus on tradition, history, and the university’s brand. Mr. Mike Goforth, associate athletic director for sports medicine, shared Virginia Tech’s concussion management plan which includes documentation education, baseline testing and assessments for return to play and return to classroom, and an overall commitment to reducing exposure to head trauma, as well as Virginia Tech’s involvement in helmet research. The committee then had the pleasure of learning more about the football recruiting process from the director of high school relations for football within the athletic department, Mr. Thomas Guerry. Former student athlete (swimming), Mr. C.J. Fiala, closed the athletic presentation by sharing his personal perspective on the importance of the student athlete experience and how Virginia Tech makes a conscious effort to link the classroom to the field of play.
4. **Task Force for a Healthier Virginia Tech Community:** Dr. Patty Perillo, vice president for student affairs, provided an introduction and brief historical context for a task force that was created in collaboration with Dr. Sherwood Wilson, vice president for administrative services. Dr. Richard Ferraro, assistant vice president for student affairs, and Ms. Cathy Kropff, director of Hokie Wellness, highlighted the recommended initiatives and broad observations from the 13-month work of the task force.

The task force was charged with advancing strategic health and wellness plans in the interest of community wellbeing, improved safety, and economic productivity through an integrated and holistic approach to better allow for caring, cost-effective, and deliverable service. The task force became familiar with Gallup’s five essential elements and believes these five elements fall within nine specific dimensions proposed for Virginia Tech. The dimensions of health and wellness as proposed by the task force include: intellectual, occupational, financial, physical, emotional (psychological), cultural, environmental, social, and spiritual.

In addition to a focus on these nine dimensions, the task force recommended an umbrella, bystander-intervention program, stated an interest in defining the feasibility of making Virginia Tech a smoke-free and tobacco-free campus, encouraged the

proposed renovation of War Memorial hall, and recognized the desire to conduct a study of mandatory comprehensive student health insurance. They also identified additional opportunities to sustain efforts already existing such as healthier eating options, support for increased health and wellness principles in on- and off-campus housing, stressed the continued focus and importance of daycare options for students and employees, and recognized continual good work in the areas of facility design, environmental health and safety, alternative transportation, and sustainability.

**Adjournment. With no further business, the open session of the Student Affairs and Athletics Committee was adjourned at 10:47 a.m.**

At this time, the Student Affairs and Athletics Committee joined the Building and Grounds Committee for a joint open session.



**Intercollegiate Athletics  
Report to the Student Affairs &  
Athletics Committee of the Board of  
Visitors**

June 1, 2015



## Agenda

- I. This Is Home campaign & Nike Graphic Identity Group
- II. Concussion management plan
- III. Football recruiting
- IV. C.J. Fiala
- V. Closing Video



**I. This Is Home campaign & Nike  
Graphic Identity Group  
- Desiree Reed-Francois**

Will you be

**HOME**

this Fall?

**SEASON TICKETS**  
ON SALE NOW

CLICK HERE TO PURCHASE TODAY

**THIS IS  
HOME**  
VT

[hokietickets.com](http://hokietickets.com)





## **II. Concussion Management - Mike Goforth**



**VIRGINIA TECH ATHLETICS  
CONCUSSION MANAGEMENT PLAN;  
Where Academics and Athletics meet  
HEAD ON!**

**Michael W. Goforth MS, ATC**

# VIRGINIA TECH CONCUSSION MANAGEMENT

- **NCAA Concussion Fact Sheet for Student-Athletes.**
- **NCAA Concussion Fact Sheet for Coaches and Administrators.**
- **Virginia Tech Athletics Emergency Action Plan**
- **Virginia Tech Athletics Health Care Plan**
- **Virginia Tech Athletics healthcare providers should be empowered to have unchallengeable authority to determine management and return-to-play of any ill or injured student-athlete, as he or she deems appropriate. For example, a countable coach should not serve as the primary supervisor for an athletics healthcare provider nor should they have sole hiring or firing authority over that provider.**
- **Virginia Tech Athletics physician-directed concussion management plan.**
- **Virginia Tech Athletics Concussion Tracking.**
- **Rule emphasis and enforcement.**

# CONCUSSION

A FACT SHEET FOR STUDENT-ATHLETES

## WHAT IS A CONCUSSION?

A concussion is a brain injury that:

- Is caused by a blow to the head or body.
  - From contact with another player, hitting a hard surface such as the ground, ice or floor, or being hit by a piece of equipment such as a bat, lacrosse stick or field hockey ball.
- Can change the way your brain normally works.
- Can range from mild to severe.
- Presents itself differently for each athlete.
- Can occur during practice or competition in ANY sport.
- Can happen even if you do not lose consciousness.

## HOW CAN I PREVENT A CONCUSSION?

Basic steps you can take to protect yourself from concussion:

- Do not initiate contact with your head or helmet. You can still get a concussion if you are wearing a helmet.
- Avoid striking an opponent in the head. Undercutting, flying elbows, stepping on a head, checking an unprotected opponent, and sticks to the head all cause concussions.
- Follow your athletic department's rules for safety and the rules of the sport.
- Practice good sportsmanship at all times.
- Practice and perfect the skills of the sport.

## WHAT ARE THE SYMPTOMS OF A CONCUSSION?

You can't see a concussion, but you might notice some of the symptoms right away. Other symptoms can show up hours or days after the injury.

Concussion symptoms include:

- Amnesia.
- Confusion.
- Headache.
- Loss of consciousness.
- Balance problems or dizziness.
- Double or fuzzy vision.
- Sensitivity to light or noise.
- Nausea (feeling that you might vomit).
- Feeling sluggish, foggy or groggy.
- Feeling unusually irritable.
- Concentration or memory problems (forgetting game plays, facts, meeting times).
- Slowed reaction time.

Exercise or activities that involve a lot of concentration, such as studying, working on the computer, or playing video games may cause concussion symptoms (such as headache or tiredness) to resurface or get worse.

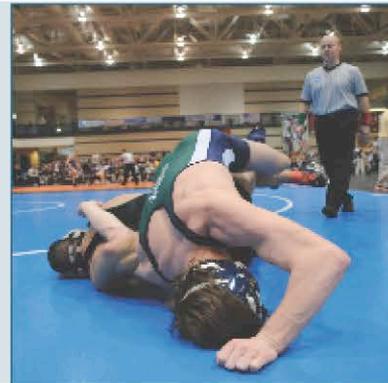
## WHAT SHOULD I DO IF I THINK I HAVE A CONCUSSION?

Don't hide it. Tell your athletic trainer and coach. Never ignore a blow to the head. Also, tell your athletic trainer and coach if one of your teammates might have a concussion. Sports have injury timeouts and player substitutions so that you can get checked out.

Report it. Do not return to participation in a game, practice or other activity with symptoms. The sooner you get checked out, the sooner you may be able to return to play.

Get checked out. Your team physician, athletic trainer, or health care professional can tell you if you have had a concussion and when you are cleared to return to play. A concussion can affect your ability to perform everyday activities, your reaction time, balance, sleep and classroom performance.

Take time to recover. If you have had a concussion, your brain needs time to heal. While your brain is still healing, you are much more likely to have a repeat concussion. In rare cases, repeat concussions can cause permanent brain damage, and even death. Severe brain injury can change your whole life.



**IT'S BETTER TO MISS ONE GAME THAN THE WHOLE SEASON.  
WHEN IN DOUBT, GET CHECKED OUT.**

For more information and resources, visit [www.NCAA.org/health-safety](http://www.NCAA.org/health-safety) and [www.CDC.gov/Concussion](http://www.CDC.gov/Concussion).



Reference to any commercial entity or product or service on this page should not be construed as an endorsement by the Government of the company or its products or services.



**Virginia Tech Sports Medicine  
Student-Athlete Concussion Statement**

- I understand that it is my responsibility to report all injuries and illnesses to my athletic trainer and/or team physician.
- I have read and understand the *NCAA Concussion Fact Sheet*.

After reading the NCAA Concussion fact sheet, I am aware of the following information:

\_\_\_\_\_ A concussion is a brain injury, which I am responsible for reporting to my  
Initial team physician or athletic trainer.

\_\_\_\_\_ A concussion can affect my ability to perform everyday activities, and affect  
Initial reaction time, balance, sleep, and classroom performance.

\_\_\_\_\_ You cannot see a concussion, but you might notice some of the symptoms  
Initial right away. Other symptoms can show up hours or days after the injury.

\_\_\_\_\_ If I suspect a teammate has a concussion, I am responsible for reporting the  
Initial injury to my team physician or athletic trainer.

\_\_\_\_\_ I will not return to play in a game or practice if I have received a blow to  
Initial the head or body that results in concussion-related symptoms.

\_\_\_\_\_ Following concussion the brain needs time to heal. You are much more likely  
Initial to have a repeat concussion if you return to play before your symptoms resolve.

\_\_\_\_\_ In rare cases, repeat concussions can cause permanent brain damage, and  
Initial even death.

\_\_\_\_\_  
Signature of Student-Athlete

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name of Student-Athlete

# CONCUSSION

A FACT SHEET FOR COACHES

## THE FACTS

- A concussion is a brain injury.
- All concussions are serious.
- Concussions can occur without loss of consciousness or other obvious signs.
- Concussions can occur from blows to the body as well as to the head.
- Concussions can occur in *any* sport.
- Recognition and proper response to concussions when they first occur can help prevent further injury or even death.
- Athletes may not report their symptoms for fear of losing playing time.
- Athletes can still get a concussion even if they are wearing a helmet.
- Data from the NCAA Injury Surveillance System suggests that concussions represent 5 to 18 percent of all reported injuries, depending on the sport.

## WHAT IS A CONCUSSION?

A concussion is a brain injury that may be caused by a blow to the head, face, neck or elsewhere on the body with an "impulsive" force transmitted to the head. Concussions can also result from hitting a hard surface such as the ground, ice or floor, from players colliding with each other or being hit by a piece of equipment such as a bat, lacrosse stick or field hockey ball.

## RECOGNIZING A POSSIBLE CONCUSSION

To help recognize a concussion, watch for the following two events among your student-athletes during both games and practices:

1. A forceful blow to the head or body that results in rapid movement of the head;  
-AND-
2. Any change in the student-athlete's behavior, thinking or physical functioning (see signs and symptoms).

## SIGNS AND SYMPTOMS

### Signs Observed By Coaching Staff

- Appears dazed or stunned.
- Is confused about assignment or position.
- Forgets plays.
- Is unsure of game, score or opponent.
- Moves clumsily.
- Answers questions slowly.
- Loses consciousness (even briefly).
- Shows behavior or personality changes.
- Can't recall events before hit or fall.
- Can't recall events after hit or fall.

### Symptoms Reported By Student-Athlete

- Headache or "pressure" in head.
- Nausea or vomiting.
- Balance problems or dizziness.
- Double or blurry vision.
- Sensitivity to light.
- Sensitivity to noise.
- Feeling sluggish, hazy, foggy or groggy.
- Concentration or memory problems.
- Confusion.
- Does not "feel right."





**Virginia Tech Sports Medicine  
 Coaches Concussion Statement**

- I have read and understand the Virginia Tech Concussion Management Protocol
- I have read and understand the *NCAA Concussion Fact Sheet*.

After reading the NCAA Concussion fact sheet and reviewing the Virginia Tech Concussion Management Protocol, I am aware of the following information:

- \_\_\_\_\_ A concussion is a brain injury which athletes should report to the medical staff.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ A concussion can affect the athlete's ability to perform everyday activities, and affect reaction time, balance, sleep, and classroom performance. You cannot see a concussion, but you might notice some of the symptoms right away. Other symptoms can show up hours or days after the injury.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ I will not knowingly allow the athlete to return to play in a game or practice if he/she has received a blow to the head or body that results in concussion related symptoms.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ Athletes shall not return to play in a game or practice on the same day that they are suspected of having a concussion.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ If I suspect one of my athletes has a concussion, it is my responsibility to have that athlete see the medical staff.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ I will encourage my athletes to report any suspected injuries and illnesses to the medical staff, including signs and symptoms of concussions.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ Following concussion the brain needs time to heal. Concussed athletes are much more likely to have a repeat concussion if they return to play before their symptoms resolve. In rare cases, repeat concussions can cause permanent brain damage, and even death.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ I am aware that every first-year student-athlete participating on specified teams must be baseline tested prior to participation in sport. These tests allow for comparison of symptoms, neurocognition, and balance if the athlete were to become injured.  
 Initial \_\_\_\_\_
- \_\_\_\_\_ I am aware that athletes diagnosed with a concussion will be assessed once symptoms have resolved. Athletes will begin a graduated return to play protocol following full recovery of neurocognition and balance.  
 Initial \_\_\_\_\_

\_\_\_\_\_  
 Signature of Coach

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Printed name of Coach

DOCUMENTATION



# BASELINE TESTING



- The baseline assessment will include the following variables.
  - Symptom Checklist
  - SCAT3 Form
  - IMPACT
- If a student athlete sustains a concussion, they will meet with a team physician prior to the start of the next calendar year to determine if they have any ongoing issues or symptoms related to their head injury.
- The team physician will refer the student athlete for further treatment as necessary.

# CONCUSSION ASSESSMENT

- S-A showing any signs of a concussion will be removed from practice/competition and evaluated by a Virginia Tech Athletics healthcare provider. **NO athlete suspected of having a concussion is permitted to return to play while symptomatic!**
- Emergency Action Plan
- Follow-up Testing
- The S-A should receive serial monitoring. Athletes should be provided with the “Concussion Injury Advice” sheet located on the SCAT3 upon discharge; preferably with a roommate, guardian, or someone that can follow the instructions.
- Once asymptomatic and post-exertion assessments are within normal baseline limits, a strict RTP protocol will be followed.

# **RTP RETURN TO PLAY**

**Follow-up clinical evaluations and symptom checklists are completed daily until the athlete is asymptomatic with cognitive and physical rest.**

**Upon satisfactory completion of f/u testing, the physician can initiate the 5-step graduated exertional RTP protocol.**

- No activity - complete and cognitive rest until asymptomatic. Objective is rest and recovery.**
- Light aerobic exercise – 20 minute stationary bike at 10-15 mph. Objective is to increase heart rate.**
- Sport-specific exercise – 20 minutes of individual drills, running team drills, etc. Objective is to add body weight movement.**
- Non-contact training drills – 20 minutes of more advanced drills like passing drills, etc. May add resistance training. Objective is to add coordination and cognitive load with exercise.**
- Full contact practice – participate in normal training activities. Objective is to restore confidence and allow assessment of functional skills by coaching staff**
- Return to play.**

**IF AT ANY POINT DURING THIS PROCESS THE ATHLETE BECOMES SYMPTOMATIC THE ATHLETE SHOULD BE RE-ASSESSED DAILY UNTIL ASYMPTOMATIC.**

# RTL RETURN TO LEARN

- **The athletic trainer responsible for the injured S-A should send a letter to SAASS who will help navigate the return-to-learn process for the S-A.**
- **If the S-A has been previously diagnosed with any mental condition (ADHD, depression, anxiety, etc.) they will be referred to Sports Psychology for consultation.**
- **Once the S-A can tolerate cognitive activity without return of symptoms, he/she should return to the classroom as tolerated. At any point, if the S-A becomes symptomatic, or scores on clinical measures decline, the team physician should be notified and the S-A's cognitive activity reassessed by the team physician.**
- **The extent of academic adjustments needed should be decided by a multi-disciplinary team that may include the team physician, athletic trainer, SAASS representative, coaches, instructors, sports psychologist, and the office of disability services representatives as needed.**
- **Modifications to the student athlete's schedule/accommodations will be made for up to two weeks with the help of the athlete's SAASS representative.**
- **Cases that cannot be managed through schedule modification/academic accommodations should utilize campus resources including learning specialists and the office of disability services.**

# REDUCING HEAD TRAUMA

- **Virginia Tech is committed to reducing exposure to head trauma through extensive clinical research and the most current safe teach techniques pertaining to each sport.**
  - **\$1,543,403 (does not include NCAA/DoD Grant Funding)**
  - **FB, MSC, WSC, LAX**
  - **Equipment, Number of blows, Magnitude of blows, Blood Testing, Balance Testing, Genetic Testing, etc...**
- **Virginia Tech Sports Medicine will ensure adherence to the Inter-Association Consensus: Year-Round Football Practice Contact Guidelines and Independent Medical Care Guidelines.**
- **Sports medicine staff will educate athletes and coaches on the importance of taking the head out of contact and reducing gratuitous contact during practice.**
- **Management of head trauma injuries will always take the safety first approach.**

# VIRGINIA TECH TALKING POINTS

**How long have you been involved in helmet research?**

**Our research started back in 2001.**

**How have helmets changed to become safer?**

**Size, shape, material, padding etc have all changed in order to decrease head accelerations because of our research. (STAR Rating System)**

**How did you get involved in helmet testing?**

**Dr. Duma came to us with the idea. We proposed it to Coach Beamer and he was more than willing to do whatever was necessary to keep our players safer and protect the game of football.**

**What else can be done to prevent concussions?**

**A lot of people talk about strengthening the “core” to prevent injuries. I think more people need to start thinking about strengthening the “core” around the neck to decrease head accelerations.**

**Sub-concussive impacts potentially leading to long term issues (CTE, depression, etc)?**

**Imaging and objective measures such as blood biomarkers can hopefully help us answers these questions.**

**How hard of an impact does it take in order for a player to sustain a concussion?**

**Every impact and every person is different.**

**Alert Threshold: 98g.**

**This number does not diagnose or rule out a head injury!**

**What can be done to make the game safer?**

**Rule changes**

**Equipment Advances**

**Education**

**Strengthening**

**Research**

# QUESTIONS



# THANK YOU



**III. Football Recruiting  
-Thomas Guerry**



# FOOTBALL - RECRUITING





CHUCK CANTOR



THOMAS GUERRY





# WHY ARE WE HERE?



TO HELP PUT OUR FOOTBALL COACHES IN A BETTER POSITION TO RECRUIT



TOP RECRUITS (GRADES + CHARACTER + TALENT) LEADS TO HIGHER PROBABILITY OF WINNING GAMES



ACADEMICS  
BLACKSBURG  
RECRUITING MATERIAL  
US vs THEM  
SOCIAL MEDIA  
SPRING RECRUITING



# ACADEMICS





SIGNING DAY



GAME DAY



GRADUATION DAY



DRAFT DAY

# THE JOURNEY

LET THE HAT TELL YOUR STORY

THIS IS VIRGINIA TECH

KEEPIN' IT



SINCE 2012, 100% OF **VT** SENIORS  
HAVE GRADUATED





**DETRICK  
BONNER**



**WILLIE  
BYRN**



**DEREK  
DI NARDO**



**DANIEL  
DYER**



**CALEB  
FARRIS**



**BRENT  
BENEDICT**



**GREG  
GADELL**



**LAURENCE  
GIBSON**



**CHASE  
WILLIAMS**



**TREY  
GRESH**



**KYSHOEN  
JARRETT**



**MARK  
LEAL**



**DADI  
NICOLAS**



**DAVID  
WANG**

**2014 FOOTBALL GRADUATES**



# PYLONS OF PROMISE



**COST OF ATTENDANCE** - IN ADDITION TO TUITION, FEES, ROOM, BOARD AND BOOKS, VIRGINIA TECH WILL PROVIDE THE FULL MAXIMUM ALLOWABLE COST OF ATTENDANCE FOR ALL 22 SPORTS

**FOUR-YEAR SCHOLARSHIP COMMITMENT** - ATHLETIC SCHOLARSHIPS MAY BE AWARDED ON AN ANNUAL OR MULTI-YEAR BASIS. VIRGINIA TECH WILL MAKE FOUR-YEAR SCHOLARSHIPS AVAILABLE FOR DESERVING STUDENT-ATHLETES.



**EXCELLENCE IN ACADEMIC SUPPORT, ATHLETICS SUPPORT AND CAREER DEVELOPMENT** - VIRGINIA TECH WILL CONTINUE TO PROVIDE EXCELLENT SUPPORT IN THESE THREE AREAS

**LOSS-OF-VALUE INSURANCE** - VIRGINIA TECH WILL PROVIDE ASSISTANCE FOR STUDENT-ATHLETES TO PURCHASE LOSS-OF-VALUE INSURANCE



**CONTINUED COMMITMENT TO LANDMARK CONCUSSION RESEARCH** - LAST YEAR, VIRGINIA TECH WAS ONE OF THREE SCHOOLS AWARDED A \$30 MILLION DEPARTMENT OF DEFENSE GRANT TO STUDY THE EFFECTS OF CONCUSSIONS

**MEET NEEDS OF STUDENT-ATHLETES THROUGH NCAA'S S.A.F.** - VIRGINIA TECH WILL MEET ITS STUDENT-ATHLETES' NEEDS THROUGH THE STUDENT ASSISTANCE FUND (APPROXIMATELY \$425,000 ALLOTTED TO VIRGINIA TECH STUDENT-ATHLETES)





**BLACKSBURG, VA**

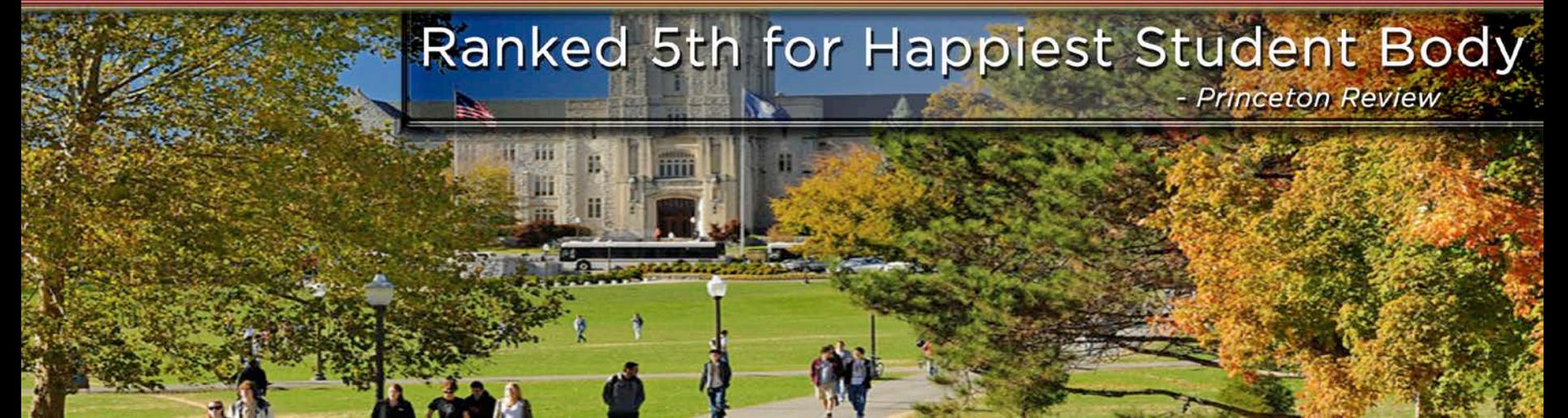


A photograph of a street scene in Blacksburg, Virginia, at dusk. The sky is a mix of purple, pink, and blue. On the left is a large, light-colored building with many windows. A street sign for 'BLACKSVILLE' is visible. A traffic light on the left shows a green light. The street is lined with trees and streetlights.

Ranked 5th for Best Quality of Life

- Princeton Review

# BLACKSBURG

A photograph of a university campus during autumn. In the background is a large, ornate stone building with a central tower. The foreground is a large green lawn with several people walking. Trees with yellow and orange leaves are scattered throughout the scene.

Ranked 5th for Happiest Student Body

- Princeton Review



# RECRUITING MATERIAL

MARSHAWN WILLIAMS / RB

ANDREW MOTUAPUAKA / LB

DEON NEWSOME / WR



CHUCK CLARK / CB

JC COLEMAN / RB

BUCKY HODGES / TE

RICKY WALKER / DT



UT PROSIM

LANE STADIUM BLACKSBURG

ACC

ORANGE EFFECT

NIKE

PRIDE AND JOY

HOKIE STONE

WORSHAM FIELD

VTFAMILY HOKIES

MAROON EFFECT

BEAMERBALL

ENTER SANDMAN

#DBLOCK

HOME OF THE FIGHTING GOBBLERS

LUNCH PAIL DEFENSE

VIRGINIA TECH

TECH TRIUMPH

WE OWN THE CUP

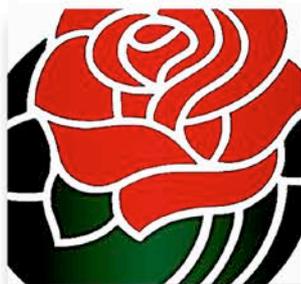
**DOMINATE THE STATE.**

# HOKIES

2015 ACC BOWL TIE-INS



COLLEGE FOOTBALL  
PLAYOFF



LET  
THE  
BORDER  
BATTLE  
BEGIN

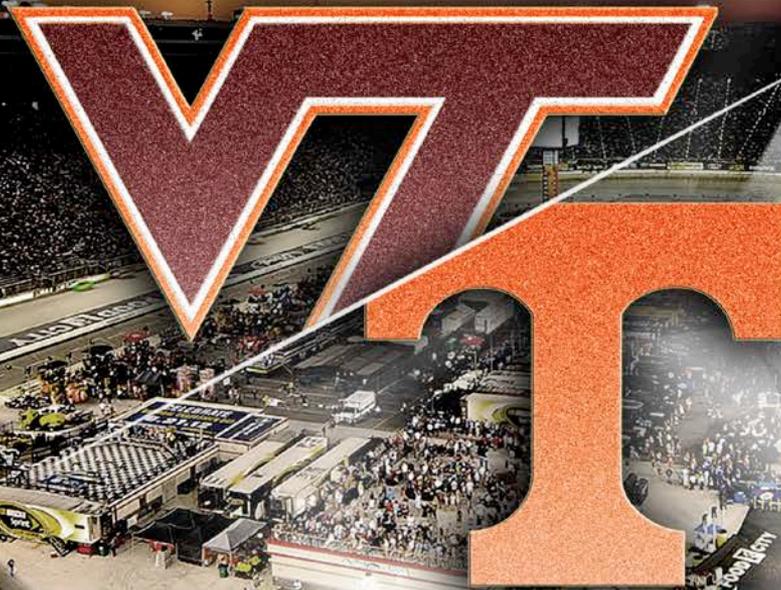
VIRGINIA TECH  
VS  
TENNESSEE

BRISTOL, TN  
09.10.2016

BRISTOL  
MOTOR  
SPEEDWAY

CAPACITY:  
160,000  
FANS

THE  
BIGGEST  
GAME  
IN  
THE  
HISTORY  
OF  
COLLEGE  
FOOTBALL



LAURENCE  
**GIBSON**

KYSHOEN  
**JARRETT**

DETRICK  
**BONNER**

SCOUTING  
**COMBINE**



DAVID WANG | DETRICK BONNER | CHASE WILLIAMS | LAURENCE GIBSON | CALEB FARRIS

# HOKIES

*bound for the*



MORE THAN JUST A GAME



@beamer\_ball

@beamer\_ball



@beamer\_ball

fb.com/VTRecruiting

ARE AT

EYES *of the*



FALL CAMP

# VIRGINIA TECH

24 NFL TEAMS VISITED DURING PRESEASON CAMP





MUSIC CITY

ORANGE GATOR

SAN FRANCISCO SUGAR INSIGHT

SUGAR GATOR ORANGE CHICK-FIL-A SUGAR GATOR

**VICTORY**  
HAS A



MILITARY GATOR SUN ORANGE

RUSSELL ATHLETIC

**TO IT VIRGINIA TECH**  
HAS PLAYED IN 22  
CONSECUTIVE BOWL GAMES  
THE LONGEST ACTIVE STREAK IN THE COUNTRY

INDEPENDENCE GATOR ORANGE CHICK-FIL-A

# BRING IT N.



## NON-CONFERENCE SCHEDULE

OHIO STATE | PURDUE | TENNESSEE | NOTRE DAME | WEST VIRGINIA | PENN STATE | MICHIGAN | RUTGERS | WISCONSIN

**DO YOU WANT TO PLAY AGAINST THE BEST TEAMS IN AMERICA?**

Over the next decade, Virginia Tech will play one of the toughest non-conference schedules in the history of college football.



# REPRESENT YOUR STATE



ACC | VT



# #VTFAMILY







DARIUS FULLWOOD

21

VT

ACC | Nike



382

# SACKSBURG, VA

## DEFENSE WINS CHAMPIONSHIPS

BUD FOSTER - DC  
CHARLEY WILES - DL  
TORRIAN GRAY - DB  
CORNELL BROWN - OLB

## TOTAL SACKS SINCE 2005

IN THE PAST DECADE, VIRGINIA TECH LEADS THE NATION IN TOTAL SACKS WITH 382. THE NEXT CLOSEST ACC TEAM HAS 341 (FLORIDA STATE). YEAR AFTER YEAR, BUD FOSTER AND THE HOKIE DEFENSE CONTINUE TO WREAK HAVOC ON OPPOSING QUARTERBACKS.





# LUNCH PAIL DEFENSE



12.8



25.5



30.6



34.9

PITT

36.1

GT U

39.2

39.2



40.5



43.7



50.1



59.0



61.3



61.3



92.5

## DEFENSE WINS CHAMPIONSHIPS

BUD FOSTER - DC  
CHARLEY WILES - DL  
TORRIAN GRAY - DB  
CORNELL BROWN - OLB

## TOTAL DEFENSE SINCE 2004

IN THE PAST 11 YEARS, BUD FOSTER AND THE VIRGINIA TECH DEFENSE HAVE CONSISTENTLY LED THE COUNTRY IN TOTAL DEFENSE. THE HOKIES AVERAGE RANKING IS 12.8, BEST IN THE ACC.



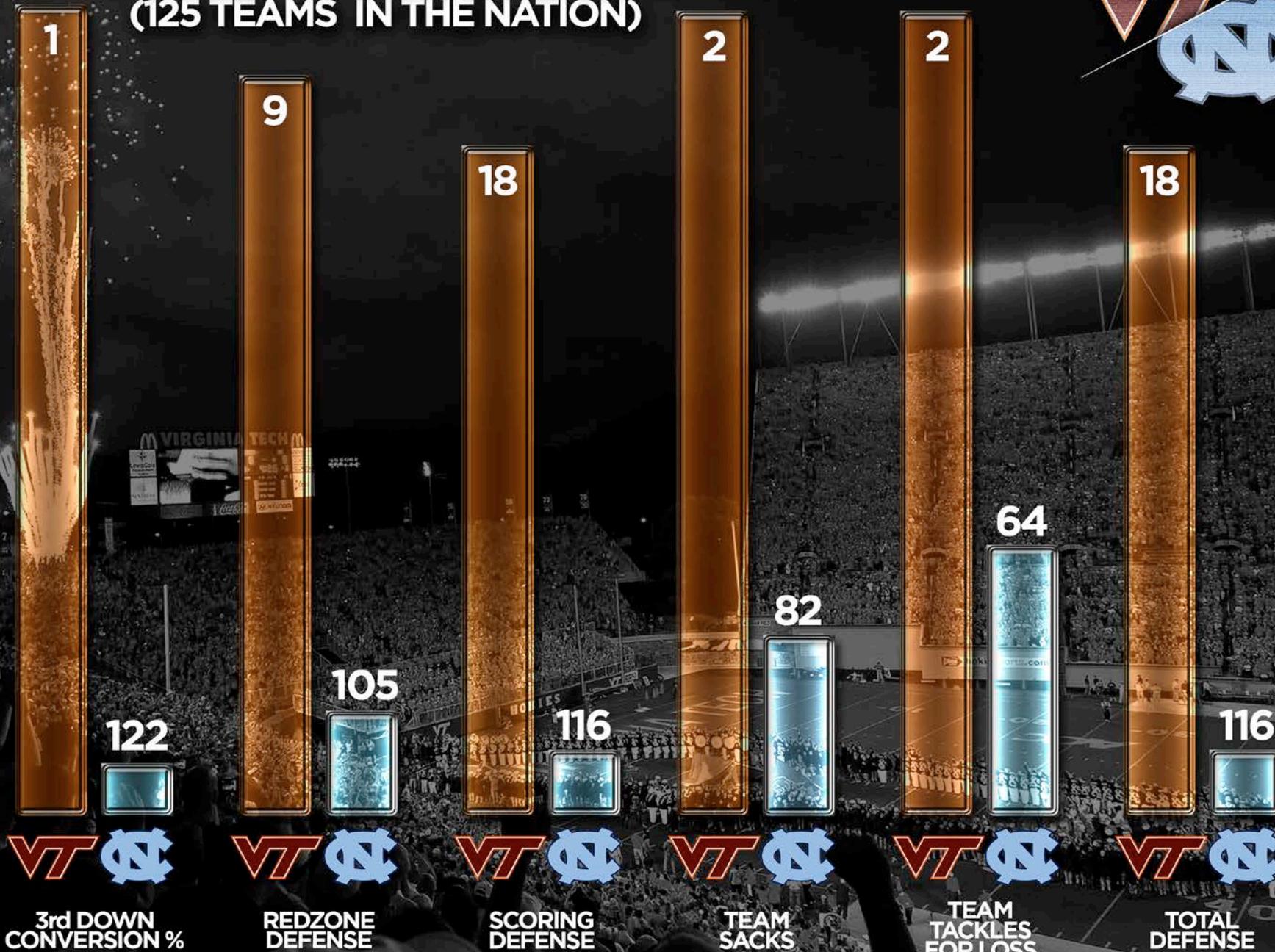


US vs THEM



# DEFENSE - NATIONAL RANKINGS

(125 TEAMS IN THE NATION)

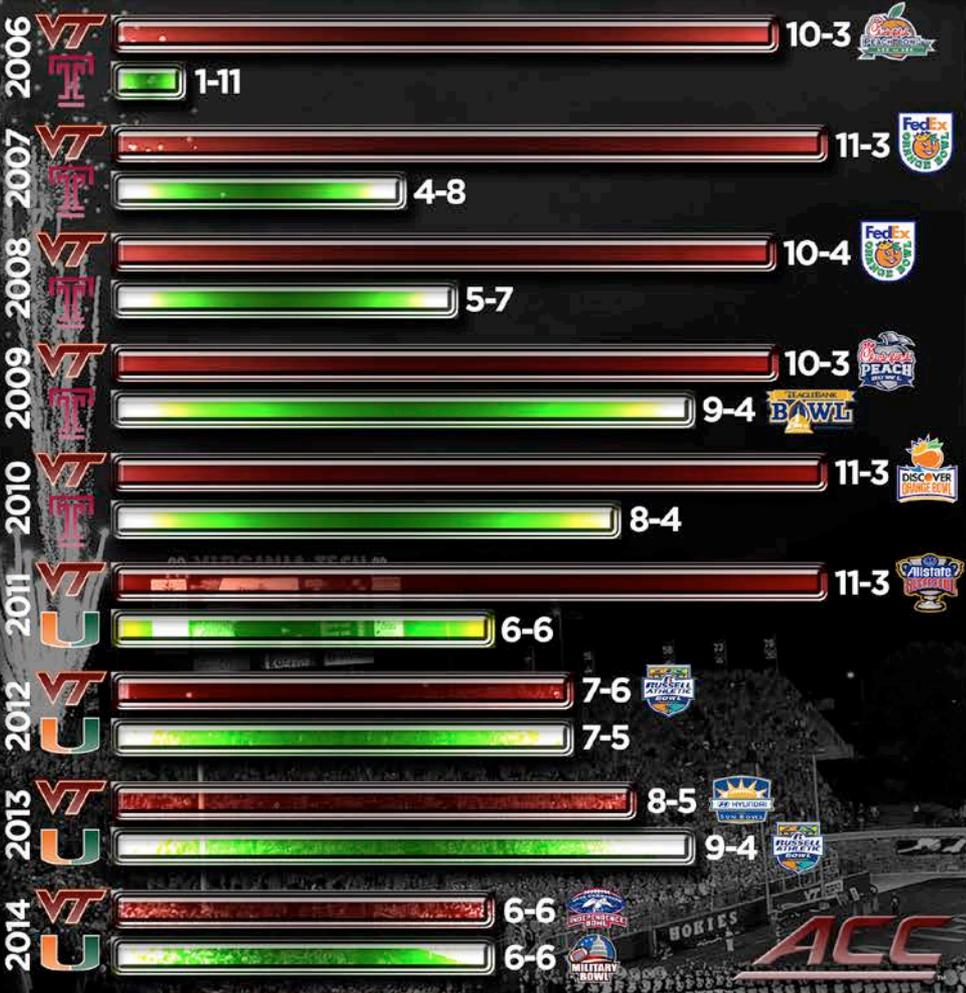


# FRANK BEAMER

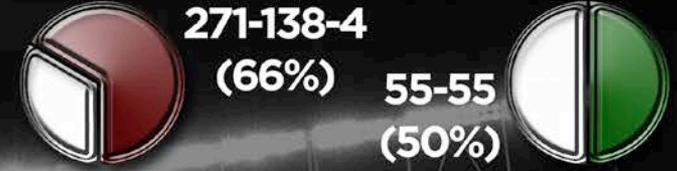
# AL GOLDEN



## HEAD COACHING RECORD



## CAREER WIN PERCENTAGE



## VIRGINIA TECH RETURNS...

**100% OF ITS OFFENSIVE SCORING  
 24 TOUCHDOWNS BY FRESHMEN INCLUDING:**  
 WR ISAIAH FORD - 6 TOUCHDOWNS  
 TE BUCKY HODGES - 8 TOUCHDOWNS  
 WR CAM PHILLIPS - 3 TOUCHDOWNS  
 RB SHAI MCKENZIE - 3 TOUCHDOWNS  
 RB MARSHAWN WILLIAMS - 4 TOUCHDOWNS

## CONFERENCE CHAMPIONSHIPS



## CAREER RECORD



## CAREER BOWL GAMES



**ONLY 3 OTHER COACHES HAVE BEEN TO 22 OR MORE BOWLS:**  
**BOBBY BOWDEN**  
**TOM OSBORNE**  
**BEAR BRYANT**

## VT FOOTBALL GRADUATES

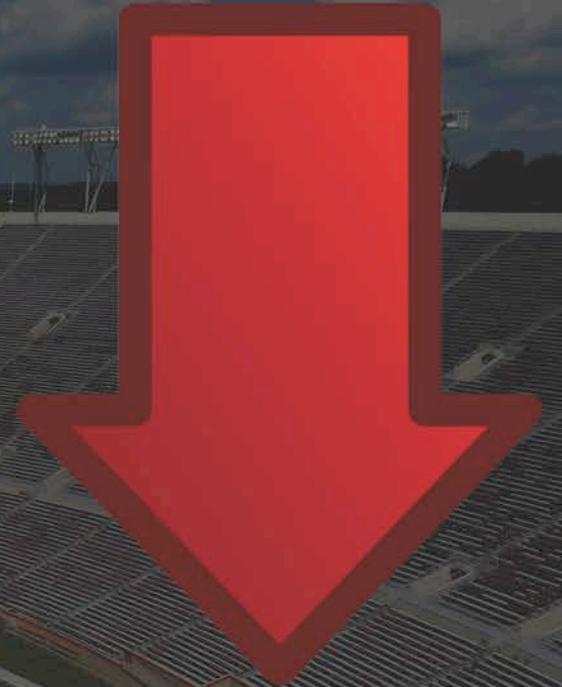
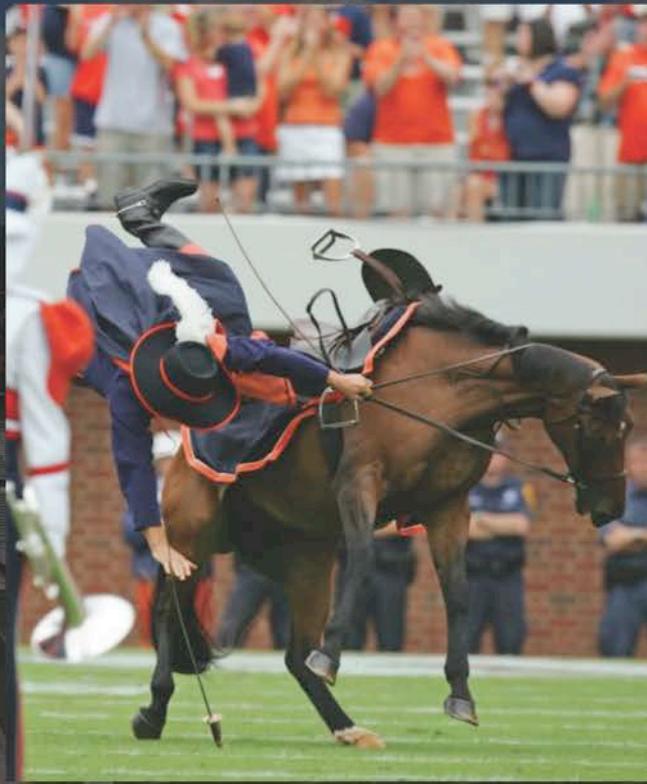
**12 OF 13 VT SENIORS HAD ALREADY GRADUATED WHEN THE 2014 SEASON BEGAN. SINCE 2012, VT HAS ACHIEVED A 100% GRADUATION RATE. DUKE JOHNSON, MIAMI'S BEST PLAYER (JUNIOR, 10 TDs), MAY BE LEAVING EARLY FOR THE NFL DRAFT... WITHOUT A COLLEGE DEGREE.**



# SOCIAL MEDIA









# SPRING RECRUITING

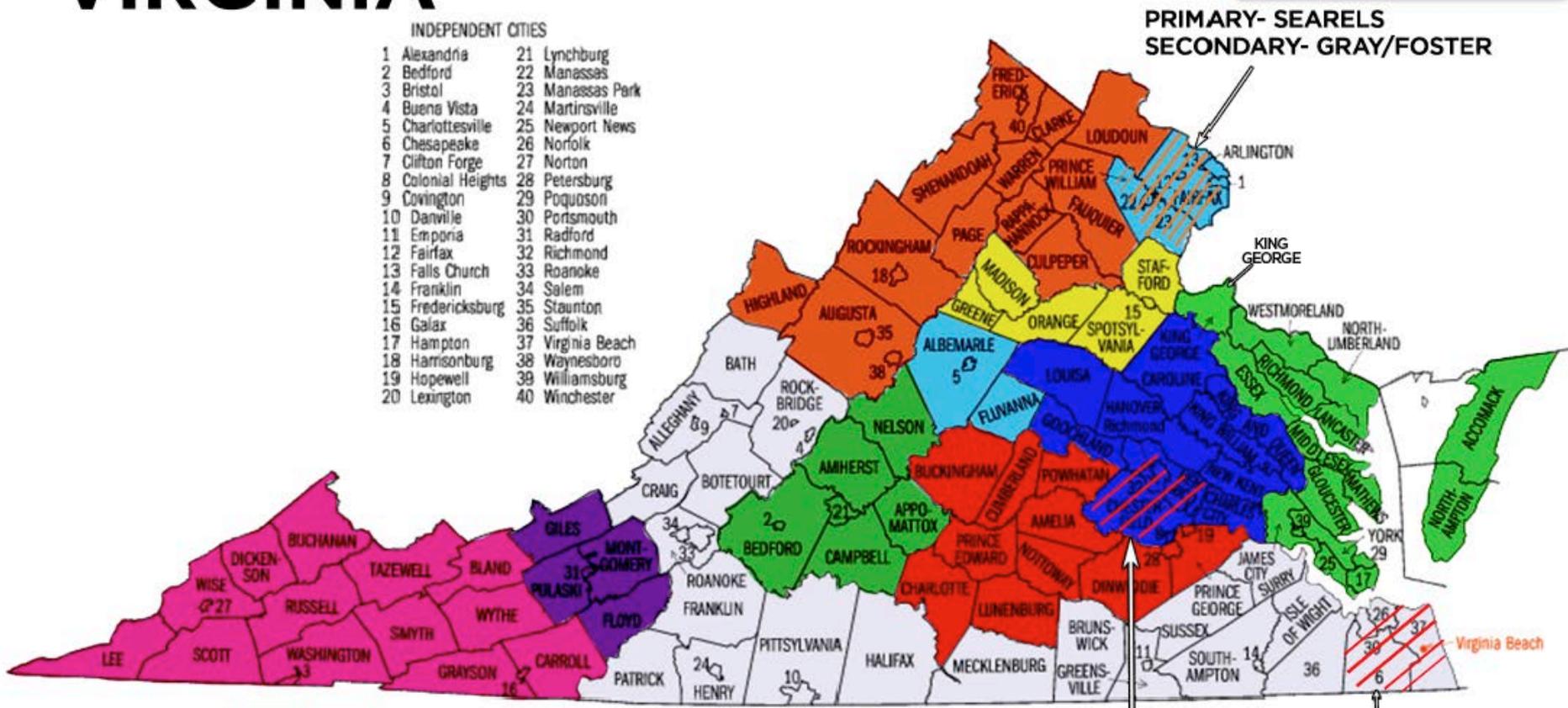


# VIRGINIA

Click on Sign to add text and place signatures on a PDF file.

## INDEPENDENT CITIES

- |                    |                   |
|--------------------|-------------------|
| 1 Alexandria       | 21 Lynchburg      |
| 2 Bedford          | 22 Manassas       |
| 3 Bristol          | 23 Manassas Park  |
| 4 Buena Vista      | 24 Martinsville   |
| 5 Charlottesville  | 25 Newport News   |
| 6 Chesapeake       | 26 Norfolk        |
| 7 Clifton Forge    | 27 Norton         |
| 8 Colonial Heights | 28 Petersburg     |
| 9 Covington        | 29 Poquoson       |
| 10 Danville        | 30 Portsmouth     |
| 11 Emporia         | 31 Radford        |
| 12 Fairfax         | 32 Richmond       |
| 13 Falls Church    | 33 Roanoke        |
| 14 Franklin        | 34 Salem          |
| 15 Fredericksburg  | 35 Staunton       |
| 16 Galax           | 36 Suffolk        |
| 17 Hampton         | 37 Virginia Beach |
| 18 Harrisonburg    | 38 Waynesboro     |
| 19 Hopewell        | 39 Williamsburg   |
| 20 Lexington       | 40 Winchester     |



**PRIMARY- SEARELS**  
**SECONDARY- GRAY/FOSTER**

**PRIMARY- BEAMER**  
**SECONDARY- BURDEN**

**PRIMARY- STINESPRING**  
**SECONDARY- BURDEN**

**PRIMARY LEGEND**

CW	TG
SL	SB
BS	CB
SS	BF
ZB	



QUESTIONS // COMMENTS



## **IV. C.J. Fiala**



## C.J. Fiala

Men's Swimming

Sprint Freestyle/Breaststroke

Centreville, Va.

Spring 2015 Graduate

Multimedia Journalism

Member of **HOKIES**Xtra broadcast team

Holds the school record (2:54.13) in the 400 Freestyle Relay with Owen Burns, Lucas Bureau and Brandon Fiala.





# **V. Closing**



**Thank You  
and Go Hokies!**





## RE: Task Force for a Healthier Virginia Tech Community

January 22, 2014

Dear [Name],

Greetings! It is with excitement that we announce the establishment of a joint task force between student affairs and human resources focused on health and wellness, entitled the ***Task Force for a Healthier Virginia Tech Community***. The purposes of this Task Force, which will commence its work in the spring of 2014, and which will likely meet once or twice a month, will include the following:

- 1) To help implement the University and divisional strategic plans that relate to health and wellness.
- 2) To promote health and wellness among all sectors in the University Community. Students are a natural and primary constituency for student affairs, but because health and wellness concerns are interconnected in a close knit, residential academic community, the Task Force should look for means to collaborate on health and wellness matters that also touch faculty and staff.
- 3) To continue to integrate the health and wellness services of diverse offices and departments, both within and outside of student affairs, in part to enhance capacity and expertise, but also to allow for services that are caring, cost-effective, and eminently deliverable.

The Task Force, to fulfill those purposes, will do the following:

- 1) Define key relevant terms, including most notably what is meant by "health and wellness" at Virginia Tech.
- 2) Advocate for best practices, based both on an understanding of local/regional needs and peer school and national perspectives.
- 3) Seek solutions that combine idealism with pragmatism, and that are calculated to produce significant, helping outcomes.

~continued~

The work of the Task Force is rooted in a number of considerations:

- 1) **Benevolence:** How do we care better for the health and wellness of our students, faculty, and staff, so that, in combination with their own good efforts, they can lead more productive and happier lives?
- 2) **Safety and Security:** How can improved health and wellness lead to a safer and more secure academic community?
- 3) **Economic Productivity:** How can improved health and wellness stabilize health costs and increase productivity, in a period rife with financial challenges, especially in this area?

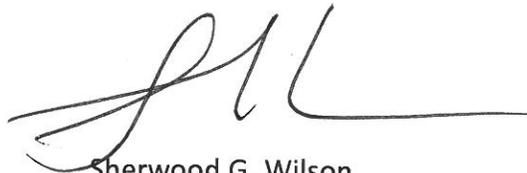
The Task Force will be co-convened by Dr. Rick Ferraro, Assistant Vice President for Student Affairs, and Ms. Cathy Kropff, Assistant Director for Hokie Wellness. We want to invite you to serve on the principal working group and we hope you will accept this invitation. Please email Hunter Gresham ([hgresham@vt.edu](mailto:hgresham@vt.edu)) at your earliest convenience, but no later than Monday, January 27, regarding your willingness to serve on this very important task force. We look forward to learning about your discoveries and ideas as you engage this work with other campus colleagues.

Thanks for your willingness to consider such an important role that will serve our campus community in important ways.

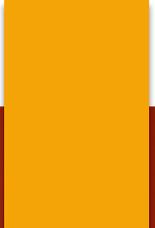
Sincerely,



Patricia A. Perillo  
Vice President for Student Affairs



Sherwood G. Wilson  
Vice President for Administration



# Community Health and Wellness Matters

*TASK FORCE FOR A HEALTHIER VIRGINIA TECH COMMUNITY*

**Richard J. Ferraro, PhD** | Assistant Vice President for Student Affairs  
**Cathy Kropff, MS, CWWS** | Director of Hokie Wellness

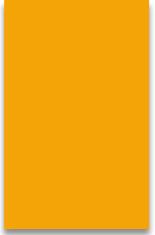
June 1, 2015

# The Task Force by the Numbers

- Two conveners: from Student Affairs and Human Resources
- Met for 13 months: March 2014 to April 2015
- No fewer than 24 students, faculty and staff contributed to the regular work of the Task Force.
- Met every two weeks during the semesters for 90 minute sessions.
- Made initial recommendations to Vice Presidents for Student Affairs and Administrative Services

# Purpose and Scope

- Advance strategic university and divisional Health and Wellness plans in interest of community wellbeing, improved safety, and economic productivity.
- Commit to an integrated approach (concern for students, faculty and staff) to better allow for caring, cost-effective, and deliverable service.
- Report supports intellectually a kind of health and wellness renaissance seen on the ground.



# Proposed Primary Initiatives

## Initiative #1

# Implementing a Comprehensive Definition of Health and Wellness in Nine Dimensions

### **Nine Dimensions include:**

- Intellectual
- Occupational
- Financial
- Physical
- Emotional (Psychological)
- Cultural
- Environmental
- Social
- Spiritual

# Virginia Tech's Nine Dimensions and Gallup's Five Essential Elements Compared

Dimensions of Health and Wellness	Essential Elements of Wellbeing
Intellectual	
Occupational	Career
Financial	Financial
Physical	Physical
Emotional (Psychological)	
Cultural	Community
Environmental	
Social	Social
Spiritual	

# Salient Aspects of Virginia Tech's Nine Dimensions

- **Multi-sectoral**: Relevant to students, faculty, and staff
- **Multidisciplinary**: Pertinent for academic, student, and administrative affairs; will benefit and draw benefit from many departments and colleges
- **Multilateral**: Encourages Self-Help, Group Assistance, and Institutional Commitment
- **Inclusive**: Concords with much that is found in the 5 Essential Elements of Wellbeing from Gallup (with attendant research capability)

## Initiative #2

### Implementing *Step Up!*

#### An Umbrella, Bystander-Intervention Program

- Recommendation of *Step Up!* as an umbrella bystander-intervention and pro-social behavior program (*to serve as unifying program for all*)
- 10 other options investigated
- *Step Up!* is comprehensive, inexpensive, offers sound curriculum and leadership, and is programmatically integrated
- It helps turn our creeds (5 Aspirations for Student Learning, 8 Pylon core values, and the Virginia Tech Principles of Community) into helping action

## Initiative #3

### Making a Healthy Break with History: Working toward a Tobacco- and Smoke-Free Campus

- Work to define the feasibility of making Virginia Tech a smoke-free and tobacco-free campus
- Task Force shared concern about E-Cigarettes: A “Trojan Horse” or an “oral nicotine patch?”
- Task Force recommends primary reliance on education, counseling, and cessation assistance
- Important to correct wildly inaccurate beliefs about the actual and perceived volume of smokers and smoking

## Initiative #4

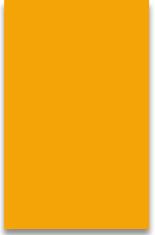
### Setting the Stage for Healthy Renewal: Needed Renovation of War Memorial Hall during its Centennial Period

- Partial remedy to shortfall in quality/quantity of physical activity space
- Means to promote multicultural and sectorial integration
- To provide incentives for long-term and consistent physical activity
- Establishment of inviting social space
- Assist with recruitment—of students, faculty, and staff
- Limit liability (creating a single, regular secure entry and exit)

## Initiative #5

# Conduct Close Study of Mandatory Comprehensive Student Health Insurance

- For degree students who attend more than half-time
- Fulfilled by any comprehensive plan: parental, spousal, job-related, exchange, or university sponsored
- Complements (does not duplicate) services at Schiffert Health Center and Cook Counseling Center
- Protects students medically, psychically, and economically



# Secondary Opportunities

# Healthier Eating

- Healthier Vending Options - successful pilot
- Consideration of a healthy-eating café or concession in a campus recreational facility(based on an Ohio State model)
- Better publicize Dining Services' healthy options
- Better publicize free nutrition counseling available on campus

# Support for Increased Application of Health and Wellness Principles in On- and Off-Campus Housing

- Continuation and expansion of W.E.L.L. (Wellness Environment for Living and Learning) or substance-free housing, to serve a variety of clients
- Encourage health and wellness themed housing (in keeping with student need and interest)
- Investigate partnerships with local apartment complexes and off-campus housing

# Continued Focus on the Importance of Daycare for Students and Employees

- The Task Force recognizes the need for accessible, affordable, and high-quality daycare, called for by undergraduate and graduate students, as well as by faculty and staff
- It recognizes that Virginia Tech has not kept pace with many peer institutions in this regard but believes it has the capacity to turn around matters
- It understands that diverse sources of funding and multiple sites may form part of the solution

# Appreciation of Ongoing Good Work in Several Areas

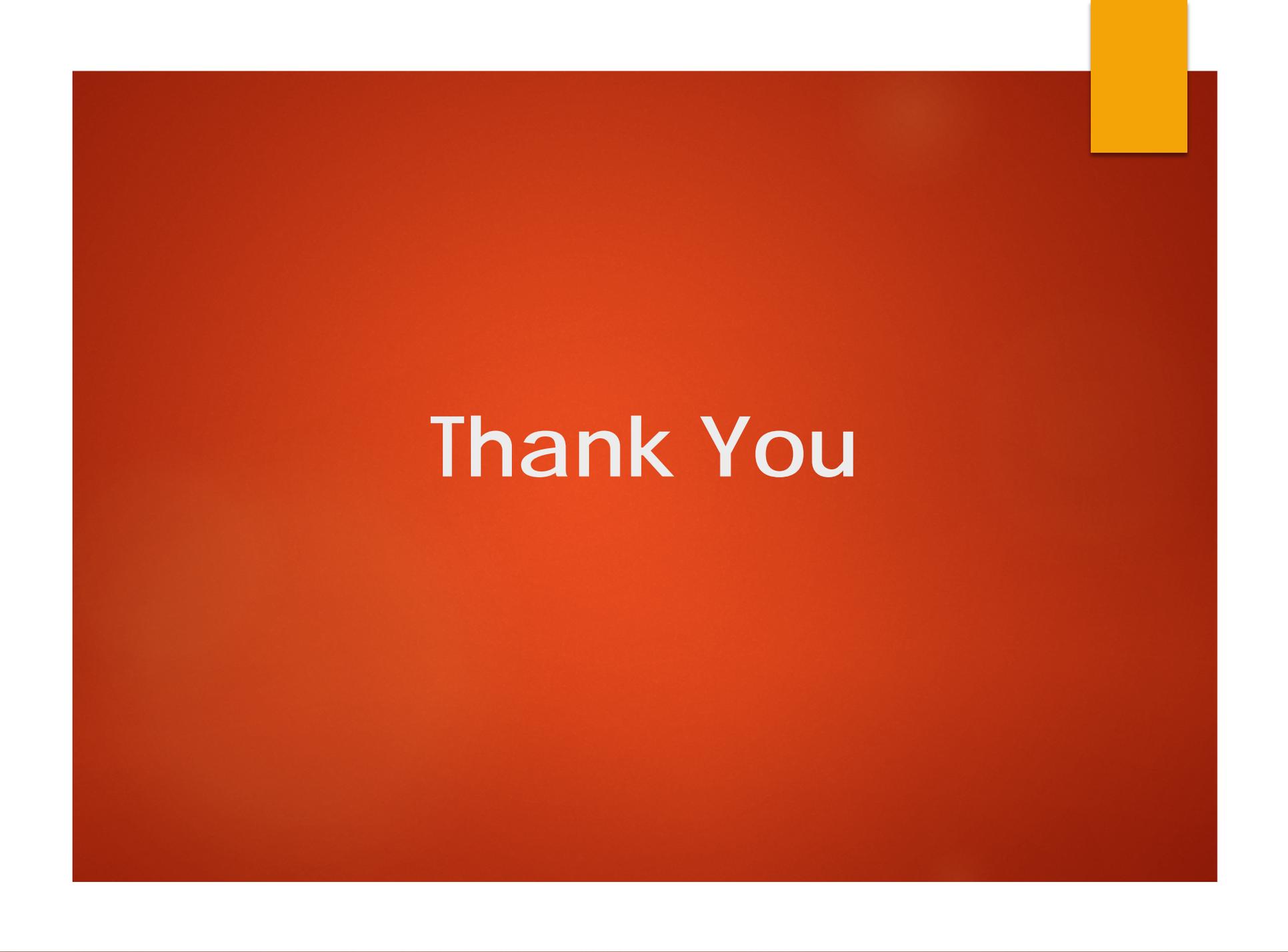
- Facility Design
  - The importance of the campus master plan in view of several health and wellness dimensions
- Department of Environmental Health and Safety
  - The need to publicize a hidden gem that benefits students and employees
- Alternative Transportation
  - The need to make known widely diverse and creative options
- Sustainability at Virginia Tech
  - Continuous improvement in action and hopes for increased education in this area

# Alcohol and Substance Abuse Matters Are Not Forgotten . . .

- Declining “binge-drinking”
- Some plans to implement important recommendations from an earlier task force
- Will focus on:
  - Party Positive: moderation campaign (on campus and off)
  - Motivational Interviewing: Non-confrontational Interventions based on one-on-one, short-term counseling
  - W.H.O. group surveys
  - Supportive groups and housing for students with dependency/addiction issues
- New Dept. of Health Education and Student Wellbeing should provide for “real” synergy

# The Coda: Towards Implementation

- Embracing Teaching and Marketing Missions: to address challenges of quality and quantity
- Strategic, Value-Based, Multivalent Investments
- Creation of Collaborative Health and Wellness Initiative Team



Thank You



---

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE  
THROUGH INTENTIONAL DESIGN OF THE PHYSICAL CAMPUS

DR. ELEANOR FINGER

MR. JASON SOILEAU

# Primary Assumptions

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**500 Additional Entering First-Year** Students in Fall 2015, resulting in **2,000 student** net growth over four years.

Possible **growth beyond 2,000** over an eight year period to approximately 29,000 undergraduates by **fall 2022**.

Virginia Tech intends to **house** approximately one third or **up to 2,350** of the new enrollment growth;

The growth will be planned to intentionally strengthen the **Virginia Tech experience** by promoting **diversity and engagement** by facilitating **multi-disciplinary** and **cross-generational** interaction.

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

---

TASK FORCE ON THE STUDENT EXPERIENCE – CAUTIONARY THEMES

# THEME

The **disparity in quality of spaces** across the campus, and student experiences within them, vary widely, contributing to a **widening gap** between possible **experiences** for students and faculty alike.

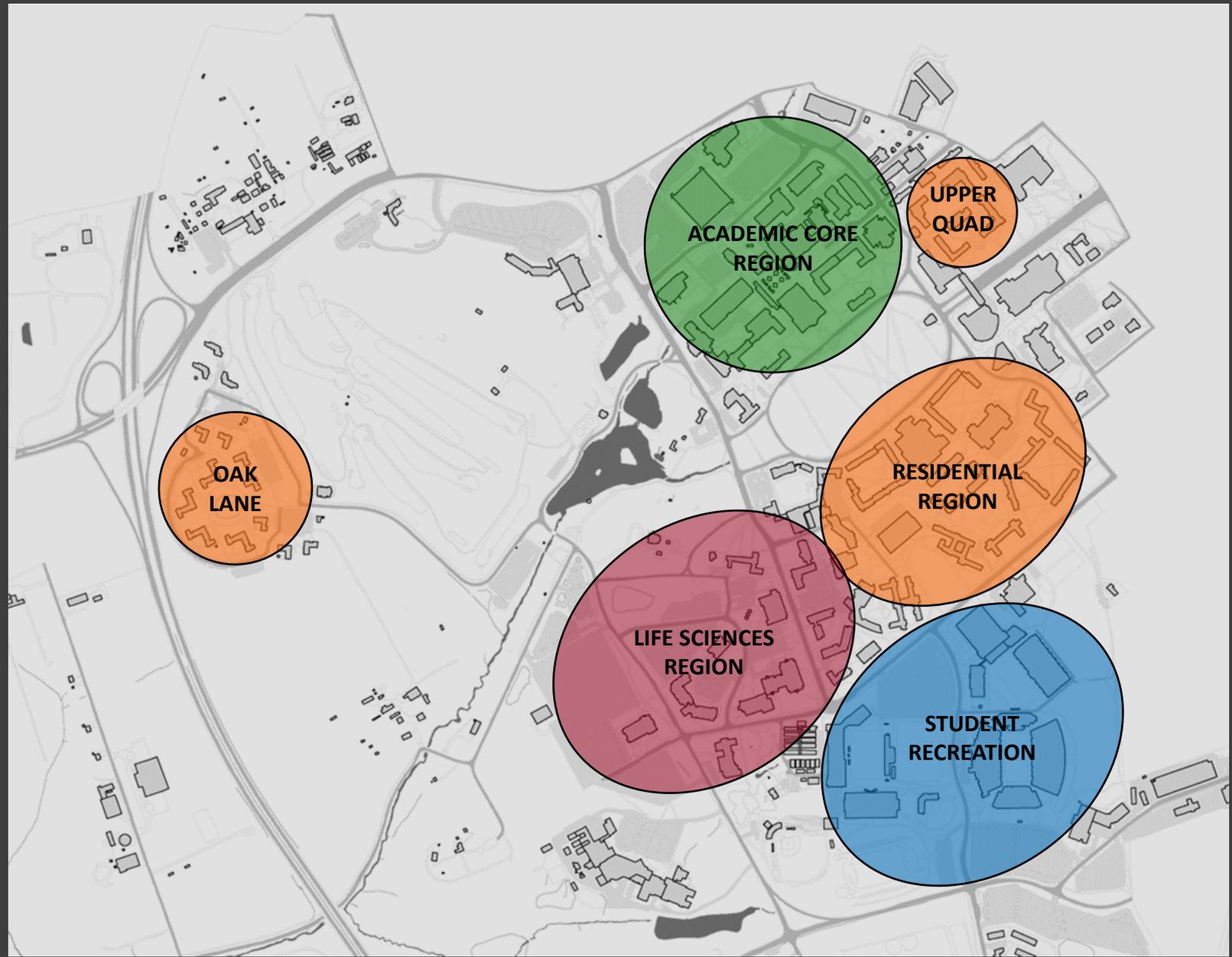
RESIDENTIAL EXPERIENCES – POSITIVE



RESIDENTIAL EXPERIENCES – NEGATIVE

# THEME

**Physical segregation**  
perpetuates silos.



**CAUTIONARY THEMES: LEARNING FROM WHERE WE HAVE BEEN**

# THEME

Our spaces **fail** to consistently **invite** students, faculty, and staff to **gather informally** outside of the classroom.

EFFECTIVE "LINGERING" SPACE

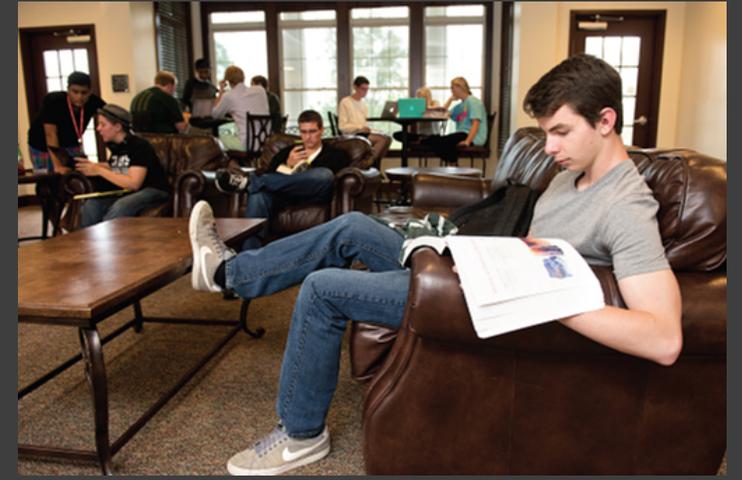


TRANSITIONAL – FAILS TO PROVIDE "LINGERING" OPPORTUNITIES

# THEME

Insufficient attention to the physical infrastructure of student-life facilities risks the erosion of a Virginia Tech strategic advantage.

Planning for these spaces must be done with intention.



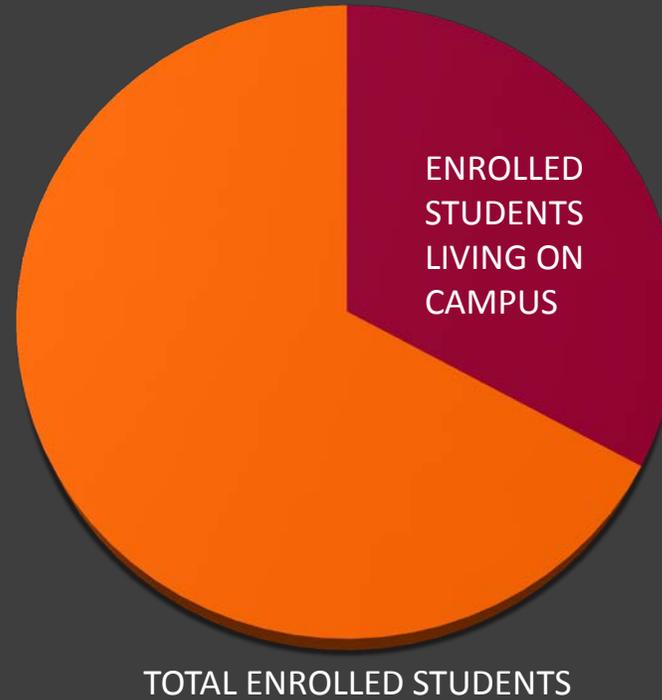
FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

---

TASK FORCE ON THE STUDENT EXPERIENCE –  
OUR RESPONSE

# IMPERATIVE

Virginia Tech must **preserve its historical** strength as a **residential campus** and re-conceptualize residence halls as **learning spaces** with the unique potential to **integrate academic and student life.**



- Adopt a **comprehensive** residence hall **renovation plan.**
- **Plan for growth** of on-campus population.
- **Incorporate academic spaces** in all residence hall renovations.
- Grow **living-learning and residential college** programmatic initiatives.

# IMPERATIVE

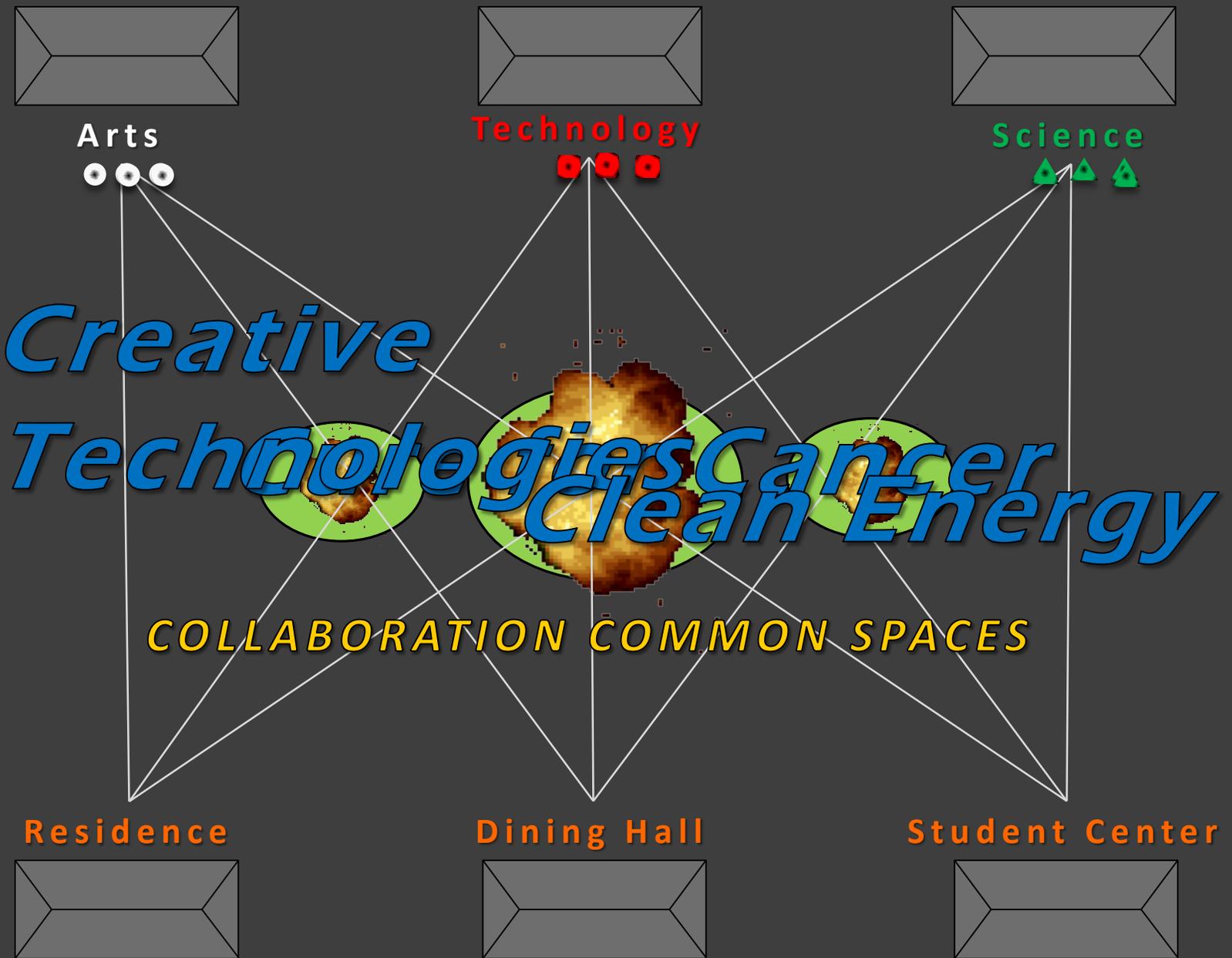
Virginia Tech will **create physical spaces**, both indoors and outdoors, which **support** a culture of **community** and connection for **meaningful interactions** and **relationships** among students, staff, and faculty.



- Implement a Campus Commons Initiative to **create multiple hubs** (or neighborhoods) across campus.
- Create **central gathering spaces for faculty** within “neighborhoods.”
- **Enhance character of outdoor spaces** to facilitate planned and unplanned encounters.

# IMPERATIVE

Virginia Tech will embrace a campus culture that values faculty and staff engagement with students, and seeks to strengthen an infrastructure that facilitates mentorship, inspiring programmatic initiatives, and practical hands-on experiences to enhance classroom learning.



FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

---

THROUGH THE RESIDENTIAL COLLEGE MODEL

# The Residential College Model

---

The community is **multidisciplinary** (students from every discipline are not only welcome, but this diversity is an important part of the learning).

The community is **multigenerational** (students from all classifications, freshman through graduate students are not only welcome, but critical to the experience).

The community is led by an academic faculty member **working and living side-by-side** with student affairs educators.

# The Residential College Model

---

The community offers students an **extraordinary opportunity** to live in that same community for the duration of their experience affording unusual possibilities for **mentorship** and **leadership** in the residential environment.

The community, through its physical spaces and programmatic emphases, will celebrate the **intellectual, artistic, social,** and **contemplative lives** of students in the spirit of Virginia Tech's commitment to educating the whole student.



Community Space



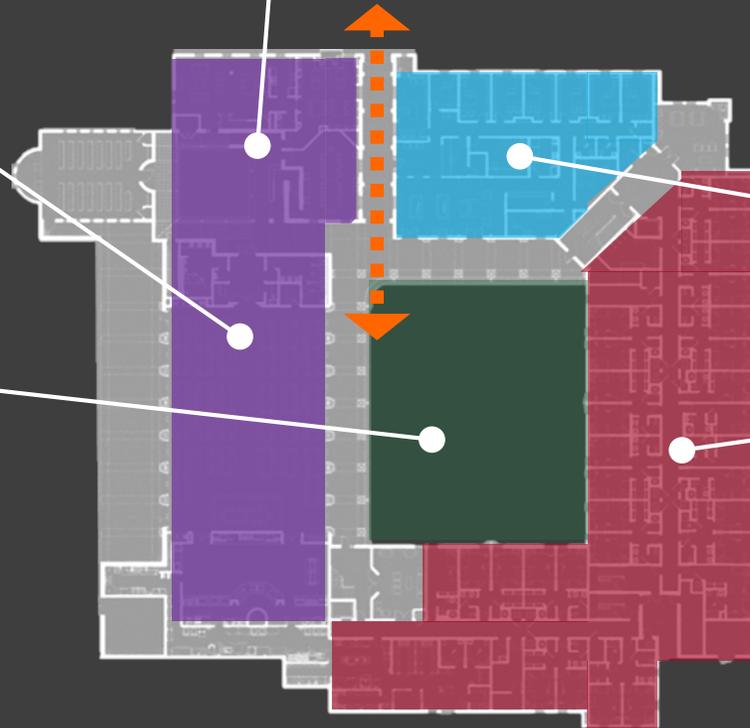
Community Space



Portal



Community Quad Space



Faculty Office Space

Student Living Space

**MIXED USES PROMOTE DIVERSITY AND ENGAGEMENT**

BROOKS COLLEGE FLOOR PLAN

**CASE STUDY: BROOKS RESIDENTIAL COLLEGE AT BAYLOR UNIVERSITY**

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

---

PLANNING FOR GROWTH ON THE PHYSICAL CAMPUS

Virginia Tech's **beautiful landscape, iconic architecture, and relationship of buildings to open spaces** creates a powerful **"sense of place"**

Any future development should **retain and enhance** these characteristics



## MULTI-MODAL TRANSIT FACILITY



## BURRUSS HALL



**ACADEMIC CORE**

**STUDENT LIFE**



NEW CLASSROOM BUILDING

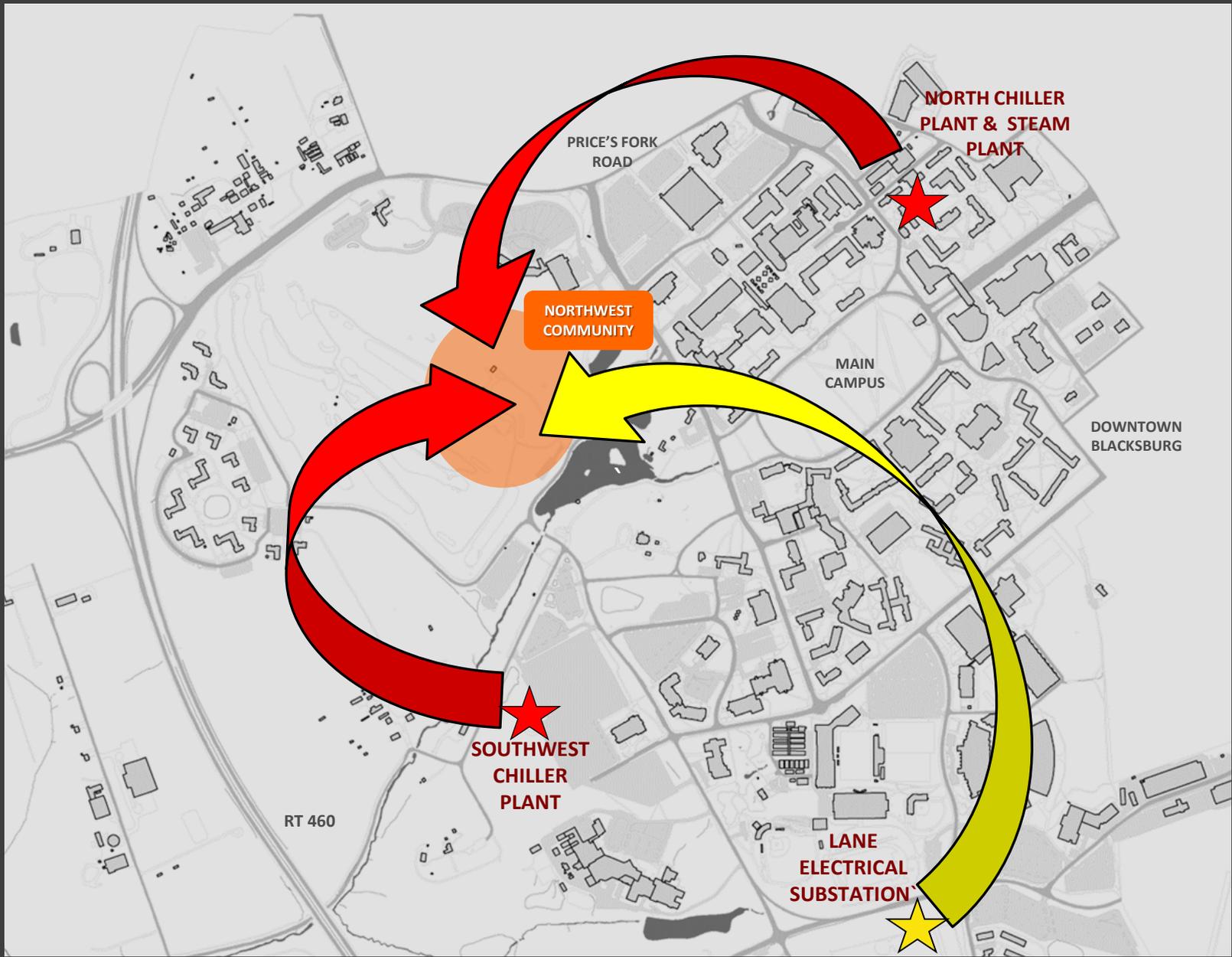
# INTENTIONAL PLANNING FOR A WALKING CAMPUS

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

---

UTILITIES, ROADS, AND PEDESTRIAN INFRASTRUCTURE

-  ALTERNATIVE ENERGY
-  POWER
-  POTABLE WATER
-  STEAM
-  NATURAL GAS
-  CHILLED WATER PIPING
-  HIGH SPEED COMPUTING



**PROVISION OF UTILITY INFRASTRUCTURE TO NORTHWEST COMMUNITY REGION**

## WESTERN PERIMETER ROAD

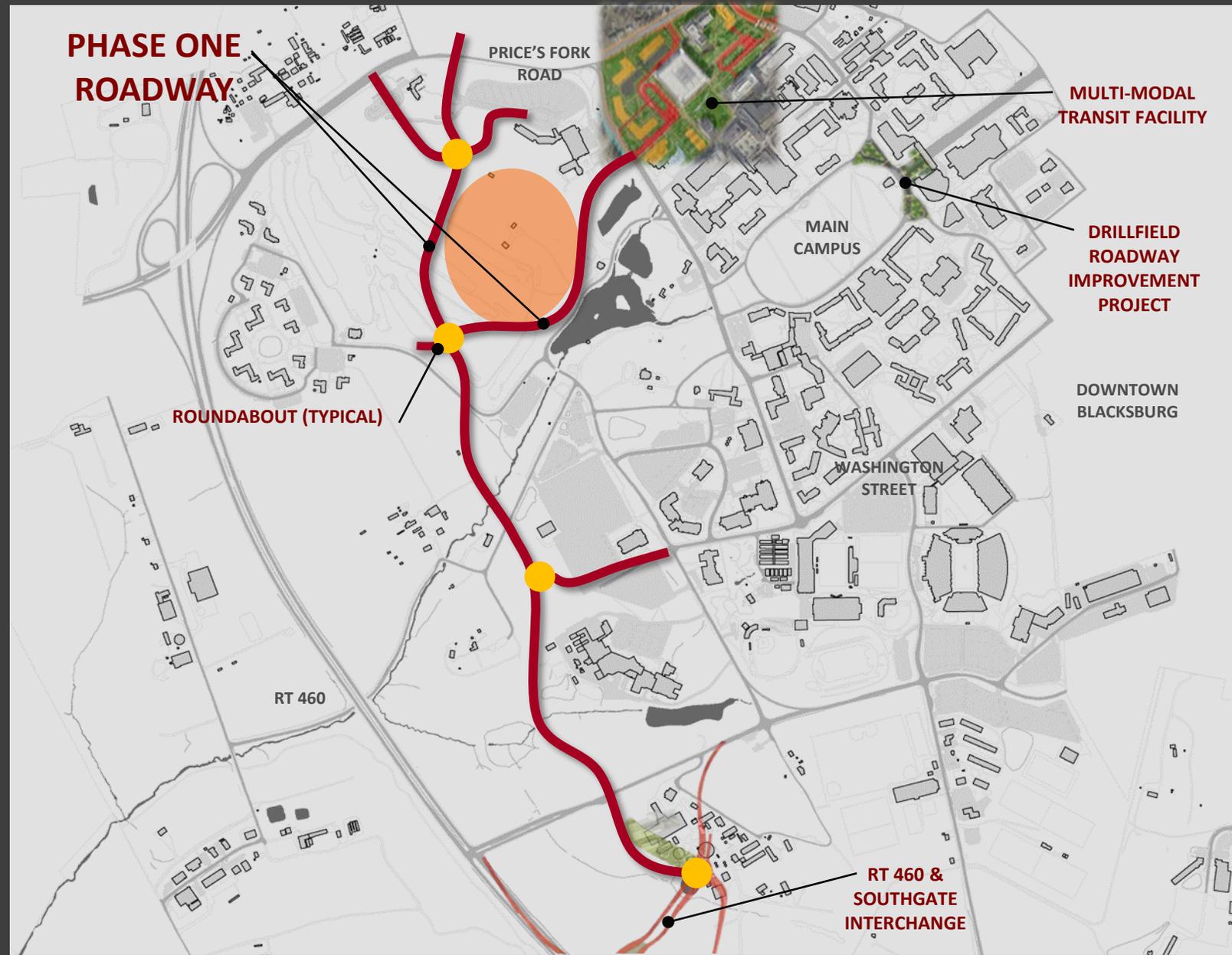
- 4 TRAVEL LANES
- BIKE LANES
- MEDIAN
- LANDSCAPE BUFFER

## PERRY STREET EXTENSION

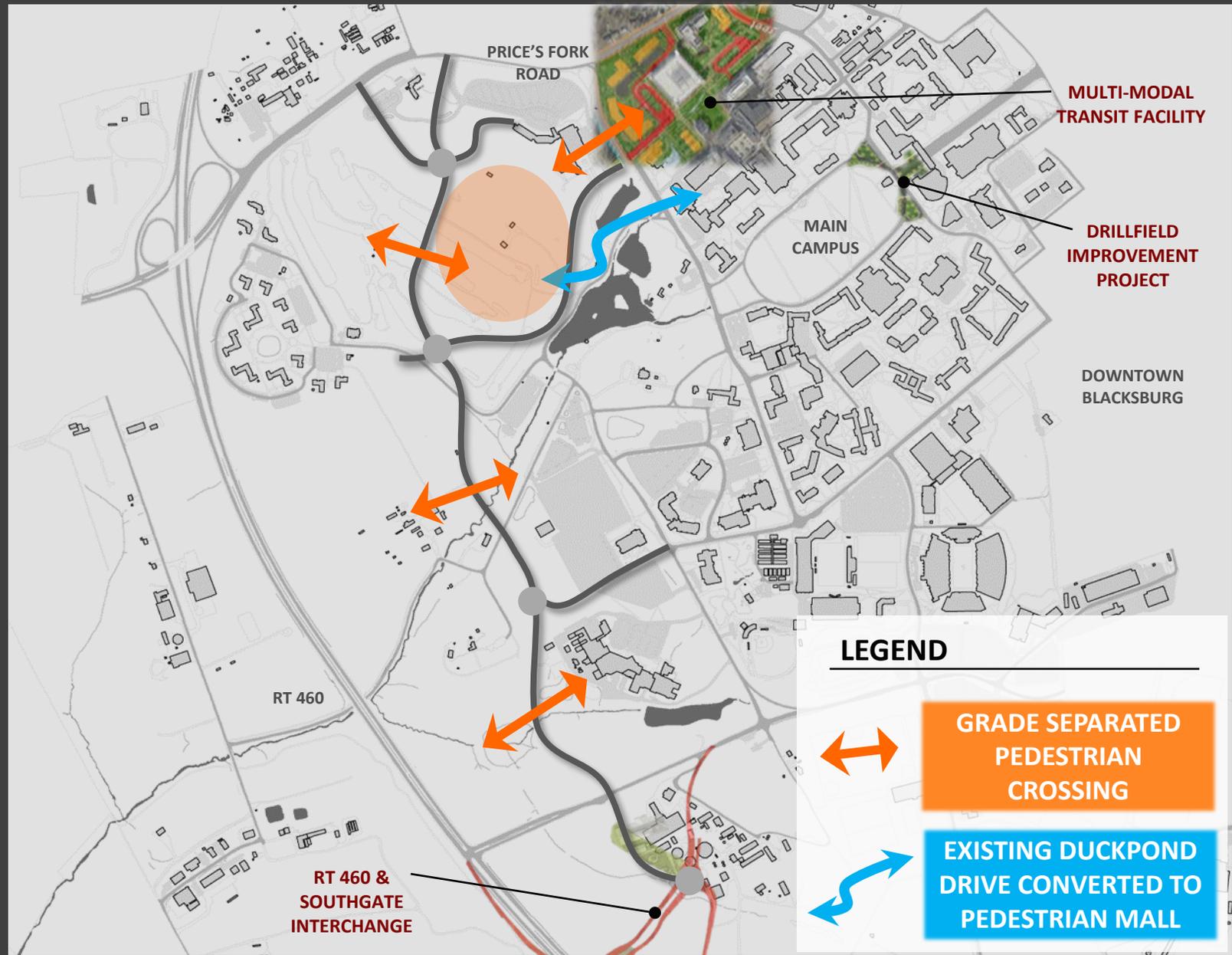
- 2 TRAVEL LANES
- BIKE OR PARKING LANES
- MEDIAN
- LANDSCAPE BUFFER

## WASHINGTON STREET EXTENSION

- 2 TRAVEL LANES
- BIKE OR PARKING LANES
- LANDSCAPE BUFFER



# PROVISION OF ROAD INFRASTRUCTURE TO NORTHWEST COMMUNITY REGION



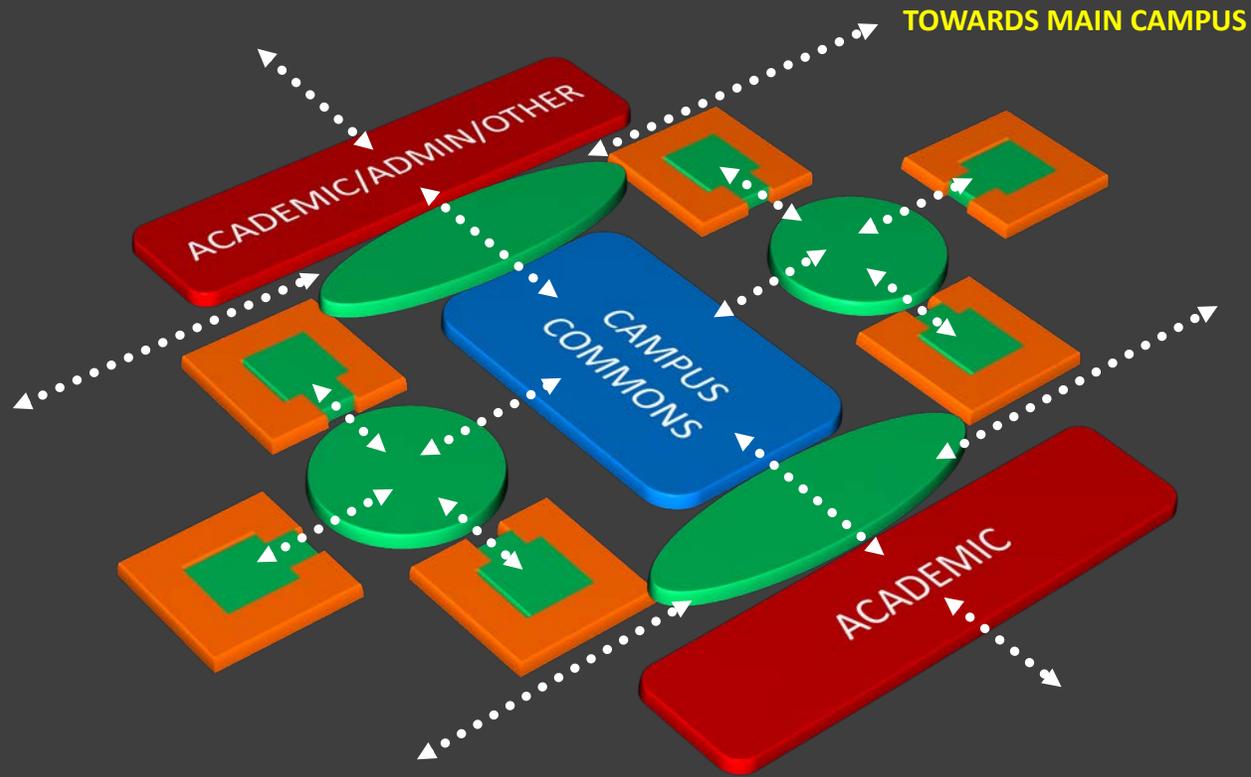
**PROVISION OF PEDESTRIAN INFRASTRUCTURE TO NW COMMUNITY REGION**

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

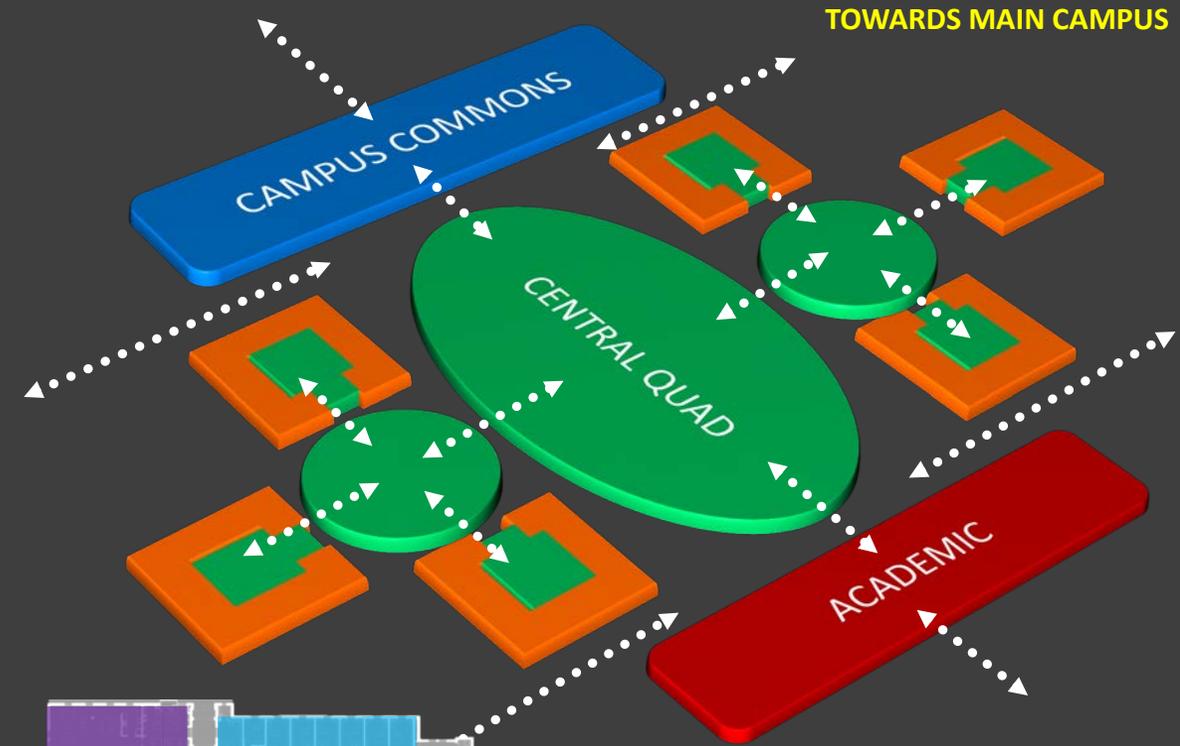
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NORTHWEST COMMUNITY SCHEMATIC DIAGRAMS

# CONCEPT ONE



# CONCEPT TWO



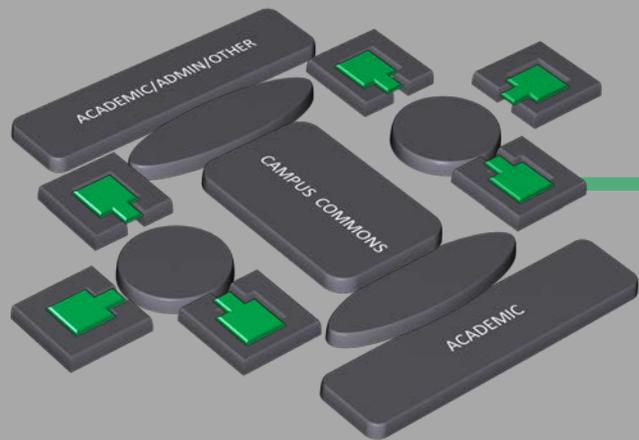
PRIMARY DIFFERENCE?

DISTRICT HEARTBEAT



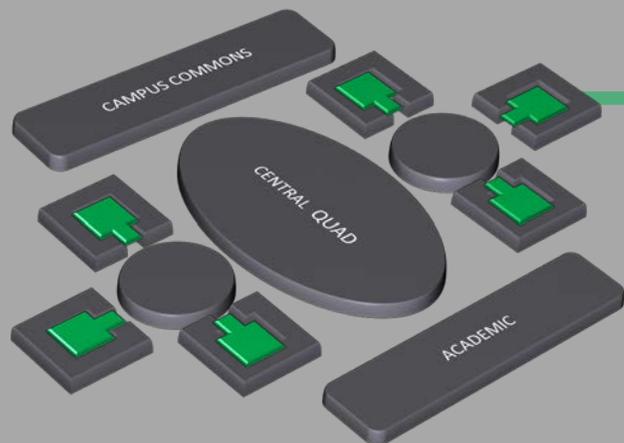
RESIDENTIAL COLLEGE BUILDING

# CONCEPT ONE



Stanford University – Green Library Courtyard

# CONCEPT TWO



Yale University - Saybrook Quad



University of Virginia – Darden School of Business



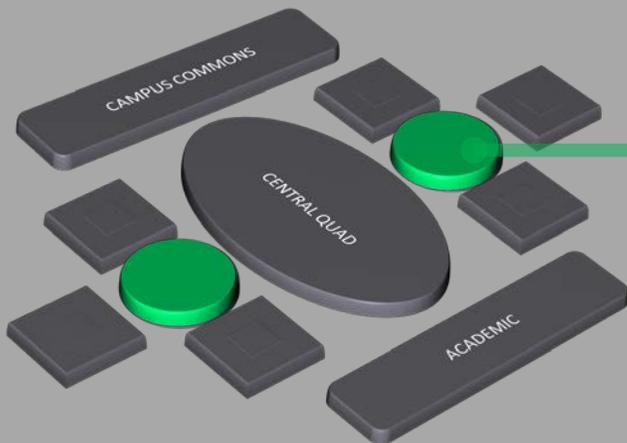
Yale University

## VARIOUS QUAD CHARACTERS

# CONCEPT ONE



# CONCEPT TWO



Stanford University – Science Engineering Quad



Cuyamaca Community College – Student Center



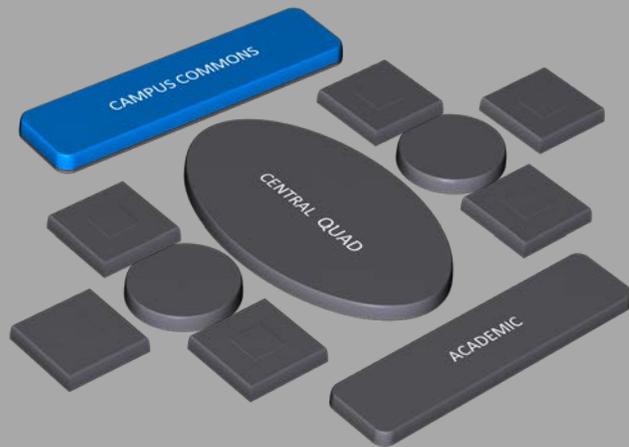
Cambridge University – Peterhouse Old Court

VARIOUS QUAD CHARACTERS

## CONCEPT ONE



## CONCEPT TWO

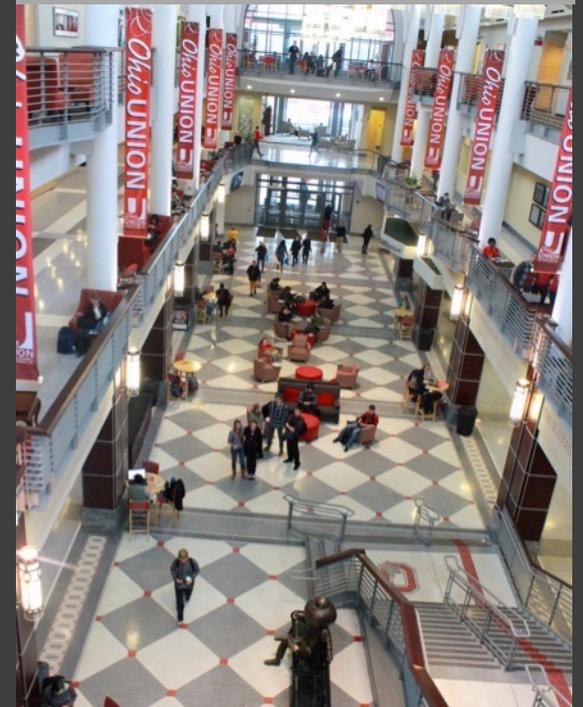


Dining Space

Recreation



Student Union



Mail/Copy/Print & Student Support Services



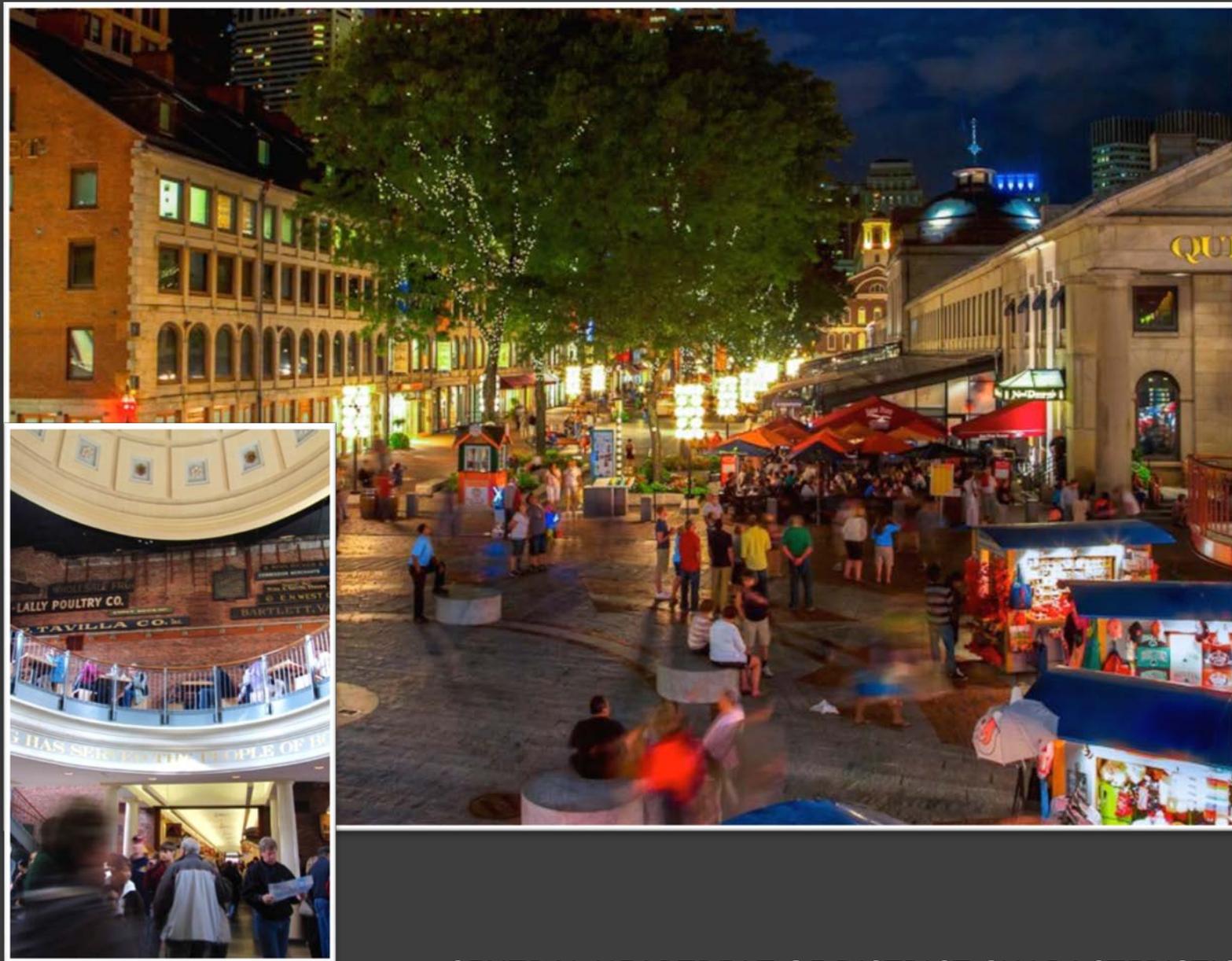
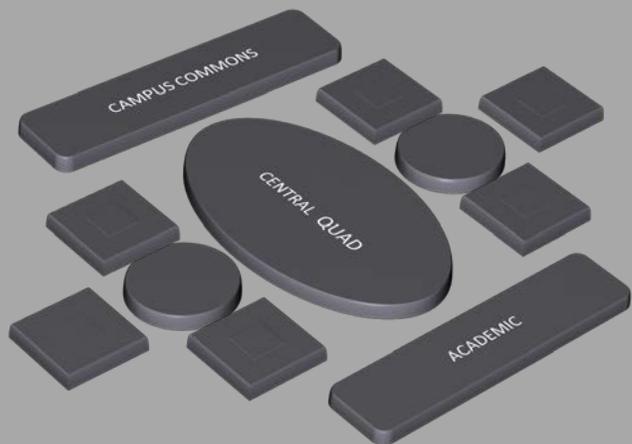
Meeting Spaces

VARIOUS CAMPUS COMMONS USES (SIZE/SCALE NOT REFLECTIVE OF VT COMMONS)

## CONCEPT ONE



## CONCEPT TWO



CENTRAL HEARTBEAT OF DISTRICT CHARACTERISTICS

# CONCEPT TWO



Oxford University – Keble College Chapel



Stanford University – The Oval



University of Washington – The Quad



University of Virginia – The Lawn

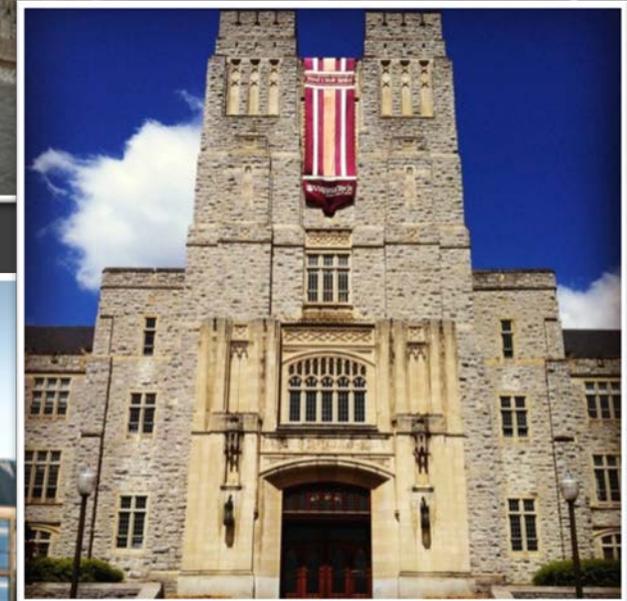
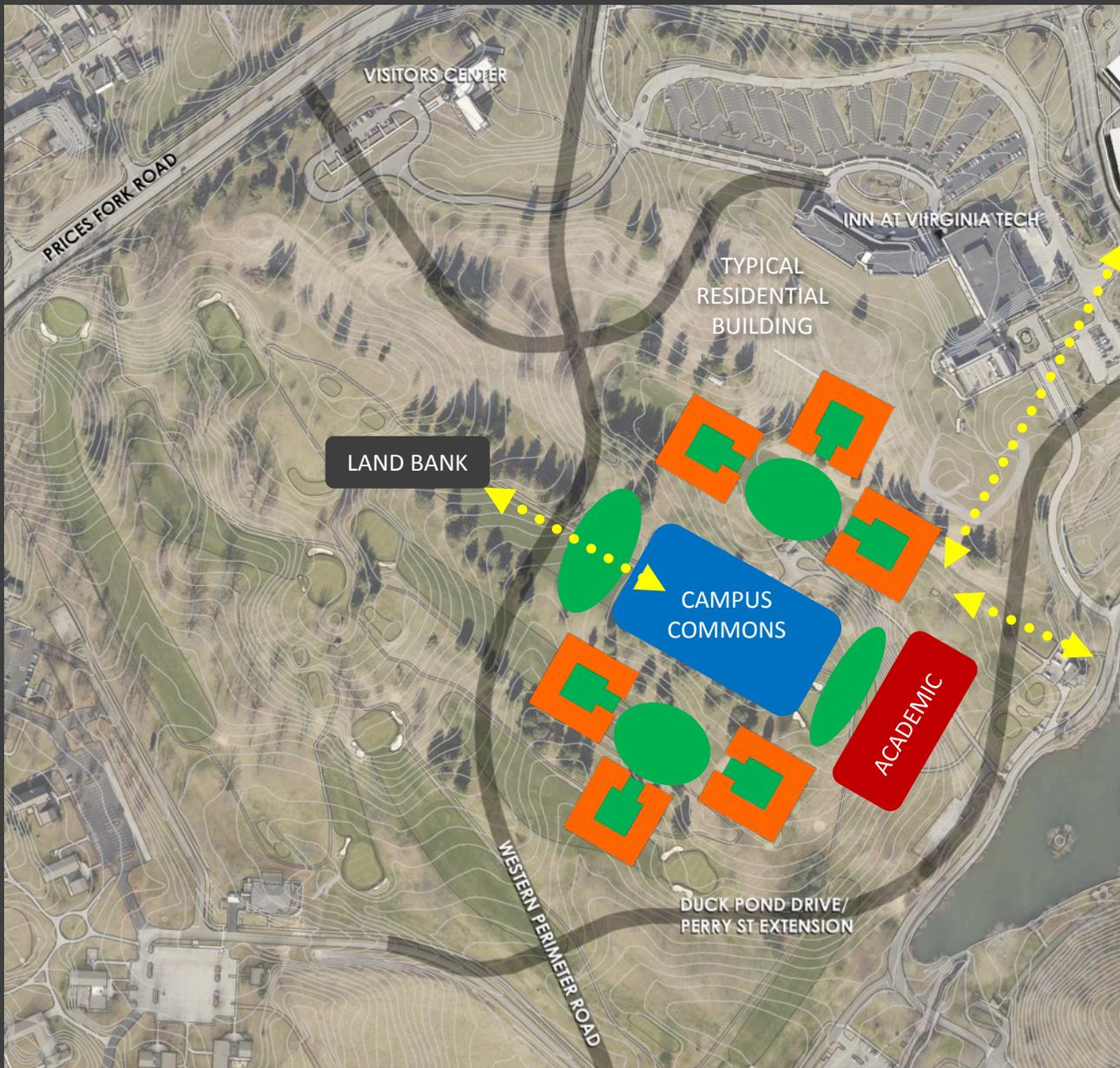
VARIOUS QUAD CHARACTERS

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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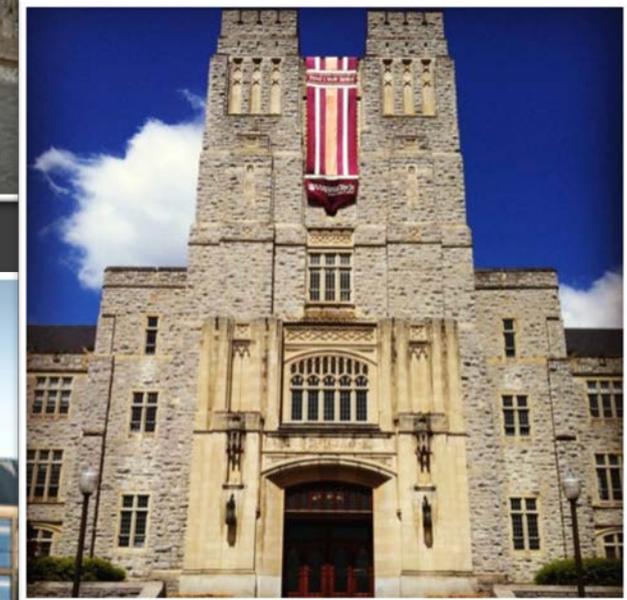
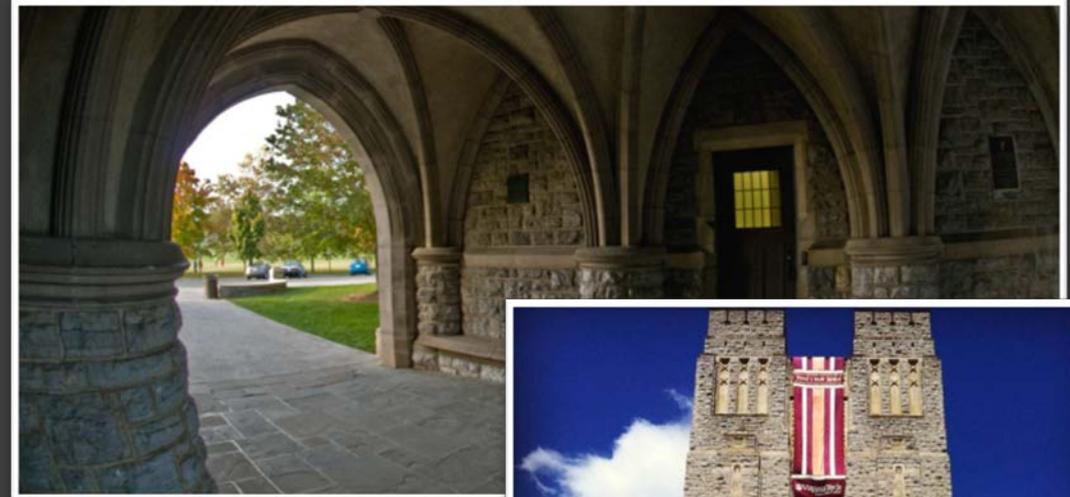
SITE ADAPTATION

## INCORPORATE VIRGINIA TECH CHARACTER



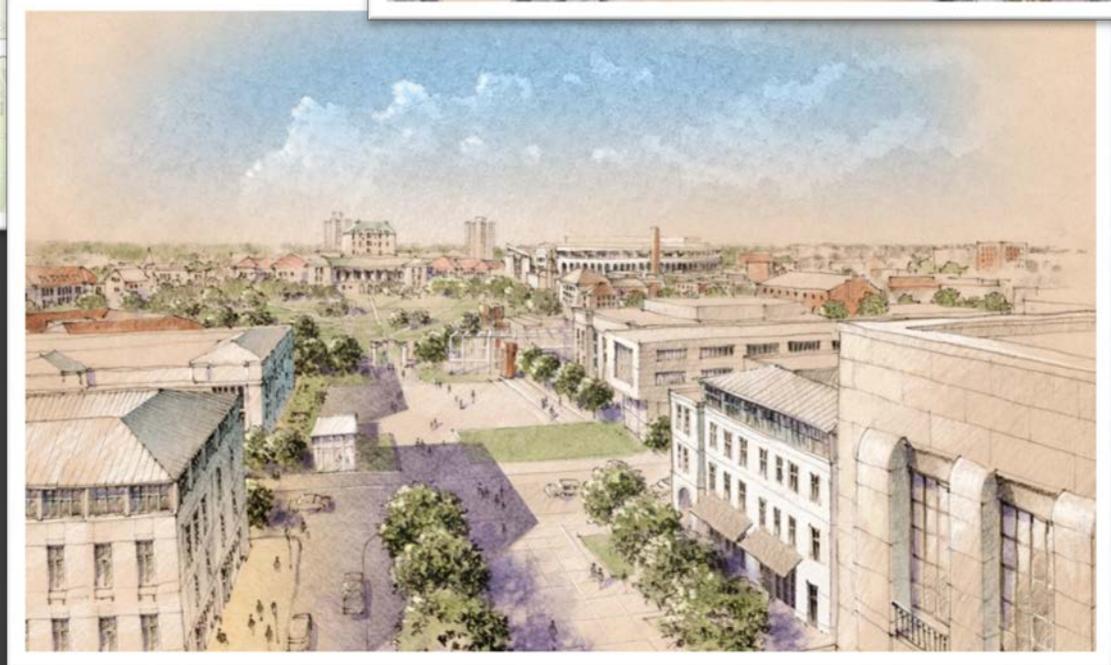
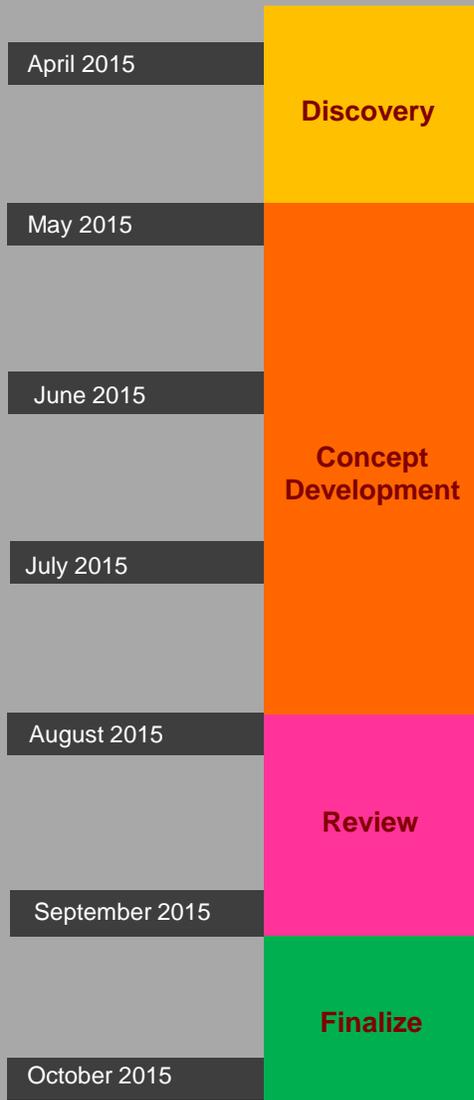
**HOW MIGHT THESE CONCEPTS ADAPT TO VIRGINIA TECH'S CAMPUS?**

## INCORPORATE VIRGINIA TECH CHARACTER



**HOW MIGHT THESE CONCEPTS ADAPT TO VIRGINIA TECH'S CAMPUS?**

# ANTICIPATED TIMELINE



EXAMPLES OF EXPECTED DELIVERABLES

**NEXT STEP: CONSULTANT-LED PRECINCT PLAN**

FACILITATING THE VIRGINIA TECH STUDENT EXPERIENCE

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PROPOSED GROWTH SEQUENCING PLAN

**New Construction Phase II:**

- Three Residential Colleges
- Academic Building(s)
- Gain in Beds = 1,050

**Immediate:**

- Identify and Provide Utility Infrastructure (Chilled Water, Steam, Electric, Etc.)

**Immediate:**

- Renovation of Eggleston – Convert Existing Office Space to Residential Use
- Gain in Beds = 70

**Renovation Phase I:**

- Explore the Feasibility of Renovating and Repurposing Owens to Residential Use
- Potential Gain in Beds = 180

**Immediate:**

- Renovation of O'Shaughnessy

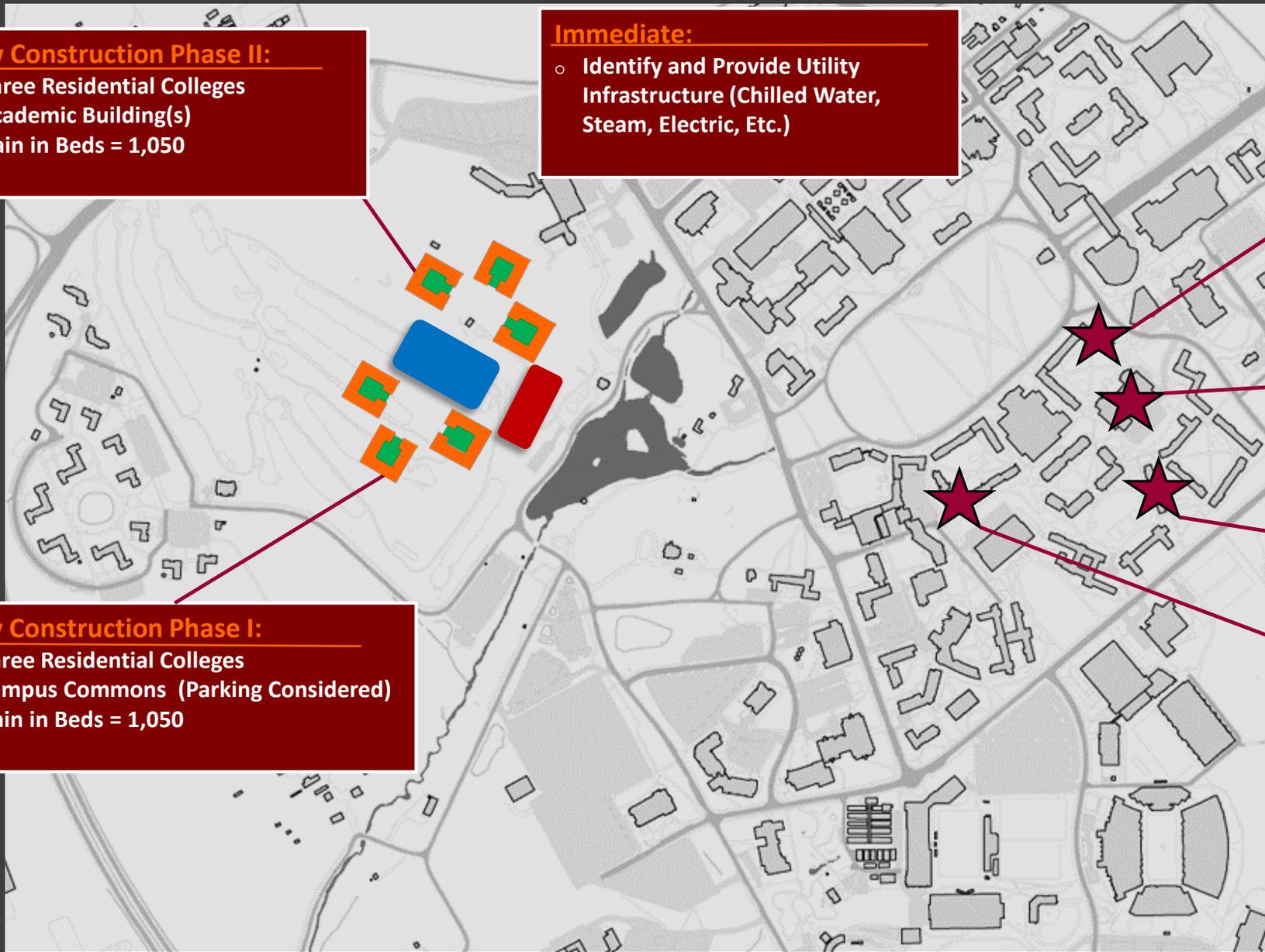
**Renovation Phase II:**

- Explore future of Slusher

**Total Bed Gain = 2,350**

**New Construction Phase I:**

- Three Residential Colleges
- Campus Commons (Parking Considered)
- Gain in Beds = 1,050



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QUESTIONS/COMMENTS?



## **Summary**

### **Emeritus Faculty Resolutions (5)**

**June 1, 2015**

#### **College of Engineering**

Mahendra Singh

Preston Wade Professor Emeritus of Engineering  
Science and Mechanics

#### **College of Science**

Arthur L. Buikema, Jr.

Alumni Distinguished Professor Emeritus of Ecology

Jackson R. Webster

Professor Emeritus of Ecology

#### **Pamplin College of Business**

Suzanne Murrmann

Professor Emerita of Hospitality and Tourism  
Management

Julie L. Ozanne

Professor Emerita of Marketing

## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, Mahendra P. Singh, Ph.D., faithfully served Virginia Tech for 38 years in the College of Engineering, beginning in 1977; and

**WHEREAS**, as the Preston Wade Professor and a member of the faculty in the Department Of Engineering Science and Mechanics and later the Department of Biomedical Engineering and Mechanics, he developed an international reputation in earthquake engineering, random vibrations, composite structures, performance based seismic design, and health monitoring of civil infrastructure elements such as buildings and bridge structures; and

**WHEREAS**, his work appears in more than 250 publications, including international journals, conference and workshop proceedings, and technical reports; and

**WHEREAS**, he received the Distinguished Alumnus Award from his alma mater (the Indian Institute of Technology at Roorkee, India) where he has been honored as a Distinguished Visiting Professor; and

**WHEREAS**, he also served as the director of the Program of Architectural and Mechanical Systems for the National Science Foundation (NSF); as the director of NSF's Program of Structural Systems and Hazard Mitigation of Structures; a visiting lecturer at the University of Illinois, Chicago; a visiting scientist for Lawrence Livermore Laboratory; and a senior engineering analyst and supervisor for Sargent and Lundy of Chicago; and

**WHEREAS**, he has made over 50 invited and keynote presentations in countries around the globe including the USA, India, China, Japan, Italy, Greece, Brazil, Taiwan, Korea, Indonesia, Thailand, and Vietnam;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Mahendra P. Singh, Ph.D., for his service to the university with the title of Preston Wade Professor Emeritus of Engineering Science and Mechanics.

### **RECOMMENDATION:**

That the above resolution recommending Mahendra P. Singh, Ph.D., for emeritus status be approved.

June 1, 2015

## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, Arthur L. Buikema, Jr., Ph.D., faithfully served Virginia Tech for 43 years in the College of Arts and Sciences and the College of Science, beginning in 1971; and

**WHEREAS**, as a member of the faculty in the Department of Biological Sciences, he was a dedicated teacher of a wide range of courses from freshman biology, including honors, to the advanced graduate level and has taught multiple courses in other departments and colleges in the university; and

**WHEREAS**, he has received numerous departmental and college teaching awards as well as university awards including the William E. Wine Award, Sporn Award, and the Diggs Teaching Scholar Award. In addition, he has received several national teaching awards and was honored with one of the university's highest honors in the form of an appointment as an Alumni Distinguished Professor; and

**WHEREAS**, he advised and counseled numerous undergraduate and graduate students during his career, serving as the graduate advisor for 21 master's and nine doctoral students and served on multiple graduate advisory committees in the Department of Biological Sciences and other departments; and

**WHEREAS**, he authored 115 peer reviewed research papers and book chapters and presented research papers at over 200 regional, national and international scientific research conferences; and he received funding from multiple state, regional, and federal agencies to support his research; and

**WHEREAS**, he served on a wide variety of departmental, college, and university committees, served as a Senior Scientific Advisor to the United States Environmental Protection Agency, and was a Senior Fulbright Scholar to Zimbabwe;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Arthur L. Buikema, Jr., Ph.D., for his service to the university with the title of Alumni Distinguished Professor Emeritus of Ecology.

### **RECOMMENDATION:**

That the above resolution recommending Arthur L. Buikema, Jr., Ph.D., for emeritus status be approved.

June 1, 2015

## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, Jackson R. Webster, Ph.D., faithfully served Virginia Tech for 39 years in the College of Arts and Sciences and the College of Science, beginning in 1975; and

**WHEREAS**, as a member of the faculty in the Department of Biological Sciences, he was a dedicated teacher of a variety of courses ranging from junior to advanced graduate levels; and

**WHEREAS**, he received several departmental and college teaching awards and, in 2012, was the receipt of the William E. Wine Award; and

**WHEREAS**, he advised and counseled numerous undergraduate and graduate students during his career in the Department of Biological Sciences, serving as a graduate advisor for 17 masters and 10 doctoral students and also served on graduate advisory committees in multiple departments and colleges; and

**WHEREAS**, he made contributions to the research areas of ecosystem level processes of aquatic ecosystems, biogeochemistry of streams, and riparian-stream interactions and long-term ecological research at several established research sites in North America; and

**WHEREAS**, he authored and co-authored 150 peer reviewed publications, presented multiple papers at national and international scientific meetings, and received the Society for Freshwater Science Award of Excellence in recognition of his research contributions to the field of freshwater ecology; and

**WHEREAS**, he served on multiple department, college, university, and professional society committees. He also served as an associate editor for three professional journals, and on several state and national technical advisory boards and committees;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Jackson R. Webster, Ph.D., for his service to the university with the title of Professor Emeritus of Ecology.

### **RECOMMENDATION:**

That the above resolution recommending Jackson R. Webster, Ph.D. for emeritus status be approved.

June 1, 2015

## **RESOLUTION FOR EMERITA STATUS**

**WHEREAS**, beginning in 1982 and continuing for 32 years, Suzanne Murrmann, Ph.D., faithfully served Virginia Tech as a faculty member in the Department of Hospitality and Tourism Management; and

**WHEREAS**, with dedication, she taught and lectured in undergraduate and graduate courses; and

**WHEREAS**, she has chaired or served on over 100 master's and doctoral committees at Virginia Tech, including chairing the committees for 20 Ph.D. students; and

**WHEREAS**, her Ph.D. students were placed in very good positions as assistant professors at institutions such as Ball State University, Indiana University, Auckland University of Technology, New Zealand, and Kyung Hee University, South Korea; and

**WHEREAS**, through her research, teaching, and outreach in the area of hospitality and tourism management human resources, she brought international visibility to Virginia Tech; and

**WHEREAS**, she authored or co-authored over 51 refereed journal articles, book chapters, and reviews; and

**WHEREAS**, she served on the Council on Hotel, Restaurant, and Institutional Education and the Journal of Tourism and Hospitality editorial board; and

**WHEREAS**, she held leadership positions in professional organizations, including the Academy of Management and Society for Human Resource Managers; and

**WHEREAS**, she received many professional honors and awards, including the Pamplin College of Business Outstanding Faculty in Doctoral Education; and

**WHEREAS**, she provided many years of distinguished contributions to the department, the college, and the university through dedicated service on numerous commissions and committees, especially as graduate program coordinator;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Suzanne Murrmann, Ph.D., for her distinguished service to the university with the title of Professor Emerita of Hospitality and Tourism Management.

### **RECOMMENDATION:**

That the above resolution recommending Suzanne Murrmann, Ph. D., for emerita status be approved.

June 1, 2015

## **RESOLUTION FOR EMERITA STATUS**

**WHEREAS**, beginning in 1985 and continuing for 29 years, Julie L. Ozanne, Ph.D., faithfully served Virginia Tech as a faculty member in the Department of Marketing in the Pamplin College of Business; and

**WHEREAS**, she made significant contributions to the understanding of marketing through her work in transformative consumer research, social innovation through new models of exchange, and extending methodologies of social change; and

**WHEREAS**, she supported the scientific research enterprise as a conference organizer and frequent reviewer for national and international journals; and

**WHEREAS**, with dedication, she taught a variety of undergraduate and graduate courses across the full marketing curriculum, placing strong emphasis on standards and student learning, and earning numerous department, college, and university teaching awards; and

**WHEREAS**, she advised numerous master's students and doctoral dissertations and helped graduate students develop successful careers in academic and industrial settings; and

**WHEREAS**, she provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous committees;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Julie L. Ozanne, Ph.D., for her distinguished service to the university with the title Professor Emerita of Marketing.

### **RECOMMENDATION:**

That the above resolution recommending Julie L. Ozanne, Ph.D. for emerita status be approved.

June 1, 2015

## Summary

### New Appointments to Endowed Chairs, Professorships, or Fellowships (7)

June 1, 2015

#### College of Architecture and Urban Studies

John Taylor	Preston and Catharine White Professorship in the Myers-Lawson School of Construction
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#### College of Engineering

Jonathan Black	Northrop Grumman Senior Faculty Fellowship
Thomas L. Martin	Bradly Faculty Fellow of Education

#### College of Science

Harald Sontheimer	I.D. Wilson Chair in the College of Science
Timothy Warburton	John K. Costain Faculty Chair

#### Pamplin College of Business

Rajesh Bagchi	Richard E. Sorensen Junior Faculty Fellowship
M. Joseph Sirgy	Virginia Tech Real Estate Professorship

## Summary

### Reappointments to Endowed Chairs, Professorships, or Fellowships (9)

#### College of Agriculture and Life Sciences

W. Lee Daniels	Thomas B. Hutcheson, Jr. Professorship in Crop and Soil Environmental Sciences
Saied Mostaghimi	H.E. and Elizabeth F. Alphin Professor of Agriculture and Life Sciences
Richard Veilleux	Julian Haden Gary and Margaret Savage Gary Professorship in Horticulture

#### College of Architecture and Urban Studies

Andrew McCoy	Preston and Catharine White Professorship in the Myers-Lawson School of Construction
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#### College of Engineering

Peter B. Rim	Joseph H. Collie Distinguished Visiting Professor of Chemical Engineering
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#### Pamplin College of Business

France Belanger	Tom and Daisy Byrd Senior Faculty Fellowship for Excellence in Accounting and Information Systems
Sudip Bhattacharjee	Konrad W. Kubin Junior Faculty Fellowship in Accounting and Information Systems
Weiguo Fan	L. Mahlon Harrell Senior Faculty Fellowship in Accounting and Information Systems
James G. Jenkins	William S. Gay Senior Faculty Fellowship in Accounting and Information Systems

**ENDOWED PROFESSORSHIP**  
**Preston and Catharine White Endowment for the Myers-Lawson School of Construction**

The Preston and Catharine White Endowment for the Myers-Lawson School of Construction was established by the generous gift of \$1M by Preston and Catharine White. The endowment's first priority is to provide for a professorship supporting the position of the director of the Myers-Lawson School of Construction. In the event that the fund may not be used to support the position, the donors direct that the fund be used as a fellowship to provide administrative stipend and operating support for the positions of associate director and assistant director of the Myers-Lawson School of Construction.

At this time, the director of the school holds the Bogle Professorship in Industrial and Systems Engineering, making the director ineligible for the Preston and Catherine White Endowment.

Richard Benson, dean of the College of Engineering and Jack Davis, dean of the College of Architecture and Urban Studies nominate John "JT" Taylor, Ph.D., for appointment to the Preston and Catharine White Professorship as associate director of the Myers-Lawson School of Construction.

John "JT" Taylor, Ph.D., is an associate professor in the Charles E. Via, Jr. Department of Civil and Environmental Engineering. In addition, he serves on the faculty in the Vecellio Construction Engineering and Management Program.

John "JT" Taylor, Ph.D., has excelled at scholarship, research, teaching, service, and outreach at Virginia Tech. He serves as director of the Civil Engineering Network Dynamics Lab and has been recognized with the Loganathan Teaching Award for Excellence in Civil Engineering Education. He has received the XCaliber award and the Construction Industry Institutes' Distinguished Professor Award. He has received the American Society of Civil Engineers (ASCE) Construction Institute's 2015 Daniel W. Halpin Award for Scholarship in Construction.

**RECOMMENDATION:**

That John Taylor, Ph.D. be appointed to the Preston and Catharine White Professorship in the Myers-Lawson School of Construction effective for a period of 1 year beginning August 10, 2015, with a salary supplement as provided by the endowment and if available, with funds from the eminent scholars match program.

June 1, 2015

**ENDOWED FELLOWSHIP**  
**Northrop Grumman Senior Faculty Fellowship**

The Northrop Grumman Senior Faculty Fellowship was established by the generous gift of the Northrop Grumman Corporation. The creation of this fellowship enables Virginia Tech to offer support to a College of Engineering faculty member who is a core member of the Ted and Kathryn Hume Center for National Security and Technology, and who specializes in C4ISR. Dean Benson has nominated Jonathan Black, Ph.D., as the Faculty Fellow, based on the recommendations of the Department of Aerospace and Ocean Engineering and Honorifics Committee.

Professor Black joined Virginia Tech in August of 2014. Previously, he was associate professor and director for the Center for Space Research and Assurance at the Air Force Institute of Technology (AFIT). While at AFIT, he established himself as a leader in cutting-edge research in space technology development and scientific space experiments. He also developed a comprehensive knowledge of DOD and intelligence community organizational trends, missions, inter-relationships, operations, research and collection methods, techniques, and practices of space systems and satellite acquisition programs.

At Virginia Tech, professor Black has quickly established a research program that intersects Space@VT and the Ted and Karyn Hume Center for National Security and Technology. His research thrusts include: national security applications of smallsats; mission-oriented satellite constellation design; spacecraft bus engineering and orbital dynamics; advanced lightweight aerospace structures; airborne autonomous vehicles; command, control, and communications for aerospace systems; cognitive mission management; joint optimization of platform and payload scheduling; engineering design for system payloads; payload size, weight, and power constraints; and advanced sensing technology.

Because of his areas of expertise, he was appointed as associate director of Research, Aerospace Systems, at the Hume Center. In addition to its research programs, the Hume Center advances the educational mission of Virginia Tech by providing mentoring, internships, and scholarships, which attract highly qualified American citizens to enter graduate programs and future federal service. Professor Black is currently teaching AOE 4134 Astromechanics, and AOE 5324 Orbital Mechanics.

**RECOMMENDATION:**

That Jonathan Black, Ph.D. be appointed the Northrop Grumman Senior Faculty Fellow effective for a period of 3 years beginning July 2015, with a salary and operating-fund supplement as provided by the endowment and if available, with funds from the eminent scholars match program.

June 1, 2015

**ENDOWED FELLOWSHIP**  
**Bradley Faculty Fellow of Education**

In concurrence with the recommendations of the honorifics committees of the Bradley Department of Electrical and Computer Engineering and the College of Engineering, Dean Richard Benson nominates Dr. Thomas L. Martin to hold the Bradley Faculty Fellow of Education.

Dr. Martin earned the MS and Ph.D. degrees from Carnegie Mellon University in 1994 and 1999, respectively. He received the B.S. in 1992 from the University of Cincinnati. He joined the Bradley Department of Electrical and Computer Engineering (ECE) in 2001 as an Assistant Professor. He received tenure in 2006 and was promoted to the rank of full professor in 2013. Prior to his appointment at Virginia Tech, he worked at the University of Alabama in Huntsville (1999-2001).

Dr. Martin's course innovations have focused on pervasive computing, where computing mediates a person's interactions with the environment. Examples of such devices include smart clothes, intelligent furniture, and interactive architecture. For these systems, the computing aspects of the system must be treated the same as any other material that affects the feel and behavior of an object. Consequently, designers from various fields—such as industrial design, architecture, fashion, and interior design—must consider computing to be part of the physical properties of the object being designed (as opposed to simply a tool to use during the design process), and computer specialists must be concerned with the physical properties of the system by taking a human-centered design approach to its affordances and interactions. With pervasive systems, designers are able to have the look, feel, and sound of an object be determined by computation rather than mechanics, allowing for a richer set of interactions between people and the object than is currently possible.

Dr. Martin is an internationally respected expert in engineering education and, in particular, has worked to integrate pervasive computing in the curriculum. Most recently, Prof. Martin received the W.S. 'Pete' White Innovation in Engineering Education Award in May 2014 as awarded by the College of Engineering for his outstanding contributions to curriculum development. In particular, Dr. Martin's development of three new courses: "Interdisciplinary Pervasive Computing Design Studio," "Textile Space," and "Introduction to Physical Computing" were especially noted. These courses are truly interdisciplinary—the courses are co-taught with faculty from Marketing, Industrial Design, Architecture, and Engineering Education and are open to students enrolled in these diverse programs. This course development has resulted in significant external recognition including well-received student presentations to NASA personnel and local venture capitalists. Teaching modules from these courses have been incorporated into curriculum at other institutions including Texas A&M and the Royal Institute of Technology (KTH) in Stockholm, Sweden. The work has also contributed to numerous publications that have been co-authored with other university faculty and students. A notable example is a paper published in the IEEE

Transactions on Automation Science and Engineering that was awarded the Best Paper Award for 2012.

Quantitative and qualitative results from classroom observations, student surveys and interviews show that the design process developed by Professor Martin has resulted in increased interdisciplinary integration and higher levels of team satisfaction. Since adding the prototyping exercise, significant improvements were observed in the quality of the student outcomes and satisfaction with the course. Both qualitative and quantitative data collected from the students in the interdisciplinary design studio show statistically significant improvement in student outcomes

Feedback from the ECE advisory board members and external project sponsors about this innovative use of technology are very favorable. In the ECE interdisciplinary design studio, students make their final product presentations to a small group of local venture capitalists-students find that the commercial opportunities suggested by the pervasive computing products (prototype designs with feasibility and marketing plans) are appealing to venture capitalists. For example, in December 2010, one of the student teams won the medical products category of the VT \$SK entrepreneurship competition. Observations of team activities and products resulting from the pedagogical innovation of the prototyping exercises show that these activities contribute to the positive results of the course. The projects from the spring 2013 Textile Space course were also well-received by project mentors at NASA in April and by attendees at the ICAT Tech or Treat event in October of that same year.

**RECOMMENDATION:**

That Dr. Thomas L. Martin be appointed to the Bradley Faculty Fellow of Education for a three-year term effective August 25, 2015, with a salary supplement as provided by the endowment and the eminent scholar match if available.

June 1, 2015

**ENDOWED PROFESSORSHIP**  
**The I. D. Wilson Chair in the College of Science**

The I. D. Wilson Chair in the College of Science was established in 2014 by Luther and Alice Hamlett to honor I. D. Wilson, a long-time faculty member and administrator in the Department of Biology. Dr. Hamlett is a strong supporter of the Academy of Integrated Science, one of most significant initiatives in the College of Science.

Lay Nam Chang Ph.D., dean of the College of Science, has nominated Harald Sontheimer Ph.D., to this endowed position, concurring with the recommendations of the Honorifics Committee of the College of Science. Dr. Sontheimer is currently a professor of neurobiology at the University of Alabama at Birmingham and will be joining Virginia Tech in June, 2015.

Harald Sontheimer received bachelor and master of science degrees from the University of Ulm, Federal Republic of Germany, and in 1989, completed a Ph.D. in cell biology and biophysics from the University of Heidelberg, Federal Republic of Germany. He undertook postdoctoral training at the Yale School of Medicine, where he subsequently served as an assistant professor of neurology and neurobiology from 1991 to 1994. Since 1994, at the University of Alabama at Birmingham, Dr. Sontheimer has led several major programs, including the Civitan International Research Center on Intellectual Disabilities and the world's first Center for Glial Biology in Medicine.

Dr. Sontheimer has received numerous awards and honors and has served as a professional consultant for the Scientific Advisory Boards of The Max Planck Society and the Massachusetts Institute of Technology Press; he has served on the Scientific Advisory Council of the American Brain Tumor Association, and on the Scientific Board of Directors of the Citizens United for Research on Epilepsy. He is a member of the American Association for the Advancement of Science, the European Society of Neuroscience, Germany Zoological Society, New York Academy of Sciences, Society for Neuroscience, Society for Neurochemistry, and the Society for Developmental Neuroscience.

Dr. Sontheimer has more than \$6.3M in research grant funding. He has published a number of books and book chapters and has numerous inventions and patents. He is a nationally recognized neuroscientist and expert on the biology of glial cells, the brain's most abundant cell type. He is credited with making foundational discoveries on the functional properties of glial cells in the brain which led to his discovery of a major new therapeutic approach for the treatment of glioblastoma, the deadliest and most prevalent primary brain tumor in humans. His past and future work will continue to influence these important research areas.

**RECOMMENDATION:**

That Harald W. Sontheimer, Ph.D., be appointed the I.D. Wilson Chair in the College of Science, effective June 10, 2015, with a salary supplement as provided by the endowment and the eminent scholar match, if available.

June 1, 2015

**ENDOWED PROFESSORSHIP**  
**The John K. Costain Faculty Chair**

The John K. Costain Faculty Chair was established in 2007 by David W. Worthington and Beverly S. Worthington to honor Mr. Worthington's mentor, John K. Costain, Professor Emeritus of Geophysics at Virginia Tech.

Lay Nam Chang, Ph.D., dean of the College of Science, has nominated Professor Timothy Warburton to this endowed position, concurring with the recommendations of the Honorifics Committees of the Department of Mathematics and the College of Science.

Timothy Warburton received bachelor and master of arts degrees in mathematics from Oxford University, and master of science and Ph.D. degrees from Brown University. He has served as a faculty member at Rice University since 2004 and was previously a faculty member at the University of New Mexico. He has served as a consultant for Hypercomp Inc. and the Division of Applied Mathematics at Brown University. He has also served as a visiting researcher at Shell Technology Center in Houston, Texas.

Professor Warburton received the Michael Pearlman Memorial Award in 2011.

Professor Warburton has received more than \$2.8M in research funding. He has numerous publications and has delivered more than 90 invited talks. He has served on several editorial boards and is currently serving as an associate editor of the Society for Industrial and Applied Mathematics Journal on Scientific Computing.

Professor Warburton's research interests are in nodal discontinuous Galerkin methods, high performance computing, and complete radiation boundary conditions. His past and future work will continue to influence these important research areas.

**RECOMMENDATION:**

That Timothy Warburton, Ph.D., be appointed the John K. Costain Faculty Chair, effective August 10, 2015.

June 1, 2015

**ENDOWED FELLOWSHIP**  
**Richard E. Sorensen Junior Faculty Fellowship**

The Richard E. Sorensen Junior Faculty Fellowship was established in 2004 through a gift from Ferguson Enterprises in recognition of dean Richard Sorensen's contributions to the Pamplin College of Business and to the long-standing relationship of the college with Ferguson Enterprises. Dean Sumichrast assembled a search committee for this fellowship in the fall of 2014. With unanimous support, the committee nominated Rajesh Bagchi, Ph.D., associate professor of marketing, for this fellowship. The college Honorifics and Awards Committee endorsed this nomination as did Dean Sumichrast.

Rajesh Bagchi joined the Virginia Tech faculty in 2008 after completing his Ph.D. at the University of Colorado. He was promoted to associate professor in 2012. In a short period, professor Bagchi has assembled an outstanding record of research on consumer processing of numerical information in decision making.

Recognizing his accomplishments, the Marketing Science Institute selected professor Bagchi as a Young Scholar in 2013. Recognition of his research extends beyond academia with media coverage and interviews on several television news outlets including WDBJ and WSLS, newspapers including USA Today and the Boston Globe, and magazines including The Atlantic monthly.

Rajesh Bagchi is an excellent teacher, having received a College Teaching Excellence Award in 2014. At the graduate level, he has chaired or served on eight dissertation committees. His service to the discipline is substantial. He has co-chaired scholarly conference tracks, serves on the editorial review boards of four journals including two of the most recognized journals in the marketing field, and was recognized with the Outstanding Reviewer Award by the Journal of Consumer Research in 2014.

**RECOMMENDATION:**

That Rajesh Bagchi, Ph.D., be appointed to the Richard E. Sorensen Junior Faculty Fellowship, effective August 10, 2015 for a period of three years, with a salary supplement as provided by the endowment and if available, with funds from the eminent scholars match program.

June 1, 2015

## **ENDOWED PROFESSORSHIP Real Estate Professorship**

Beginning in 1984, in an effort to promote teaching and scholarship in the field of real estate, several donors, led by John W. Bates, Jr. '35, contributed funds to the Pamplin College of Business and the Virginia Tech Foundation to establish what is now known as the Real Estate Professorship. Dean Sumichrast assembled a search committee for this professorship in the fall of 2014. With unanimous support, the committee nominated M. Joseph Sirgy, Ph.D., professor of marketing, for this professorship. The College Honorifics and Awards Committee endorsed this nomination as did Dean Sumichrast.

M. Joseph Sirgy joined the Virginia Tech faculty in 1979 after completing his Ph.D. at the University of Massachusetts. He was promoted to associate professor in 1985 and has served as professor in the Department of Marketing since 1991.

He has a distinguished record of research in the areas of quality of life studies and business ethics. He has published over 200 articles, scholarly books and monographs, and book chapters. He has co-authored nine textbooks. His work has been recognized with numerous awards including the Distinguished Scholar Award from the Academy of Marketing Science.

Over the past 15 years, M. Joseph Sirgy, Ph.D., has linked his research program to the area of real estate business, particularly marketing. For example, he has conducted research on the contribution of real estate to consumer quality of life. He has published a textbook on real estate marketing and has taught the core class in real estate marketing for over a decade. He was the recipient of the Virginia Association of Realtors Research Fellow Award in 1999. In sum, M. Joseph Sirgy, Ph. D., is a distinguished scholar fully deserving of this professorship.

### **RECOMMENDATION:**

That M. Joseph Sirgy, Ph.D., be appointed to the Virginia Tech Real Estate Professorship, effective August 10, 2015, with a salary supplement as provided by the endowment and if available, with funds from the eminent scholars match program.

June 1, 2015

## 2015-16 Promotion, Tenure, and Continued Appointment Program

### ACADEMIC AFFAIRS COMMITTEE AND FINANCE AND AUDIT COMMITTEE

April 21, 2015

Traditionally, increases for faculty promoted in the spring are effective at the beginning of the academic year (or in the case of calendar-year faculty, at the beginning of the fiscal year). Consistent with the 2014-15 faculty compensation plan, salary adjustments are proposed at this time for teaching and research faculty who have been promoted in rank during the 2014-15 academic year. The following raises are recommended for promotions to:

Professor	\$7,000
Associate Professor	5,000
Assistant Professor	3,000

There are four non-tenure track clinical faculty ranks beginning with Clinical Instructor. Those clinical faculty members with outstanding performance may be considered for promotion in rank. The following raises are recommended for promotions to:

Clinical Professor	\$7,000
Clinical Associate Professor	5,000
Clinical Assistant Professor	3,000

There are three non-tenure track professor of practice faculty ranks. Instructors may be promoted into the Assistant Professor of Practice rank. Those professor of practice faculty members with outstanding performance may be considered for promotion in rank. The following raises are recommended for promotions to:

Professor of Practice	\$7,000
Associate Professor of Practice	5,000
Assistant Professor of Practice	3,000

Extension faculty are also eligible for promotion in rank. The three ranks for extension faculty are Associate Agent, Agent, and Senior Agent. The following raises are recommended for promotions to:

Senior Agent	\$5,000
Agent	3,000

There are three ranks for faculty on the instructor track: Instructor, Advanced Instructor, and Senior Instructor. The following raises are recommended for promotions to:

Senior Instructor	\$5,000
Advanced Instructor	3,000

### **RECOMMENDATION:**

That the following faculty are recommended for promotion and/or tenure or continued appointment in accordance with the faculty compensation plan.

June 1, 2015

Name	Promoted Rank	Recommended Salary 2015-16	Appt <sup>1</sup>	Increase over 2014-15		Code
				Amount	Percent	
<b>COLLEGE OF AGRICULTURE &amp; LIFE SCIENCES</b>						
Davy, Brenda Mueller	Professor	\$ 130,033	CY	\$ 7,000	5.69	2
Liu, Dongmin	Professor	153,726	CY	7,000	4.77	2
Moeltner, Klaus	Professor	129,338	AY	7,000	5.72	2
Thomason, Wade Everett	Professor	103,605	CY	7,000	7.25	2
Colla'kova', Eva	Associate Professor	102,634	AY	5,000	5.12	3
Mukhopadhyay, Biswarup	Associate Professor	120,024	CY	-	0.00	1
Niewolny, Kimberly Lee	Associate Professor	89,036	CY	5,000	5.95	3
Okumoto, Sakiko	Associate Professor	85,438	AY	5,000	6.22	3
Sample, David J	Associate Professor	101,285	AY	5,000	5.19	3
Senger, Ryan S	Associate Professor	96,380	AY	5,000	5.47	3
Mykerezi, Pavli	Senior Instructor	102,900	CY	5,000	5.11	2
Girmes-Grieco, Nicolin	Advanced Instructor	61,059	AY	3,000	5.17	2
<b>COLLEGE OF ARCHITECTURE &amp; URBAN STUDIES</b>						
Clements, Terry Lynn	Professor	86,135	AY	7,000	8.85	2
Emmons, Paul F	Professor	96,000	AY	7,000	7.87	2
Ahram, Ariel I	Associate Professor	79,160	AY	5,000	6.74	3
Dickerson, Deborah Elspe	Associate Professor	97,000	AY	5,000	5.43	3
Grant, Elizabeth Joyce	Associate Professor	81,300	AY	5,000	6.55	3
Zawistowski, Keith Brian	Associate Professor	64,245	AY	5,000	8.44	2
Zawistowski, Marie	Associate Professor	64,245	AY	5,000	8.44	2
Zhang, Yang	Associate Professor	79,238	AY	5,000	6.74	3
<b>COLLEGE OF BUSINESS</b>						
Sheetz, Steven D	Professor	139,027	AY	7,000	5.30	2
Seref, Onur	Associate Professor	147,193	AY	5,000	3.52	3
Singal, Manisha	Associate Professor	111,852	AY	5,000	4.68	3
Almond, Lynn A	Assistant Professor	71,003	AY	3,000	4.41	2
Easterwood, Cintia M	Advanced Instructor	75,045	AY	3,000	4.16	2
<b>COLLEGE OF ENGINEERING</b>						
Agah, Masoud	Professor	110,312	AY	7,000	6.78	2
Al-Haik, Marwan	Professor	111,248	AY	7,000	6.71	2
Brandon, Thomas L	Professor	112,749	AY	7,000	6.62	2
Camelio, Jaime A.	Professor	185,760	CY	7,000	3.92	2
Davalos, Rafael V	Professor	148,160	CY	7,000	4.96	2
Edwards, Stephen H	Professor	108,663	AY	7,000	6.89	2
Lattimer, Brian Y	Professor	185,051	CY	7,000	3.93	2
Lu, Chang	Professor	176,250	CY	7,000	4.14	2
Lu, Peizhen	Professor	108,920	AY	7,000	6.87	2
Ma, Lin	Professor	113,000	AY	7,000	6.60	2
Murali, T M	Professor	132,281	AY	7,000	5.59	2
Park, Jung-Min	Professor	140,917	CY	7,000	5.23	2
Rajagopalan, Padmavathy	Professor	165,029	AY	7,000	4.43	2
Rodriguez-Marek, Adrian	Professor	109,964	AY	7,000	6.80	2
Stremler, Mark A	Professor	167,472	CY	7,000	4.36	2
Tatar, Deborah Gail	Professor	108,620	AY	7,000	6.89	2
Taylor, John E	Professor	140,151	CY	7,000	5.26	2
VandeVord, Pamela	Professor	128,275	AY	7,000	5.77	2
Xuan, Jianhua	Professor	116,522	AY	7,000	6.39	2
Behkam, Bahareh	Associate Professor	96,282	AY	5,000	5.48	3
Hudait, Mantu K	Associate Professor	102,855	AY	-	0.00	1
Jung, Sunghwan	Associate Professor	98,489	AY	5,000	5.35	3
Seidel, Gary D	Associate Professor	97,720	AY	5,000	5.39	3
Staples, Anne E	Associate Professor	91,104	AY	5,000	5.81	3
Whittington, Abby Rebecc	Associate Professor	94,500	AY	5,000	5.59	3
Lo, Jenny L.	Senior Instructor	69,140	AY	5,000	7.80	2

<sup>1</sup>AY denotes an Academic Year appointment, while CY denotes a Calendar Year appointment.

Name	Promoted Rank	Recommended Salary 2015-16	Appt	Increase over 2014-15		Code
				Amount	Percent	
<b>COLLEGE OF LIBERAL ARTS &amp; HUMAN SCIENCES</b>						
Kiecolt, K Jill	Professor	83,653	AY	7,000	9.13	2
King, Neal M	Professor	82,769	AY	7,000	9.24	2
Bauer, Esther K	Associate Professor	62,573	AY	5,000	8.68	3
Coburn, Melissa Anne	Associate Professor	63,352	AY	5,000	8.57	3
Efird, Robert O	Associate Professor	62,573	AY	5,000	8.68	3
McPherson, Tristram	Associate Professor	71,292	AY	5,000	7.54	3
Moehler, Michael	Associate Professor	72,320	AY	5,000	7.43	3
Schmid, Sonja	Associate Professor	83,750	AY	5,000	6.35	3
Sierra, Sarah	Associate Professor	63,120	AY	5,000	8.60	3
Venkatesh, Vinodh	Associate Professor	69,354	AY	5,000	7.77	3
Vollmer, James M	Associate Professor	69,838	AY	5,000	7.71	3
Combiths, Zana K	Senior Instructor	45,000	AY	5,000	12.50	2
Frost, Serena Deann	Senior Instructor	45,762	AY	5,000	12.27	2
Oakey, Steve	Senior Instructor	46,065	AY	5,000	12.18	2
Stallings, Emily Wilkins	Senior Instructor	55,550	AY	5,000	9.89	2
Aguilar, Derley	Advanced Instructor	48,500	AY	3,000	6.59	2
<b>COLLEGE OF NATURAL RESOURCES AND ENVIRONMENT</b>						
Bond, Brian H	Professor	104,933	CY	7,000	7.15	2
Buehlmann, Urs Kurt	Professor	105,819	CY	7,000	7.08	2
Dolloff, C. Andrew	Professor	-		-		6
McGee, John A	Professor	88,939	AY	7,000	8.54	2
Holliday, Jason A	Associate Professor	83,883	AY	5,000	6.34	3
Jones, Jess Walter	Associate Professor	-		-		6
Strahm, Brian Dale	Associate Professor	85,403	AY	5,000	6.22	3
<b>COLLEGE OF SCIENCE</b>						
Huber, Patrick	Professor	98,700	AY	7,000	7.63	2
Moore, Ignacio T	Professor	92,500	AY	7,000	8.19	2
Sharpe, Eric R	Professor	89,700	AY	7,000	8.46	2
Bahel, Eric A	Associate Professor	100,500	AY	5,000	5.24	3
Ciupe, Mihaela Stanca	Associate Professor	87,500	AY	5,000	6.06	3
House, Leanna L	Associate Professor	99,500	AY	5,000	5.29	3
Mihalcea, Constantin Leo	Associate Professor	86,000	AY	5,000	6.17	3
Scharf, Birgit	Associate Professor	81,000	AY	5,000	6.58	3
Gebremariam, Gebremeskel	Advanced Instructor	68,500	AY	3,000	4.58	2
Hurdus, Jessica Michelle	Advanced Instructor	48,452	AY	3,000	6.60	2
Save'ev, Evgeny	Advanced Instructor	45,502	AY	3,000	7.06	2
<b>COLLEGE OF VETERINARY MEDICINE</b>						
Zajac, Anne M	Professor	114,036	CY	7,000	6.54	2
<b>LIBRARIES</b>						
Bailey, Annette F	Associate Professor	73,340	CY	5,000	7.32	2
Miller, Rebecca K.	Associate Professor	73,173	CY	5,000	7.33	5
Dietz, Kira A	Assistant Professor	51,760	CY	0	0.00	4
Nardine, Jennifer Talbot	Assistant Professor	54,441	CY	0	0.00	4
<b>VICE PRESIDENT FOR RESEARCH</b>						
LaConte, Stephen Michael	Associate Professor	166,507	CY	5,000	3.10	3

Name	Promoted Rank	Recommended Salary 2015-16	Appt <sup>1</sup>	Increase over 2014-15		Code
				Amount	Percent	
<b>VIRGINIA COOPERATIVE EXTENSION</b>						
Alstat, Kathryn Marie	Senior Agent	61,464	CY	5,000	8.86	2
Jones, Bruce G	Senior Agent	66,504	CY	5,000	8.13	2
Booher, Dara Elizabeth	Agent	45,665	CY	3,000	7.03	2
Furgurson, Sonya Douthat	Agent	56,095	CY	3,000	5.65	2
Ligon, Jennifer Marie	Agent	48,645	CY	3,000	6.57	2
Mize, Timothy Allen	Agent	62,028	CY	3,000	5.08	2
Morris, Reginald B	Agent	51,395	CY	3,000	6.20	2
Strong, Kathryn Alice	Agent	54,195	CY	3,000	5.86	2
Totten, Tadashi Christop	Agent	46,651	CY	3,000	6.87	2
<b>Promotion and Tenure Adjustments</b>				<b>512,000</b>		

### Summary of Promotion and Tenure Adjustments

Promoted Rank	Increase	Number of Adjustments	Total Amount
Agent	\$ 3,000	7	\$ 21,000
Senior Agent	5,000	2	10,000
Assistant Professor	3,000	1	3,000
Associate Professor	5,000	37	185,000
Professor	7,000	35	245,000
Advanced Instructor	3,000	6	18,000
Senior Instructor	5,000	6	30,000
<b>Total Promotion and Tenure Adjustments</b>		<b>94</b>	<b>512,000</b>
<b>Associated Fringe Benefit Costs*</b>			<b>126,822</b>
<b>TOTAL COST OF PROMOTION AND TENURE ADJUSTMENTS</b>			<b>\$ 638,822</b>

#### Code:

- 1: Tenure
- 2: Promotion
- 3: Promotion with Tenure
- 4: Continued Appointment
- 5: Promotion and Continued Appointment
- 6: Promotion and Tenure for Federal Employee

\*Based upon university-wide average variable fringe benefit rate. Actual results may vary slightly depending upon specific employee attributes.

## Faculty Personnel Changes Report

### ACADEMIC AFFAIRS COMMITTEE AND FINANCE AND AUDIT COMMITTEE

**Quarter ending March 31, 2015**

The Faculty Personnel Changes Report includes new appointments and adjustments in salaries for the general faculty, including teaching and research faculty in the colleges, and for administrative and professional faculty that support the university including the library, extension, academic support, athletics, and administration. The report is organized by senior management area (college or vice presidential area).

Since the last Board meeting, the university has made the following faculty personnel appointments and salary adjustments:

Teaching and Research Faculty	
New Appointments with Tenure or Continued Appointment	6
New Appointments to Tenure-Track or Continued Appointment-Track	20
New Appointments to Non-Tenure Track	0
Adjustments in Salary	4
Administrative and Professional Faculty	
New Appointments	9
Adjustments in Salary	46
One-time payments	3
One-time payments for Post-Season Sports Events	0

### **RECOMMENDATION:**

That the Board ratify the Faculty Personnel Changes Report

June 1, 2015

## FACULTY PERSONNEL CHANGES

June 1, 2015

### TEACHING AND RESEARCH FACULTY NEW APPOINTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Agriculture &amp; Life Sciences</u>								
Isengildina-Massa, Olga	Associate Professor - Tenured	Agriculture & Applied Economics	Reg	9	10-Aug-15	100	\$	120,000
Mountain, Travis	Assistant Professor	Agriculture & Applied Economics	Reg	9	10-Aug-15	100	\$	81,000
<u>Architecture &amp; Urban Studies</u>								
Schenk, Todd	Assistant Professor	Architecture and Urban Studies	Reg	9	10-Aug-15	100	\$	72,000
Skuzinski, Thomas	Assistant Professor	Architecture and Urban Studies	Reg	9	10-Aug-15	100	\$	71,500
<u>Business</u>								
Cobabe, Matthew	Assistant Professor	Accounting & Information Systems	Reg	9	10-Aug-15	100	\$	200,000
Godsell, David	Assistant Professor	Accounting & Information Systems	Reg	9	10-Aug-15	100	\$	200,000
Hayne, Christie	Assistant Professor	Accounting & Information Systems	Reg	9	10-Aug-15	100	\$	200,000
<u>Engineering</u>								
Flint, Madeleine	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-15	100	\$	90,000
Hebdon, Matthew	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-15	100	\$	88,000
Jazizadeh Karimi, Farrokh	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-15	100	\$	88,000
Johnson, Blake	Assistant Professor	Industrial & Systems Engineering	Reg	9	10-Aug-15	100	\$	90,000
Kelliher, Aisling	Associate Professor - Tenured	Computer Science	Reg	9	1-Sep-15	100	\$	115,000
Queen, Robin	Associate Professor	Biomedical Engineering & Mechanics	Reg	9	10-Aug-15	100	\$	88,000
Shealy, Tripp	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-15	100	\$	88,000
Wang, Vincent	Associate Professor - Tenured	Biomedical Engineering & Mechanics	Reg	9	10-Aug-15	100	\$	120,000
Wang, Zhiwu	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-15	100	\$	90,000
<u>Liberal Arts and Human Sciences</u>								
Avey, Paul	Assistant Professor	Political Science	Reg	9	10-Aug-15	100	\$	58,000
Genest, Gabriel	Assistant Professor	Political Science	Reg	9	10-Aug-15	100	\$	60,000
Hester, Rebecca	Assistant Professor	Science & Technology in Society	Reg	9	10-Aug-15	100	\$	60,000
Reed, Ashley	Assistant Professor	English	Reg	9	10-Aug-15	100	\$	58,000
Serna, Gabriel	Assistant Professor	School of Education	Reg	9	10-Aug-15	100	\$	69,000
Smith, Stephanie	Assistant Professor	Communication	Reg	9	10-Aug-15	100	\$	60,000
<u>Science</u>								
Fricker, Ronald	Professor - Tenured	Statistics	Reg	12	25-Jun-15	100	\$	189,000
Liu, Honghu	Assistant Professor	Mathematics	Reg	9	10-Aug-15	100	\$	70,000
Sontheimer, Harald	Professor - Tenured	Biological Sciences	Reg	12	10-Jun-15	100	\$	465,000
Warburton, Timothy	Professor - Tenured	Mathematics	Reg	9	10-Aug-15	100	\$	170,000

**TEACHING AND RESEARCH FACULTY*****ADJUSTMENTS***

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME

Agriculture & Life Sciences

McDuffie, Robert	Associate Professor	Horticulture	Reg	9	10-Jan-15	100	\$	88,842
Scherer, Hannah	Assistant Professor	Ag, Leadership and Community Education	Reg	9	10-Jan-15	100	\$	77,250

Engineering

Williams, Christopher	Associate Professor	Mechanical Engineering	Reg	9	10-Jan-15	100	\$	121,761
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Vice President for Research

Dean, Dennis	Professor	Fralin Life Science Institute	Reg	12	25-Jan-15	100	\$	320,400
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**ADMINISTRATIVE AND PROFESSIONAL FACULTY*****NEW APPOINTMENTS***

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Dean of Libraries</u>								
French, Amanda	Director, Research and Informatics - Library Continued Appointment		Reg	12	22-Apr-15	100	\$	80,000
<u>President</u>								
Burden, Zohn	Assistant Football Coach	Athletics	Reg	12	2-Feb-15	100	\$	185,500
Connolly, Ryan	Assistant Baseball Coach	Athletics	Reg	12	12-Jan-15	100	\$	78,000
Gwilliam, Ford Matthew	Assistant Coach, Women's Soccer	Athletics	Reg	12	20-Mar-15	100	\$	54,300
Jones, Kevin	Assistant Athletic Director for Special Projects and Design	Athletics	Reg	12	25-Feb-15	100	\$	60,000
<u>Senior Vice President &amp; Provost</u>								
Rikakis, Thanassis	Executive Vice President and Provost - Tenured	Executive Vice President and Provost	Reg	12	16-Aug-15	100	\$	400,000
<u>Vice President for Administration</u>								
Kates, Angela	Chief of Staff, Administrative Services	Vice President for Administration	Reg	12	1-Feb-15	100	\$	130,000
<u>Vice President for Development &amp; University Relations</u>								
Phlegar, Charles	Vice President for Advancement	Vice President for Development & University Relations	Reg	12	1-Jul-15	100	\$	635,000
<u>Vice President for Outreach and International Affairs</u>								
Crowder, L. Van	Executive Director and Professor - Tenured	Office of International Research, Education, and Development	Reg	12	10-Aug-15	100	\$	145,000

**ADMINISTRATIVE AND PROFESSIONAL FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Agriculture &amp; Life Sciences</u>								
Eigel, Bethany	Extension Agent	Chesterfield Cooperative Extension	Reg	12	10-Feb-15	100	\$ 53,434	
Schwarz, Michael	Director	Virginia Seafood AREC	Reg	12	10-Jan-15	100	\$ 150,000	
<u>Business</u>								
Africa, Emily	Associate Director of Recruiting	Dean of Business	Reg	12	10-Feb-15	100	\$ 53,561	
Mease, Stuart	Executive Director of Student Advancement and Career Services	Dean of Business	Reg	12	10-Feb-15	100	\$ 120,000	
<u>Dean of Libraries</u>								
Klein, Christopher	Web Applications Developer	University Libraries	Reg	12	10-Mar-15	100	\$ 48,000	
Serra, Adrienne	Technical Archivist	University Libraries	Reg	12	25-Jan-15	100	\$ 46,000	
<u>Engineering</u>								
Lesko, John	Associate Dean	Dean - Engineering	Reg	12	25-Mar-15	100	\$ 195,000	
<u>President</u>								
Babcock, Bradley Whitney	Athletics Director	Athletics	Reg	12	1-Jan-15	100	\$ 493,500	
Beamer, Shane	Associate Head Football Coach	Athletics	Reg	12	1-Jan-15	100	\$ 252,810	
Beamer, Frank	Head Football Coach	Athletics	Reg	12	1-Jan-15	100	\$ 315,253	
Brizendine, Michael	Head Coach, Men's Soccer	Athletics	Reg	12	1-Mar-15	100	\$ 71,000	
Brown, Cornell	Assistant Football Coach	Athletics	Reg	12	1-Jan-15	100	\$ 252,810	
Foster, Robert	Defensive Coordinator	Athletics	Reg	12	1-Jan-15	100	\$ 600,000	
Gentry, R. Michael	Associate Athletic Director for Athletic Performance	Athletics	Reg	12	1-Jan-15	100	\$ 199,260	
Gray, Torrian	Assistant Football Coach	Athletics	Reg	12	1-Jan-15	100	\$ 275,600	
Kopp, Andrew	Associate Head Coach, Women's	Athletics	Reg	12	1-Mar-15	100	\$ 61,000	
Loeffler, Scot	Offensive Coordinator	Athletics	Reg	12	1-Jan-15	100	\$ 424,000	
Moorehead, Aaron	Assistant Football Coach	Athletics	Reg	12	1-Jan-15	100	\$ 185,500	
					10-Jan-15	100		\$ 50,000
Riley, Christopher	Head Volleyball Coach	Athletics	Reg	12	1-Mar-15	100	\$ 87,500	

continued

**ADMINISTRATIVE AND PROFESSIONAL FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Sands, Timothy	President	President	Reg	12	1-Jun-15	100	\$	180,000
					1-Jun-15	100	\$	25,000
					1-Jun-15	100		*
Searles, Stacy	Assistant Football Coach	Athletics	Reg	12	1-Jan-15	100	\$	280,900
Stinespring, Bryan	Assistant Football Coach	Athletics	Reg	12	1-Jan-15	100	\$	337,080
Wiles, Charles	Assistant Football Coach	Athletics	Reg	12	1-Jan-15	100	\$	308,990
Wolff, Dennis	Head Women's Basketball Coach	Athletics	Reg	12	22-Mar-15	100	\$	283,775
Woodard, Robert	Assistant Baseball Coach	Athletics	Reg	12	10-Jan-15	100	\$	92,700
<u>Senior Vice President &amp; Provost</u>								
Armstrong, Sarah	Senior Associate Director	Student Athlete Academic Support Services	Reg	12	16-Feb-15	100	\$	67,500
Dean, Wanda	Vice Provost for Enrollment & Degree Management	Provost Office	Reg	12	10-Jan-15	100	\$	200,000
Hertweck, Bryan	BIT Manager	Provost Office	Reg	12	25-Mar-15	100	\$	65,000
Lusk, Danielle	Associate Director for Professional Development	CIDER	Reg	12	10-Mar-15	100	\$	75,000
Schweighart, Matthew	Senior Financial Aid Banner Operations Analyst	Scholarships and Financial Aid	Reg	12	25-Mar-15	100	\$	45,000
Swanhart, Michael	Associate Director	Student Athlete Academic Support Services	Reg	12	16-Feb-15	100	\$	55,000
<u>Vice President for Administration</u>								
Judy, Aaron	Computer Support Systems Administrator	IT for Administrative Services	Reg	12	10-Mar-15	100	\$	48,967
Nichols, Byron	Senior Associate Director of Utilities	Facilities Services Power Plant Operations	Reg	12	25-Jan-15	100	\$	109,418
Petry, Catherine	Director, HR Support Services	Human Resources	Reg	12	25-Mar-15	100	\$	74,784
Robinson, Dale	Assistant Director for Training, Education and Outreach	Human Resources	Reg	12	2-Mar-15	100	\$	73,000
Wilkes, Lisa	Assistant Vice President for Business Services	Business Services	Reg	12	25-Jan-15	100	\$	200,588

\*The Board will revisit this action at their next meeting

continued

**ADMINISTRATIVE AND PROFESSIONAL FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Vice President for Development &amp; University Relations</u>								
Martin, Karina	Director of Gift Accounting and Information Systems	University Development	Reg	12	10-Feb-15	100	\$	101,750
Price, Wynoka	Director of Business Operations	University Development	Reg	12	10-Feb-15	100	\$	83,081
Smythers, Robert	Interim Director of Gift Planning	University Development	Reg	12	17-Mar-15	100	\$	109,834
<u>Vice President for Information Technology</u>								
Anderson, Michael	Manager, Secure Information Exchange Services	IT Management	Reg	12	9-Feb-15	100	\$	83,000
Ransbottom, Jeffrey	Chief of Staff and Deputy Chief Information Officer	IT Management	Reg	12	1-Mar-15	100	\$	120,000
<u>Vice President for Research</u>								
Robinson, Rachel	Director, Creative and Media Relations	Virginia Bioinformatics Institute	Reg	12	25-Mar-15	100	\$	62,000
Tranter, Elizabeth	Associate Vice President for Research Planning	Research/Interdisc Program Administration	Reg	12	25-Mar-15	100	\$	135,000
<u>Vice President for Student Affairs</u>								
Baker, Suzanne	Interim Director of Cranwell International Center	Cranwell International Center	Reg	12	25-Jan-15	100	\$	54,232
Bylenga, Kathryn	Assistant Director of Student Conduct	Office of Student Conduct	Reg	12	10-Jan-15	100	\$	44,944
Jimenez-Gordon, Nannette	Associate Director of Student Conduct	Office of Student Conduct	Reg	12	10-Jan-15	100	\$	53,476

**Undergraduate Student Constituency Report**  
Virginia Tech Board of Visitors  
Austin Larrowe – Undergraduate Student Representative  
May 31, 2015

Good afternoon Rector Petrine, President Sands, distinguished members of the Board, administration, and guests. I am shocked that my year with you has come and went by so quickly, and am honored to be able to report to you for the last time, as a proud alumni of this great university.

First, having had the wonderful opportunity to serve on the search committee for both the Executive Vice-President and Provost, and for the Vice-President for Advancement, I would like to enthusiastically welcome Dr. Thanassis Rikakis and Mr. Charles Phlegar to Virginia Tech. I am fully confident that Virginia Tech's future is in excellent hands and that both of them will be swiftly welcomed into the Blacksburg community.

The time since our last meeting has been very busy for undergraduate students. Students participated in the Big Event, International Street Fair, sorority and fraternity initiation ceremonies, and the Largest Collegiate Relay for Life event in the country where over 6,000 participants rose over 516,000 dollars this year.

Another exciting point is that the 86 Inclusive VT initiatives have also been released for public viewing and created significant dialogue between students, faculty, staff, and administrators on how we can synergistically work together to increase diversity and inclusion efforts at Virginia Tech and as heard earlier, increased diversity in applications and acceptances is very encouraging for our future, but we still have work to do.

I would also like to express a special thank you to all who participated in the spring commencement ceremony where thousands of Hokies were welcomed into alumni status. It was an exceptional event to celebrate the innovative, passionate, and driven students that Virginia Tech has prepared for the future.

Before the official end of my term on June 30th, I will be sending out a detailed report of topics and conversations that students are having for the Board of Visitors to consider for the future. Some of these topics are early alumni engagement, potential structural changes that may help support the student representatives to the Board's ability to better represent students, and the energy and student support behind creating a new service cornerstone program with both domestic and international foci, a Ut Prosim Symposium, if you will, for Virginia Tech that could greatly improve the connections between academic disciplines, student life, a focus on global issues, and service.

Lastly, I would also like to officially introduce Morgan Sykes, the incoming undergraduate representative, who will begin her term on July 1st. She is pursuing a degree in History with a minor in Psychology in preparation for entering into an elementary education masters program. She is the Co-Founder and President of the Kappa Delta Pi at Virginia Tech, which is an internationally recognized honor society for future educators. She has

been a Hokie Ambassador and Hokie Camp Counselor, a member of the Kappa Delta Sorority, has presented at numerous research conferences across the country, and is well-known and trusted across campus.

Clearly, Morgan is extremely accomplished. After having worked with her since her selection at the last Board of Visitors meeting, I have no doubt that she will represent the undergraduate student population next year in a fantastic manner.

Serving as the Undergraduate Representative to the Board of Visitors has truly been one of the most enriching and rewarding experiences of my college experience and I am so very thankful for having had the opportunity.

With this being said, thank you all for your dedication to Virginia Tech and keep making this incredible community even better!

Thank you,

Austin

**Graduate Student Constituency Report**  
Virginia Tech Board of Visitors  
Ashley Francis – Graduate Student Representative  
May 31, 2015

Good afternoon Rector Petrine, members of the Board, President Sands, administrators and guests. I can't believe the time has already come to give my last report on behalf of the graduate student body. I have thoroughly enjoyed my time serving on the board with you all and I know that my successor will do a fantastic job.

President Sands, thank you for appointing me to serve on the search committee for our incoming Executive Vice President and Provost. I know that our university will be in great hands and I look forward to hearing about the amazing things you and Dr. Rikakis will accomplish together. Students were very thankful to be involved in the process, and I Austin and I were very pleased with the turnout for lunches with prospective candidates. While we are excited to welcome Dr. Rikakis to campus, Dr. McNamee, you will absolutely be missed. Thank you so much for your 14 years of service. You have helped to transform Virginia Tech into the amazing institution it is today. We wish you the best as you journey to Boston.

I want to take this opportunity to update you all on two things: parking and comprehensive fees. The pilot parking-program for graduate assistants, GTAs, and GRAs is still on track for implementation in August. Currently, logistics are being arranged to ensure successful implementation. Additionally, the proposal that graduate students brought forth is going to be used as a model for a pilot program for staff and the Corps of Cadets as well. All programs will be managed by lottery systems and implemented this coming fall.

The Bursar's Office has completed a revision of the description of comprehensive fees on their website and University Relations is still working on a supplemental PowerPoint. I am currently looking over revisions and working with students to make sure they feel the language is explicit and comprehensive.

I would now like to take a moment to introduce you to Mohammed Seyam, the incoming graduate student representative. Mohammed is currently a doctoral student in computer science from the College of Engineering. He earned a master's degree in Information Systems from Cairo University in Egypt. You may have seen Mohammed in Richmond as he represented our university at Hokie Day this past year. Mohammed is very involved on campus and well known within the graduate community. He serves, as a global ambassador where he helps to welcome new international students to Tech. He is a member of the computer science graduate council and the Center for the Arts International Advisory Board. He truly embodies our universities motto – that I may serve – as he recently helped to plan the very successful Islamic Worlds Festival that occurred in April. Mohammed recently traveled to the OpenCon conference in Washington, DC and is very interested in open access issues and how they impact students here at Tech. He also plans to continue working on the ever-present issues of health insurance, childcare, and housing during his

appointment. I know that he and Morgan will represent their constituencies well and wish them both the best for the coming year.

In closing, thank you all for your hard work this year. I have thoroughly enjoyed working with each of you and it has been an absolute honor to represent the amazing graduate students we have here. Congratulations to all of the recent graduates, I wish you the best in your future endeavors, wherever they may take you. Lastly, thank you members of the board, for allowing me this once in a lifetime opportunity. This year has been transformational. Thank you.

Staff Senate Constituency Report  
Virginia Tech Board of Visitors  
May 31, 2015  
Presented by Dan Cook, Staff Senate President

Rector Petrine, members of the Board of Visitors, President Sands, administrators and distinguished guests: I would like to thank you for this opportunity to speak with you about what has been happening in the recent months in regard to Virginia Tech's staff.

It has been a short time since our last meeting, but the staff here at Virginia Tech has been very busy. Although the summer months are upon us, there are many things still yet to be done. This is the time of year when many staff members are gearing up to get work done that can only be done with a minimum amount of students on campus.

The Staff Senate meetings included presentations from Ms. Claudia Cornwell, the Leave Programs Supervisor as well as Ms. Becky Morris, Insurance Coordinator, both from Human Resources. The topics presented were the upcoming new Leave Reporting system that will begin a phased roll out in July, as well as the changes to our Health Insurance and Open Enrollment. In the upcoming month we will enjoy a lively presentation from Dr. Ellen Plummer, the Associate Vice Provost for Academic Administration. She will be presenting on Shared Governance and her presentation is slotted to coincide with "bring a colleague" to Staff Senate. This is in hopes of getting the word out about what we do and how we do it, as well as raising awareness of the Staff Senate. Later we will have someone from the ITSO speak to our group about the ever-present dangers of phishing. This has caused some issues recently within several departments and we hope to get some much-needed information out.

On April 27<sup>th</sup> we hosted the annual McComas Leadership Seminar. Over 200 staff members attended this event from across the campus; in fact the registration met its maximum very quickly and a wait list was started. This was a day event that saw our own President Sands as the keynote speaker. Several other speakers followed, addressing the theme of "Leading Through Change". Some of the topics included: "Building a House for Diversity", "Emotional Intelligence", "Leading Change" and others. The seminar was very well received, and work has already begun for next year's session.

Our thanks go out to the President's Office and the Department of Human Resources for once again hosting the Staff Appreciation Day festivities. For over 20 years this has been an event that the staff looks forward to each May. This seemed to be well attended and there was an abundance of things to do and see. There were tours, activities, classes, safety and health screenings and lots of great food. On a personal

note, I would like to express my gratitude for bringing back the hamburgers! It was a great day, with perfect weather. It was a wonderful time for the staff to get together and catch up with old friends and perhaps make a few new ones. There were approximately 2000 meals served, and once it was over there were 130 pounds of plastic bottles and cans recycled, and 2500 pounds of compost added to the sustainability efforts.

As an update to the competition between the Faculty and Staff Senates I spoke of in the last meeting; if you recall this is to help get information out on the "Employee's Spouse and Dependent Scholarship", and hopefully make a positive impact on the fundraising that the Office of Annual Giving does each year. An email received last Friday has the Faculty Senate with a slight lead. We should have a better idea of our overall impact once we get a few more weeks into it, but for now the number is up by 14 gifts and over \$500 (compared to same time last year) for total of over \$7200 raised so far. The competition will run until the 30<sup>th</sup> of June.

I appreciate the opportunity to speak to the Board on behalf of the staff of Virginia Tech and welcome any questions or comments that you may have.

Respectfully submitted,  
Dan Cook  
President, Staff Senate

## **Faculty Constituency Report Virginia Tech Board of Visitors**

**May 31, 2015**

**Rami Dalloul and Bernice Hausman, Faculty Senate Officers**

Good afternoon Rector Petrine, President Sands, Provost McNamee, members of the Board of Visitors, and distinguished guests. As you know, Bernice Hausman is not available to attend this Board of Visitors meeting; we composed this report from the faculty together.

The Faculty Senate has had a busy year. This report from the faculty touches briefly on the many issues that have come before the Faculty Senate and governance bodies this year, and suggests some areas that will be addressed next year.

### **A. The Year in Review**

General Education—The Faculty Senate was pleased to participate through governance in the general education revision that was passed by University Council in April. In a compromise, the proposal was adapted to address faculty concerns about outcomes and indicators in a number of areas, including ethics. In addition, there was acknowledgment of the difficulty of integrating ethics and/or intercultural and global education across the entire general education curriculum, and this difficulty will be explored through the development of an implementation process. The Faculty Senate looks forward to working with the UCCE on the implementation plan for the Pathways curriculum next year.

Salary—The faculty are pleased that there has been movement on the salary issue, and look forward to the development of a plan that will, over the course of the next few years, move faculty salaries into the mid-range of our peers as outlined by Mr. Dwight Shelton. We recognize that salary increases must be negotiated in the context of many pressing budget needs, including the desire to maintain limited tuition increases, but we believe that lower salaries hurt the institution overall and compromising quality may be more expensive in the end.

Governance—The faculty look forward to continued conversations about faculty participation in governance. As we bring a new vice president for research and innovation, we hope to open conversations about the appropriate involvement of the growing number of research faculty in governance. In addition, we want to open conversations about the voices of restricted and part-time faculty in governance. During the summer, the Faculty Senate officers will be engaging in conversations about governance with various constituencies.

This year the Faculty Senate made a concerted effort to be more engaged and responsive to resolutions and issues moving through governance and will continue to do so as Virginia Tech moves forward with envisioning its future. In March, we conducted a brief survey of faculty views of shared governance at Virginia Tech. Our survey indicated that the vast majority of faculty are in favor of a more robust faculty role in governance concerning faculty and academic affairs. The

Faculty Senate will harness the energy of faculty who seek a more integral role in governance in working with the president, the new provost, and the rest of the university community in engaging with the president's visioning initiative.

Grievance procedures—The Faculty Senate president charged a task force to consider restructuring the Reconciliation, Review, and Ethics committees of the Faculty Senate, which are responsible for addressing faculty grievances, faculty relations with supervisors, and charges of ethical misconduct. These processes and the committees that oversee them are in need of revision, and the task force made a recommendation for change. One option is to potentially establish an ombuds office that would coordinate grievance and ethics panels, as well as advise faculty of options available in cases where mediation is necessary and provide consultation as appropriate. The Commission on Faculty Affairs will be considering these issues with the Faculty Senate in the fall.

## **B. Issues to Address in the Coming Year**

Institutes—Teaching and research faculty continue to be concerned about the integration of the research institutes on campus, especially as the number of research faculty grow in relation to other categories of faculty. The T and R faculty indicate that there can be undue competition for grant funding and other resources with research faculty in institutes, which can make some activities necessary for T and R faculty to accomplish before tenure difficult.

Faculty time—As the president's visioning initiative takes off next year, we want to think about how faculty time is apportioned between the various missions of the university, and how to best support faculty work in the context of varying and time-intensive demands. The faculty have made it clear that in the past few years there has been significant downloading onto the faculty of administrative tasks that used to be taken care of by others. Time Clock is one example; the online travel approval system is another. These examples demonstrate that the shift toward computerized systems may involve significant efficiencies at some levels that do not account for increased workload at others.

Base budgets—Departmental budgets have remained flat for so long that they are effectively diminished compared to years ago, while demands on faculty have increased. The Faculty Senate believes that many concerns of faculty on a number of fronts could be addressed with more robust base budgets. The Faculty Senate hopes to engage in productive dialogue about this issue with appropriate administrators next year.

## **C. Advancing Virginia Tech**

The Faculty Senate looks forward to the coming academic year. The institution will have a new administration in many areas—Research, the Provost's Office, Advancement and University Relations, and Inclusion and Diversity. These changes herald the growth of the university and its promise of moving into the future on a singular trajectory. We appreciate the opportunity to have a representative to the Board of Visitors and look forward to our continued work together.