#### Virginia Tech Board of Visitors Meeting September 10-11, 2017

#### Information Session

#### Minutes

- A. Minutes: Academic, Research, and Student Affairs Committee
- B. Minutes: Buildings and Grounds Committee
- C. Minutes: Compliance, Audit, and Risk Committee
- D. Minutes: Finance and Resource Management Committee
- E. Minutes: Governance and Administration Committee
- F. Resolution: Approval to Ratify Changes to the 2017-18 Faculty Handbook
- G. Resolution: Approval of Amendment for Atmos Gas Line Easements to Serve the Virginia Tech Base
- H. Resolution: Approval of Atmos Gas Line Extension Easement to the Virginia Tech Rector Field House
- I. Resolution: Approval of Update to the Capital Construction Delivery Method Approval Process
- J. Resolution: Approval to Revise #12005 Policy on Commemorative Tributes
- K. Form: ACC Governing Board Certification
- L. Report: Research and Development Disclosures
- M. Resolution: Approval Supporting Amendment of Chapter 638 Virginia Acts of Assembly Relating to the New River Valley Emergency Communications Authority
- N. Resolution: Approval of Carilion Research Institute Biosciences Addition in Accordance with Public-Private Education Facilities and Infrastructure Act (PPEA) Comprehensive Agreement
- O. Resolution: Approval of Year-to-Date Financial Performance Report (July 1, 2016 June 30, 2017)
- P. Resolution: Approval of Virginia Tech Carilion Research Institute Biosciences Addition 9(d) Financing Resolution
- Q. Resolution: Approval of Capital Lease for Applied Projects Building in the Corporate Research Center
- R. Resolution: Approval of Capital Lease for Virginia Tech Transportation Institute Intern Park Facility
- S. Resolution: Approval of Dietrick First Floor and Plaza Renovation Project
- T. Resolution: In Appreciation Honoring James L. Chapman
- U. Resolution: In Appreciation Honoring J. Thomas Ryan
- V. Resolution: In Appreciation Honoring Steve Sturgis
- W. Report: President's Report
- X. Resolution: Naming of University Facilities (2)

- Y. Resolution: Approval of Emeritus Requests (17)
- Z. Resolution: Approval of Endowed Chairs, Professorships, and Fellowships (1)
- AA. Resolution: Approval of Exception to the Conflict of Interests Act (1)
- BB. Resolution: Ratification of the Personnel Changes Report
- CC. Report: Constituent Reports

#### Virginia Tech Board of Visitors Meeting

#### **Information Session**

Sunday, September 10, 2017 1:00 - 2:15 p.m.

The Inn—Smithfield Room Virginia Tech Campus

#### 1:00 – 1:30 p.m. Beyond Boundaries and Inclusion and Diversity Updates

- Dr. Timothy D. Sands, President
- Dr. Menah Pratt-Clarke, Vice Provost for Inclusion and Diversity and Vice President for Strategic Affairs

#### 1:30 - 1:50 p.m. **Branding Update**

 Ms. Tracy Vosburgh, Senior Associate Vice President for University Relations

#### 1:50 – 2:15 p.m. Constituent Reports – (No action required)

- Mr. Seyi Olusina, Undergraduate Student Representative to the Board
- Mr. Brett Netto, Graduate Student Representative to the Board
- Mr. Robert Sebek, Staff Representative to the Board
- Dr. Hans Robinson, Faculty Representative to the Board

## Beyond Boundaries

**Update & Next Steps** 

September 2017 Meeting of the Board of Visitors

#### Progress to Date

- Envisioning Virginia Tech Beyond Boundaries began in 2015 as the visioning phase intended to underpin the next strategic plan following A Plan for a New Horizon 2012-2018.
- Beyond Boundaries envisioned Virginia Tech 30 years out, accounting for long-term trends in the higher ed environment, and setting an overarching aspiration to become a top-100 global university in the spirit of an engaged land-grant institution.
- Major themes emerging include:
  - VT-Shaped Student Experience
  - Destination Areas (Communities of Discovery at scale, leveraging VT strengths)
  - Deep Partnerships across VA and beyond (being where the targeted activity is)
  - Diversification of resources, data-informed decisions and efficiencies of scale
  - InclusiveVT

#### **STAKEHOLDERS**

- Students
- Faculty
- Industry & Employers
- Leadership and Staff
- Local Communities
- Alumni and Donors
- Partners/Funders
- Federal and State Government

#### BEYOND BOUNDARIES

A VISION FOR THE FUTURE
OF VIRGINIA TECH
AS A GLOBAL LAND-GRANT
UNIVERSITY

#### **PLACES**

- Blacksburg –District and Communities
- Roanoke VTC Health Sciences and Technology Campus in the Roanoke Innovation Corridor
- National Capital Region (NCR)
- Agricultural Research and Extension Centers
- The Commonwealth, the Nation and the World

#### **INITIATIVES**

- Destination Areas
- InclusiveVT
- VT-Shaped Experience
- VA Agriculture & Natural Resources Consortium
- Innovation Ecosystem
- Honors College
- Business Engagement Center

#### **METHODS & TOOLS**

- Data-Informed Decision Making
- Strategic Alignments and Planning
- Research Revenue Model
- Talent-Focused Realignment of HR
- Advancement Model
- Partnership for Incentive-Based Budget
- Master Plan

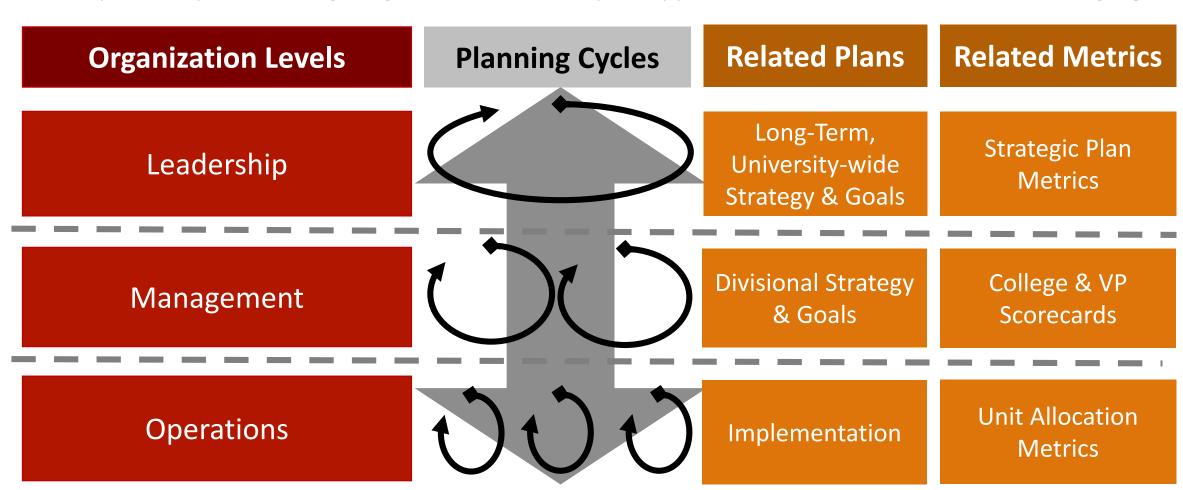


#### Moving into Planning and Implementation

- Already Launched:
  - InclusiveVT
  - Destination Areas and emergent Strategic Growth Areas
  - Pathways for General Education
  - Experiential Learning planning and coordination committee
  - NCR working groups
  - VTC planning for the next phase
  - Partnership for an Incentive-Based Budget (PIBB)
  - Unit and College level continuous planning
- Launching:
  - Unit level InclusiveVT planning to be integrated with unit-level continuous planning
  - University-level goal-setting, metrics development and continuous planning
- Future (through November 2018):
  - Reconcile objectives and planning at the university level with college/VP-level

## Coupled Multi-level Planning and Data-Informed Budgeting (PIBB)

PIBB replaces top-down budgeting with accountability for application of resources to achieve strategic goals



#### Office of Strategic Affairs

Led by VP for Strategic Affairs, Dr. Menah Pratt-Clarke, this office will:

- Coordinate university-level strategic planning based on Beyond Boundaries
  - Key goals and Objectives
  - Metrics
  - Assessment
- Work with the Office of the Provost (Ken Smith lead) to align university and academic unit plans, objectives and metrics
- Integrate Diversity Strategic Plans with university level plan
- Assist units across the university in the development of strategic plans and connections of unit plans to University plan

#### Timeline

- Summer and Fall 2017
  - Fill positions in data and communications in coordination with existing university and provost offices
  - Review Beyond Boundaries concept papers
  - Review academic unit evolving plans, strategies, goals and metrics
  - Develop draft university strategic plan concept and university level metrics
- Spring 2018
  - University-wide discussion about strategic plan
- Summer 2018
  - Finalize plan and continuous planning process
- Fall 2018
  - Roll-out

#### Deliverables to the BOV

- Preliminary university-level dashboard metrics for discussion partial list (Nov17)
- Strategic Plan and dashboard (Nov18)
- Brief updates on Beyond Boundaries each BOV meeting (except Nov)
- Annual comprehensive Beyond Boundaries review (each Nov)

## InclusiveVT

MENAH PRATT-CLARKE, VICE PRESIDENT FOR STRATEGIC AFFAIRS AND VICE PROVOST FOR INCLUSION AND DIVERSITY

SEPTEMBER 1, 2017

# Diversity strategic planning process

#### Timeline

#### Fall 2018:

Draft Diversity Strategic Plans Due

#### **Spring 2019:**

- Campus-wide Discussion about Diversity Strategic Plan and Beyond Boundaries Plan
- Campus-wide Climate Survey

#### Summer 2019:

Finalize Plans and Continuous Planning Process

#### Fall 2019:

Roll Out

#### Strategic Plan Part I: Overview

Does your college have a **diversity statement**? If so, please share. How is this statement publicized and communicated to faculty, students, and staff.

Please describe any model/signature inclusion and diversity programs within the unit that significantly advance or advanced (if the program was discontinued) diversity and inclusion (ideally there would be measurable outcomes/evaluation, evidence of effectiveness).

Please describe the **structure for implementation**, **oversight**, **and accountability** for diversity in your unit, (*i.e*, *Dean and Associate Deans*; *Diversity committee*(*s*); *AdvanceVT/InclusiveVT representatives*; *InclusiveVT Senior representatives*; student organizations).

#### Part II: Representational Diversity

Please share your current college/department compositional diversity for gender and traditionally underrepresented racial/ethnic populations:

How does your unit compare in terms of representational diversity with its peers for faculty and student diversity? What is the average diversity by race/gender in the field for undergraduate students, graduate students, and faculty? Who are our aspirational peers/programs and why?

Do your **disciplinary associations** have committees on women/minority concerns? If so, please list the association(s) and website(s)? What is the unit's relationship with these associations?

#### Part III: Climate and Inclusion

**How does your unit promote** an inclusive, welcoming, affirming, safe, and accessible climate for all?

What issues impact the climate in your unit, and how are you addressing them? Are there unique concerns for particular identity groups/populations (race, ethnicity, gender, veterans, LGBTQ, disability, and other groups reflected in the Principles of Community)?

How does the department/unit track, promote and encourage participation and engagement in programs, mentoring, training, etc. that promote an inclusive climate? How are these addressed in performance evaluations?

#### Part III: Climate and Inclusion

Describe your unit's **collaborations/partnerships** with programs that support particular identity groups (*i.e.* faculty/staff caucuses, student cultural centers, student organizations – including those associated with academic disciplines, alumni chapters, community based organizations).

## Part IV: Advancing the academic mission of Virginia Tech through inclusion and diversity

In what ways are inclusion and diversity integrated in teaching, research, and service in your unit?

**Teaching** (*Pathways General Education Curriculum, upper level and graduate courses*)

**Research** (sponsored research, Equity and Social Disparity in the Human Condition Strategic Growth Area)

**Service** (student/faculty/staff disciplinary associations, community outreach/partnerships)

#### Part V: Goals and Timeline

What are your **1**, **2**, and **5** year inclusion and diversity goals? Explain how they connect to and integrate with the InclusiveVT strategic goals above.

For each of the goals, describe:

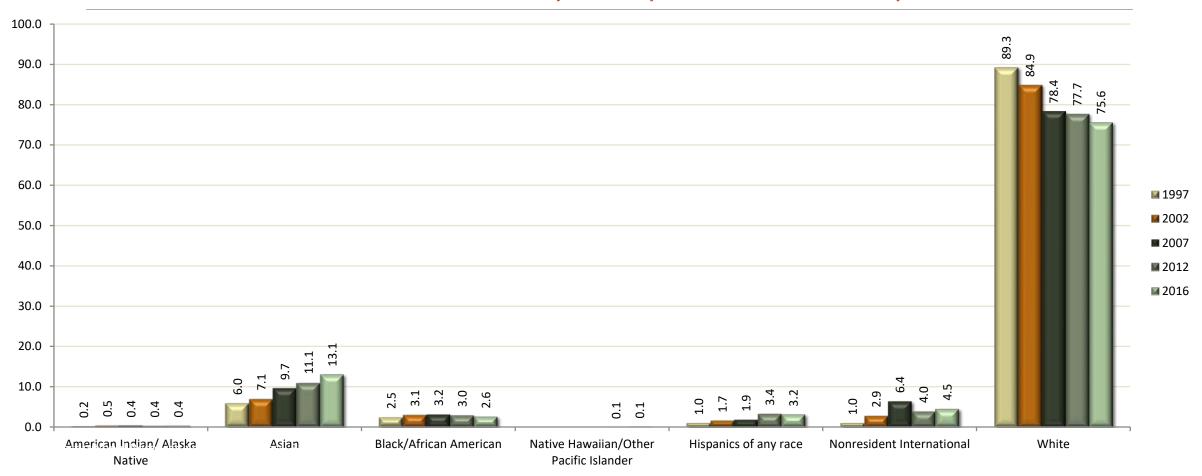
- Action Steps (three to five)
- Resources available and needed (funding, personnel)
- Measures of Success/Accountability (evaluations)
- Timeline for Sustainable Transformation (short/long term)

## Organizational Change Case Study: Tenured/Tenure Track Faculty

#### The Organizational Change Process

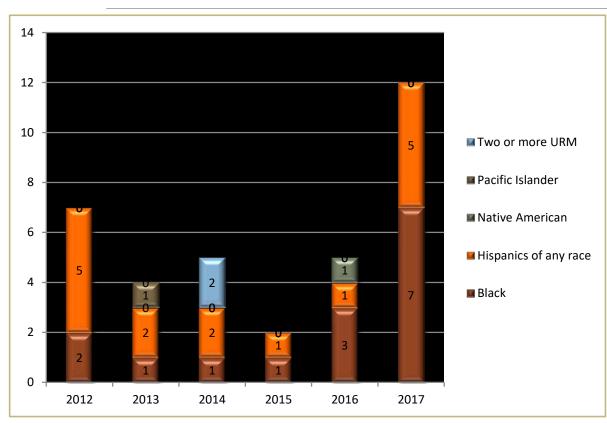
- ▶ Data Gathering and Assessment
- > Build the team and leadership structure
- ➤ Review Processes and Procedures and Existing Operations
- > Design new processes, procedures, incentives
- ➤ Roll out of new plan
- > Implementation
- > Evaluation

#### Tenured/Tenure Track Faculty, % by Race/Ethnicity, 1997-2016

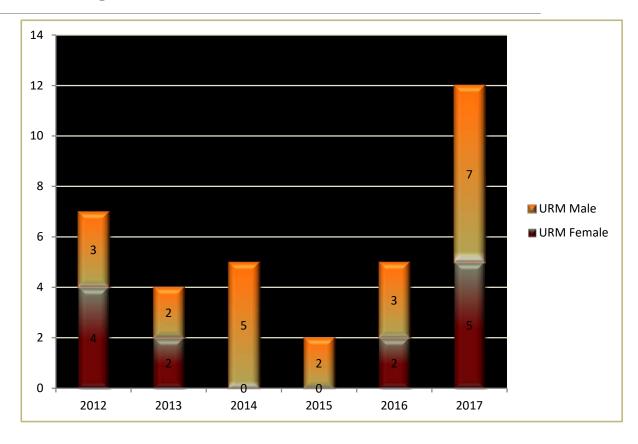


## New tenured/tenure track faculty hires, 2012-16, 2017 projected

BY RACE/ETHNICITY



#### **BY GENDER**



## InclusiveVT Faculty Diversity Program Investments

- Target of Talent Program: \$5.5M investment over 5 years
  - Future Faculty Fellows
  - Post-doctoral fellowships
  - Senior Faculty
  - Director of Faculty Diversity Recruitment
  - Destination Areas and Diversity

#### InclusiveVT Faculty Diversity Program

- > Required Search Process Education
  - DiversityEdu Unconscious Bias Search Committee
  - Equity and Accessibility Search Committee
  - > Search Chair and Diversity Advocate
  - > Search Committee Conversations about Diversity
  - Unit-level Conversations about Diversity

### InclusiveVT Faculty Diversity

#### **Accountability and PIBB (budget model):**

- Each college will report annually on faculty diversity (composition)
- Experiences of faculty from underrepresented groups (climate).
- Faculty Success Scorecard will measure a number of diversity metrics around representational diversity, hiring, promotion, and retention

#### Retention

- > Mentoring
- > Inclusion and Climate
- Sense of Community
- Sense of Belonging
- Sense of Support for Success

#### Future BOV Meetings/Next Steps

Enrollment Management Presentation – November 2017

Challenges, Opportunities, Cost

Student Success Presentation – March 2018

Challenges, Opportunities, Cost

Diversity and Academic Mission Presentation—June 2018

Challenges, Opportunities, Cost

Virginia Tech

## MASTER BRAND

Update

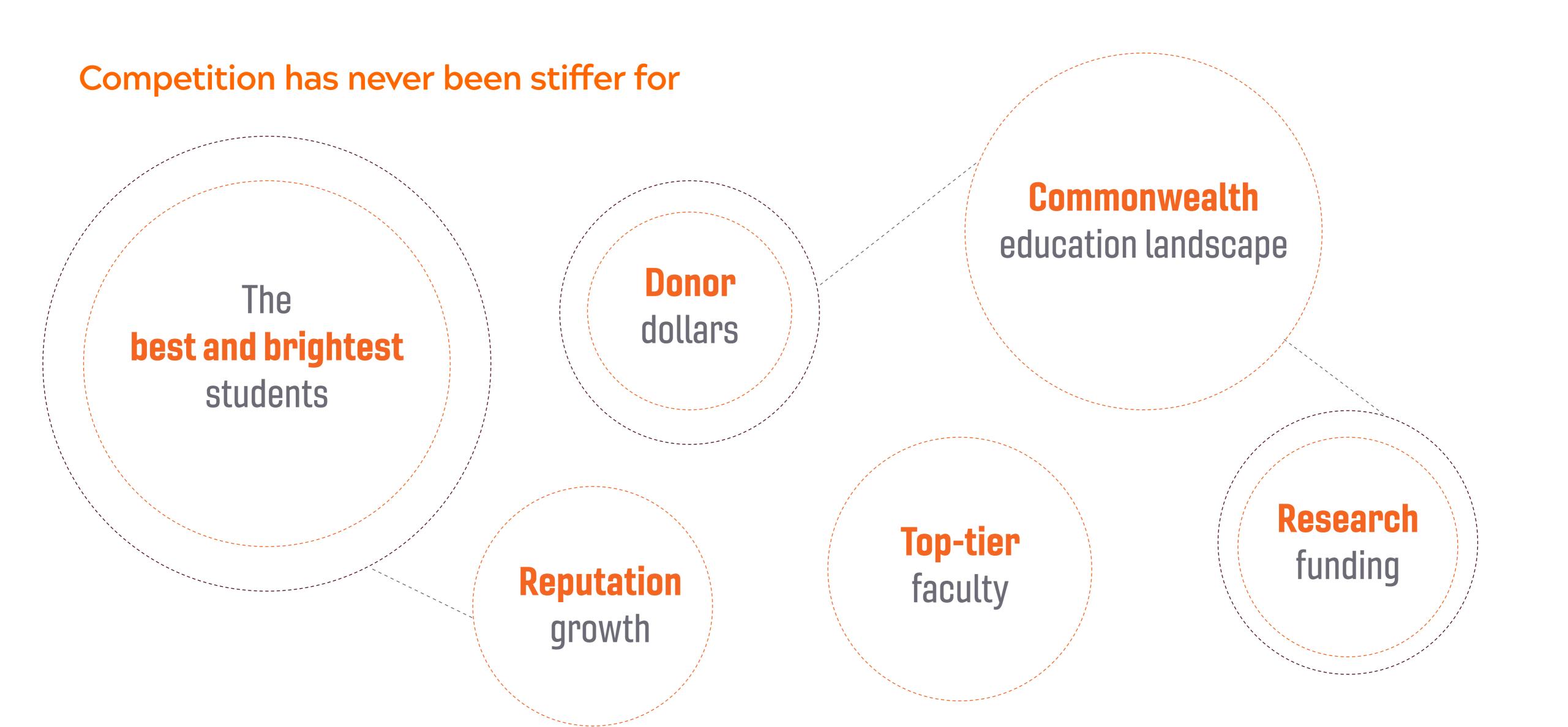
September 2017



# BRANDING IN HIGHER ED

Tracy Vosburgh
Senior Associate Vice President

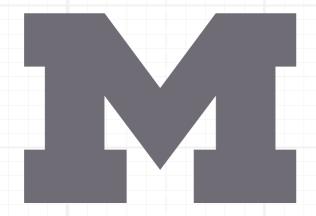
Melanie Schramm Marketing Director



## WHAT DEFINES A BRAND?

The promises we make to our audiences
The essence of our university
The experience we create
The personality we convey
The messages we deliver

# GREAT BRANDS DON'T JUST HAPPEN

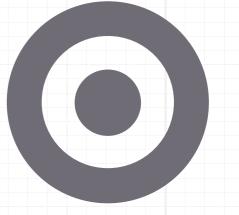




Northwestern







## Virginia Tech is at a critical moment in time.

We have a new vision, and our brand needs to shine a light on it with meaning and intention.



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# We analyzed three groups of peers:

# **REGIONAL**







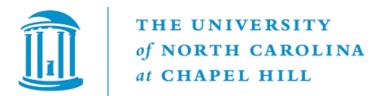


# **NATIONAL**

ĀM

TEXAS
The University of Texas at Austin

MICHIGAN STATE UNIVERSITY









# **ASPIRATIONAL**



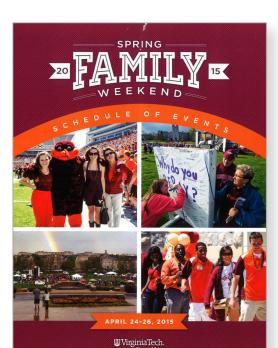








# COMMUNICATIONS AUDIT | INCONSISTENT USE OF COLOR & TYPE









Hokie Mobile Virginia Tech















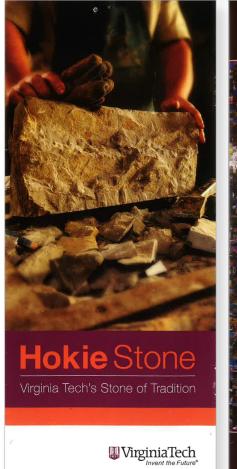




Did you know?

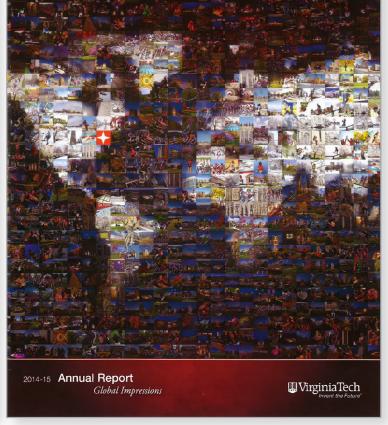






**Wirginia**Tech















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# LAND-GRANT OF TODAY

AGRICULTURAL
education and
MILITARY
tradition

education and
TECHNOLOGY
research and application

LAND-GRANT
mission and
COOPERATIVE
extension

**UT PROSIM** 

# LAND-GRANT OF TOMORROW

Beyond Boundaries

2047

**Experiential** learning

Transdisciplinary approach

Technology literacy across disciplines

**AGRICULTURAL** 

education and

**MILITARY** 

tradition

**ENGINEERING** 

education and

**TECHNOLOGY** 

research and application

LAND-GRANT

mission and

COOPERATIVE

extension

**UT PROSIM** 

### WHAT WE DO

We reimagine the role of education and technology.



We foster a transdisciplinary approach that integrates technology in all spheres of inquiry.

## **HOW WE DO IT**

We push the boundaries of knowledge, and support people in their quests to go beyond limits.



We are VT-shaped, focused, and tenacious.

# WHY WE DO IT

We are a force for positive change.

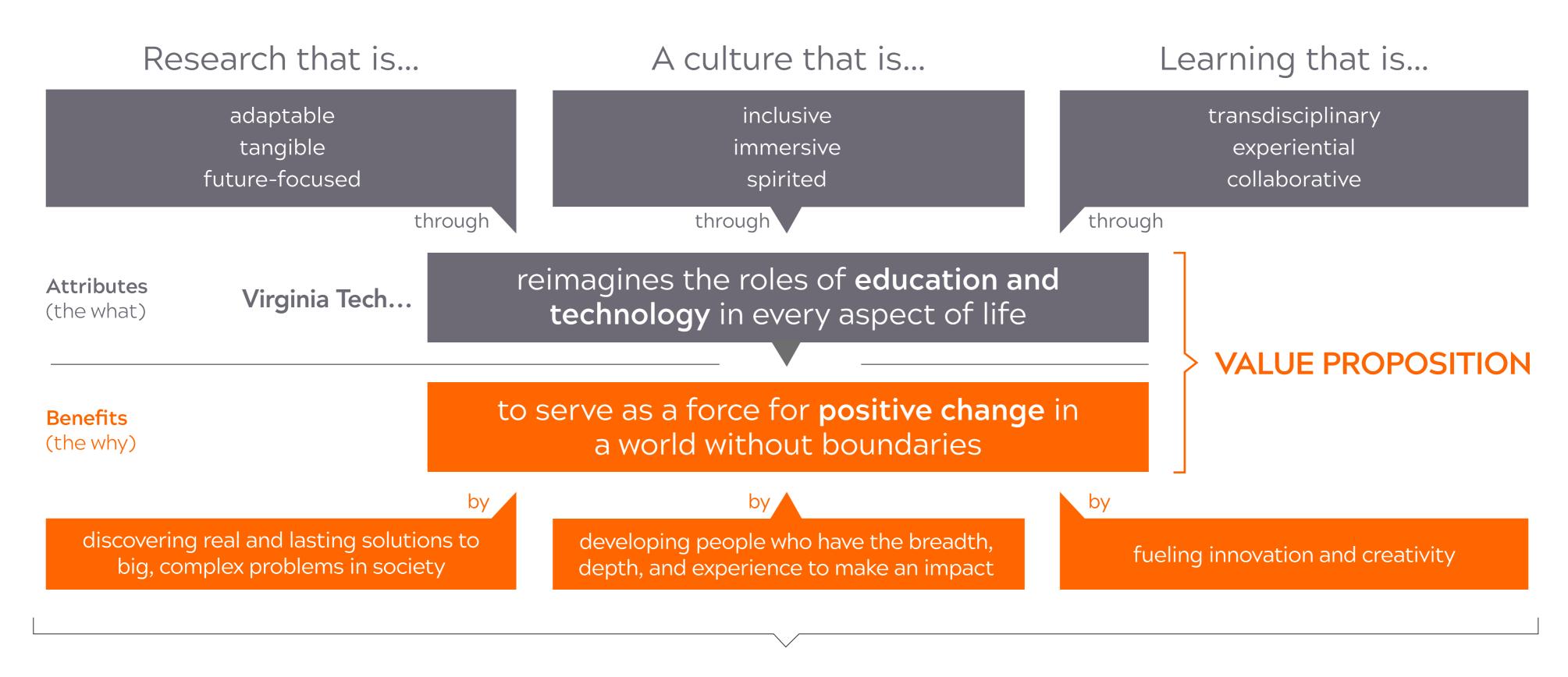
We are driven to serve

Ut Prosim

(That I May Serve).

# STRATEGY | MESSAGING MAP

Our messaging map is built around a core message, known as our value proposition. We support that statement with three brand pillars: research, culture, and learning. These pillars show how we live our value proposition, and act as guideposts for framing what we offer and why it matters.



**Ut Prosim** 

# STRATEGY | PERSONALITY

# Our history is the cornerstone of our personality.

We are naturally earnest, tenacious, and proud. As our brand evolves, we will build on these traits, showing the world that Hokies aspire to be inclusive, courageous, and adaptable. To ensure these aspirational traits become a natural extension of our brand personality, we will emphasize them in the way we communicate.

# Emphasize that we are...

# Inclusive

We deliberately ensure that everyone in our community feels welcome and valued.

# Courageous

We will break new ground and blaze new trails to improve the world. We're not afraid to disrupt the status quo to advance society.

# Adaptable

In a rapidly changing world, we have the flexibility to embrace new ideas and change our approach.

# Remember that we are...

# **Earnest**

We have a sincere work ethic and a genuine passion to serve in profound and meaningful ways.

# **Tenacious**

Hokies get it done. We've got the perseverance and resolve to push past any obstacle.

# **Proud**

We truly love being Hokies, and we're always excited to share our spirit and devotion with the world.



. . . .

# OUR NEW BRAND IS

authentic to who we are reflects where we are going and differentiates us from our competitors

And it all centers on the critical role we play in the world

NEED TO COMMUNICATE	HOW THE PLATFORM DELIVERS
Beyond Boundaries	Clearly communicate what our vision for a global land- grant can be.
Transdisciplinary ideas	Illustrate that a collection of different minds and skillsets create the very best ideas.
Experiential learning	Share stories of outcomes and people who learn and grow greatly from hands-on, real-world experiences, spaces, and challenges.
Technology literacy	Translate the idea that technology is infused in ALL academic areas.

# Claiming the role of Virginia Tech as the land-grant of tomorrow

It's the authentic essence of who we are and who we want to be.

It's a representation of our ever-evolving role—as individuals, as a community, and as an institution.

It's a declaration of our innate drive to be a force for good.

It's a call to action for every Hokie to bring our mission to life.

# CREATIVE PLATFORM | AUDIENCES

# Faculty and staff

Claim your role as an advocate.

# **Current students**

Explore your role.

# **Donors**

Claim your role as a supporter.

# Prospective students

Your role awaits. Claim it.

# Alumni

Your role as a Hokie is lifelong. Claim it.

# General public

Virginia Tech claims our role as a force for good.

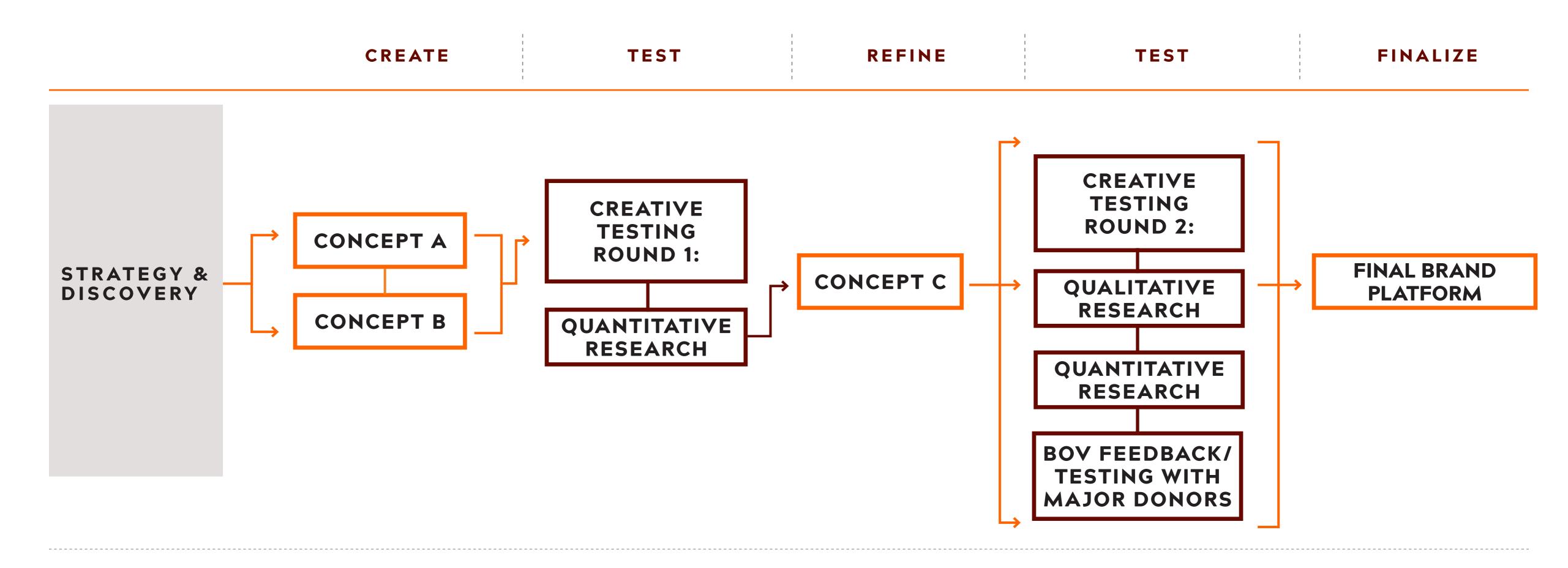


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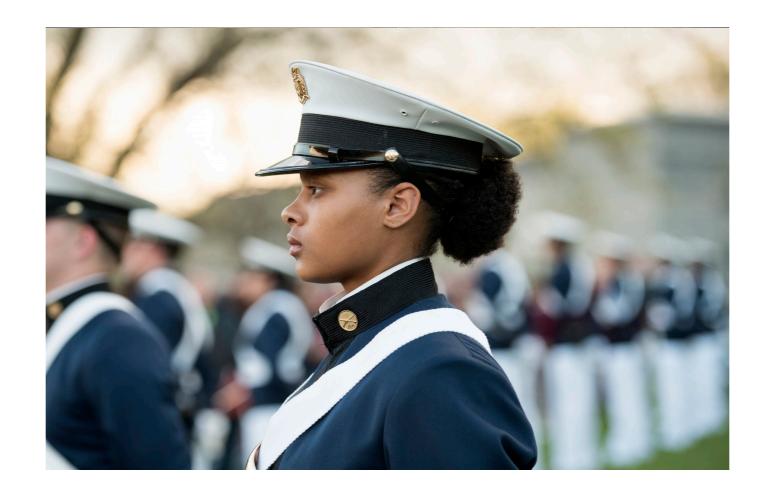
# Goals of testing:

- · Refine and strengthen the creative platform
- · Measure the effectiveness of the creative in conveying our value proposition and our personality
- · Iterate with key stakeholders to make sure the platform will resonate with our audiences

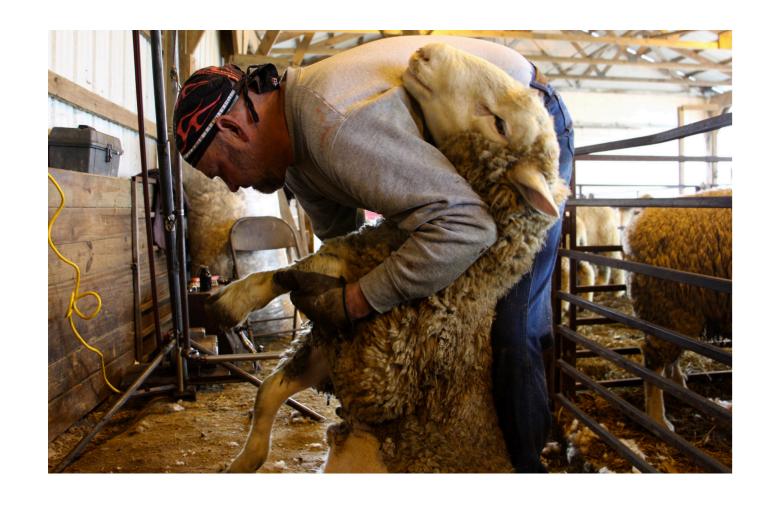


# Platform Updates









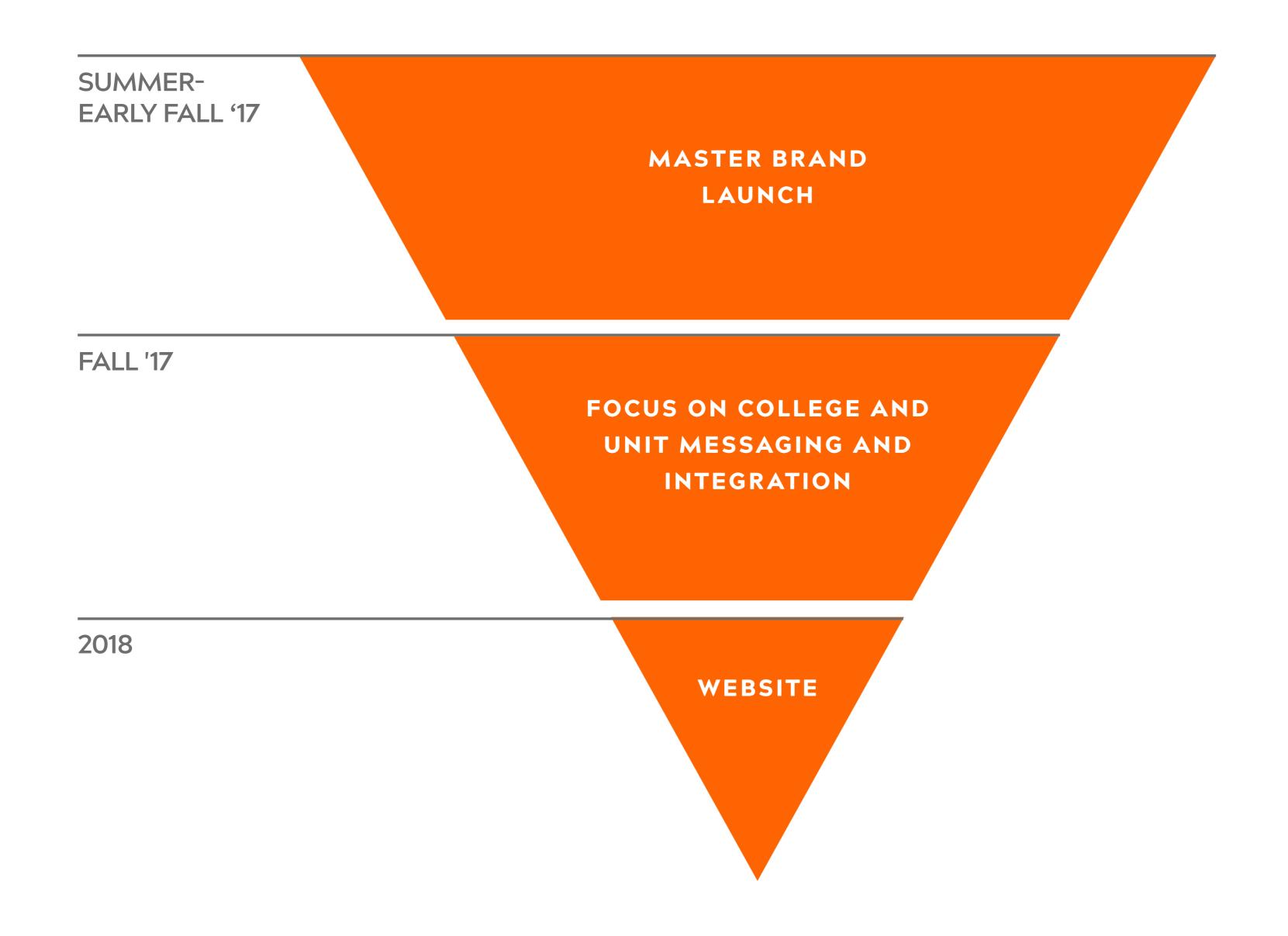




# CREATIVE TESTING | FINDINGS

# Key points of validation

- · The creative platform reinforces the value proposition, and moves the needle to shift perceptions
- · The creative platform reflects a good balance of Virginia Tech's authentic and aspirational personality traits, pushing the university in an aspirational direction
- The big idea resonates



# THANK YOU

#### **MINUTES**

#### September 11, 2017

The Board of Visitors of Virginia Polytechnic Institute and State University met on Monday, September 11, 2017, at 1:20 p.m. in Torgersen Boardroom (Room 2100), Virginia Tech Campus, Blacksburg, Virginia.

Present Absent

Ms. Greta J. Harris

Mr. C. T. Hill

Ms. Anna L. James

Mr. Mehmood S. Kazmi

Ms. Letitia A. Long

Mr. Robert J. Mills

Mr. L. Chris Petersen

Ms. Deborah Leigh Martin Petrine (Vice Rector)

Mr. Michael J. Quillen

Mr. Wayne H. Robinson

Mr. Mehul P. Sanghani

Mr. Dennis H. Treacy (Rector)

Mr. Horacio A. Valeiras

Mr. Jeff Veatch

#### **Constituent Representatives:**

Dr. Hans Robinson, Faculty Representative

Mr. Robert Sebek, Staff Representative

Mr. Brett Netto, Graduate Student Representative

Mr. Seyi Olusina, Undergraduate Student Representative

Also present were the following: President Timothy Sands, Deputy Chief William Babb, Mr. Robert Broyden, Ms. Lori Buchanan, Mr. Brock Burroughs, Mr. Ralph Byers, Ms. D'Elia Chandler, Ms. Shelia Collins, Mr. Al Cooper, Mr. John Cusimano, Mr. Brian Daniels, Dr. Karen DePauw, Dr. John Dooley, Mr. Corey Earles, Chief Kevin Foust, Dr. Michael Friedlander, Mr. David Guerin, Dr. Luisa Havens, Dr. Lee Hawthorne, Ms. Kay Heidbreder, Mr. Tim Hodge, Dr. Rachel Holloway, Ms. Sharon Kurek, Dr. Theresa Mayer, Dr. Steven McKnight, Ms. Nancy Meacham, Dr. Scott Midkiff, Mr. Mike Mulhare, Ms. April Myers, Ms. Kim O'Rourke, Mr. Mark Owczarski, Dr. Patty Perillo, Mr. Charles Phlegar, Dr. Ellen Plummer, Dr. Menah Pratt-Clarke, Mr. Chris Rahmes, Dr. Scot Ransbottom, Dr. Thanassis Rikakis, Ms. Savita Sharma, Mr. Dwight Shelton, Ms. Sara Simpkins, Ms. Kayla Smith, Dr. Ken Smith, Mr. Jon Clark Teglas, Ms. Tracy Vosburgh, Dr. Lisa Wilkes, Dr. Sherwood Wilson, Mr. Chris Yianilos, faculty, staff, students, guests, and reporters.

\* \* \* \* \*

Rector Treacy welcomed everyone to the Board meeting. He then asked that all pause for a moment of silence to remember the victims of September 11, 2001.

\* \* \* \* \*

Rector Treacy welcomed the new Board members and new representatives: Ms. James, Ms. Long, Mr. Mills, Dr. Robinson, Mr. Sebek, Mr. Netto, and Mr. Olusina. He asked that all members introduce themselves.

\* \* \* \* \*

Rector Treacy announced the 2018 Board of Visitors' meeting dates:

March 25-26, 2018 June 3-4, 2018 August 26-27, 2018 November 4-5, 2018

\* \* \* \* \* \* \* \* \* \*

Rector Treacy said that after at least 30 years of the same committee structures, the BOV committees have been altered a bit this year and best practices have been developed for the committees. Consent agendas will now be used by the committees and the full Board to deal with routine items. Any Board member may request that an item be removed from the consent agenda to be considered as part of the regular agenda.

## APPROVAL OF THE CONSENT AGENDA (Refer to Attachments A through L)

Rector Treacy asked for a motion to approve the consent agenda items as listed. The motion was made by Mr. Valeiras, seconded by Ms. Petrine, and approved unanimously.

Copies of consent agenda items are filed with the permanent minutes and marked as noted below:

- Minutes of the Board of Visitors Retreat held August 19, 2017
- Report of the Academic, Research, and Student Affairs Committee (9/10/17) Attachment A

- Report of the Buildings and Grounds Committee (9/11/17) Attachment B
- Report of the Compliance, Audit, and Risk Committee (9/11/17) Attachment C
- Report of the Finance and Resource Management Committee (9/11/17) Attachment D
- Report of the Governance and Administration Committee (9/11/17) Attachment E

From the Academic, Research, and Student Affairs Committee Consent Agenda:

• Resolution to Ratify Changes to the 2017-18 Faculty Handbook – Attachment F

From the Buildings and Grounds Committee Consent Agenda:

 Resolution to Approve the Amendment for Atmos Gas Line Easements to Serve the Virginia Tech Baseball Facilities – Attachment G

This resolution revokes the authorization of a gas line extension along Duck Pond Drive and authorizes the Vice President for Operations, his successors and/or assigns, to execute an easement to extend an Atmos gas line to serve the planned new Virginia Tech baseball stadium.

 Resolution to Approve the Atmos Gas Line Extension Easement to the Virginia Tech Rector Field House – Attachment H

This resolution authorizes the Vice President for Operations, his successors and/or assigns, to execute an easement to extend Atmos' gas line to serve the planned improvements to the Virginia Tech Rector Field house.

 Resolution to Approve an Update to the Capital Construction Delivery Method Approval Process – Attachment I

From the Finance and Resource Management Committee Consent Agenda:

 Resolution to Revise #12005 Policy on Commemorative Tributes – Attachment J

This resolution adds the position of the Vice Provost for Inclusion and Diversity to the membership of the Commemorative Tributes Committee, effective immediately.

Consent agenda information items; no Board of Visitors action required:

- Atlantic Coast Conference (ACC) Governing Board Annual Certification Attachment K
- Report of Research and Development Disclosures Attachment L

\* \* \* \* \* \* \* \* \* \*

#### REPORT OF THE ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE

Rector Treacy called on Ms. Petrine to highlight matters of particular interest from the Academic, Research, and Student Affairs Committee meeting.

\* \* \* \* \* \* \* \* \* \*

#### REPORT OF THE BUILDINGS AND GROUNDS COMMITTEE

Rector Treacy called on Mr. Quillen for the report of the Buildings and Grounds Committee.

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

Resolution Supporting the Amendment of Chapter 638 Virginia Acts of Assembly Relating to the New River Valley Emergency Communications Authority

That the resolution supporting the amendment of the act to permit implementation of a funding formula and the allocation of annual contributions among the Authority members based on use of authority services be approved. (Copy filed with the permanent minutes and marked Attachment M.)

\* \* \* \* \*

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

Resolution to Approve the Comprehensive Agreement for the Construction of a Virginia Tech Carilion Research Institute Biosciences Addition in Roanoke, Virginia, in Accordance with the Public-Private Education Facilities and Infrastructure Act (PPEA) of 2002

That the resolution to enter into the Comprehensive Agreement with Carilion Clinic to construct the VT Carilion Research Institute Biosciences Addition at the Riverside Center in Roanoke, Virginia, as provided by the PPEA; to authorize the Vice President for Operations, his successors and/or assigns, to execute the Comprehensive Agreement forthwith; and to direct the Vice President for Finance and Chief Financial Officer, his successors and/or assigns, to make the Comprehensive Agreement and the procurement file available for public inspection to the extent required by law be approved. (Copy filed with the permanent minutes and marked Attachment N.)

\* \* \* \* \* \* \* \* \* \*

#### REPORT OF THE COMPLIANCE, AUDIT, AND RISK COMMITTEE

Rector Treacy called on Mr. Kazmi to highlight matters of particular interest from the Compliance, Audit, and Risk Committee meeting.

\* \* \* \* \* \* \* \* \* \*

#### REPORT OF THE FINANCE AND RESOURCE MANAGEMENT COMMITTEE

Rector Treacy called on Mr. Valeiras for the report of the Finance and Resource Management Committee.

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

# Resolution to Approve the Year-to-Date Financial Performance Report (July 1, 2016 – June 30, 2017)

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, 2016, through June 30, 2017, and the Capital Outlay report be approved. (Copy filed with the permanent minutes and marked Attachment O.)

\* \* \* \* \*

As part of the Finance and Resource Management Committee report, approval of the following resolution was moved by Mr. Valeiras, seconded by Ms. Petrine, and approved unanimously.

# Resolution to Approve the Virginia Tech Carilion Research Institute Biosciences Addition 9(d) Debt Financing

That the resolution authorizing the issuance of 9(d) bonds through the Virginia College Building Authority on behalf of the university for the Virginia Tech Carilion Research Institute Biosciences Addition – Capital Outlay Project Number 18269 be approved. (Copy filed with the permanent minutes and marked Attachment P.)

\* \* \* \* \*

As part of the Finance and Resource Management Committee report by Mr. Valeiras and with the endorsement of the Buildings and Grounds Committee, approval of the following resolution was moved by Mr. Valeiras, seconded by Mr. Hill, and approved unanimously.

# Resolution to Approve the Capital Lease for the Applied Projects Building in the Corporate Research Center

That the resolution authorizing Virginia Tech to enter into a capital lease with the Virginia Tech Foundation for the Applied Projects Building be approved. (Copy filed with the permanent minutes and marked Attachment Q.)

\* \* \* \* \*

As part of the Finance and Resource Management Committee report by Mr. Valeiras and with the endorsement of the Buildings and Grounds Committee, approval of the following resolution was moved by Mr. Valeiras, seconded by Mr. Hill, and approved unanimously.

# Resolution to Approve the Capital Lease for the Virginia Tech Transportation Institute Intern Park Facility

That the resolution authorizing Virginia Polytechnic Institute and State University to enter into a capital lease with the Virginia Tech Foundation to construct the Intern Park Facility be approved. (Copy filed with the permanent minutes and marked Attachment R.)

\* \* \* \* \*

As part of the Finance and Resource Management Committee report by Mr. Valeiras and with the endorsement of the Buildings and Grounds Committee, approval of the following resolution was moved by Mr. Valeiras, seconded by Mr. Mills, and approved unanimously.

# Resolution to Approve the Capital Project for the Dietrick First Floor and Plaza Renovation Project

That the resolution authorizing Virginia Tech to complete the Dietrick First Floor and Plaza Renovation Project be approved. (Copy filed with the permanent minutes and marked Attachment S.)

\* \* \* \* \* \* \* \* \* \*

#### REPORT OF THE GOVERNANCE AND ADMINISTRATION COMMITTEE

Rector Treacy called on Mr. Sanghani to highlight matters of particular interest from the Governance and Administration Committee meeting.

#### REPORT ON THE MEDICAL SCHOOL INTEGRATION

The Rector called on Ms. Petrine for a **report on the Medical School Integration**. Ms. Petrine serves as the BOV liaison to the Medical School Integration Steering Committee. The goal of the committee is the successful integration of the Virginia Tech Carilion School of Medicine (VTCSOM) into the university on July 1, 2018. Ms. Petrine provided the following updates:

- SCHEV has confirmed that upon integration Virginia Tech will have the authority to confer the MD degree; there may be a presentation in January to SCHEV about the integration of the VTCSOM into Virginia Tech.
- SACSCOC the university is in communication with the SACSCOC accrediting body regarding current and future documentation needs.
- US Department of Education the university is in communication with the US Department of Education to insure there is no break in financial aid for medical students at the point of integration. Virginia Tech will provide "bridge" loans to students if for any reason there is a break in funding.
- The university and Carilion Clinic continue to discuss a memorandum of understanding (MOU) and other legal and financial agreements.
- Infrastructure needs such as IT, library, and the integration of academic student services continue to be reviewed by several dedicated work groups who bring issues and recommendations to the integration steering committee for consideration.
- Plans are being developed to provide services such as counseling, medical care, and wellness for medical students on the Roanoke campus.
- The school has arranged for an informational site visit by the Liaison Committee on Medical Education (LCME), which is the national accrediting body for schools of medicine. The aim is to receive feedback on financial and governance arrangements.

Rector Treacy expressed the Board's appreciation for Ms. Petrine's continued work with the VTCSOM on the integration.

#### PRESIDENT'S REPORT

As part of the report by President Sands, the following resolution was moved by Mr. Valeiras, seconded by Ms. Petrine, and approved unanimously.

#### **Resolution of Appreciation Honoring James L. Chapman**

That the resolution recognizing James L. Chapman for his service as a member and Rector of the Board of Visitors be approved. (Copy filed with the permanent minutes and marked Attachment T.)

\* \* \* \* \*

As part of the report by President Sands, the following resolution was moved by Mr. Quillen, seconded by Ms. Petrine, and approved unanimously.

#### Resolution of Appreciation Honoring J. Thomas Ryan

That the resolution recognizing J. Thomas Ryan for his service as a member of the Board of Visitors be approved. (Copy filed with the permanent minutes and marked Attachment U.)

\* \* \* \* \*

As part of the report by President Sands, the following resolution was moved by Mr. Mills, seconded by Ms. Petrine, and approved unanimously.

#### **Resolution of Appreciation Honoring Steve Sturgis**

That the resolution recognizing Steve Sturgis for his service as a member of the Board of Visitors be approved. (Copy filed with the permanent minutes and marked Attachment V.)

\* \* \* \* \*

A copy of **President Sands' remarks to the Board of Visitors** is filed with the permanent minutes and marked Attachment W.

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

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

- Appointment of faculty to Emeritus status, the 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 Awards;
- 4. Security of public buildings,

all pursuant to the following subparts of 2.2-3711 (A), <u>Code of Virginia</u>, as amended, .1, .7, .10, and .19. The motion was seconded by Mr. Sanghani and passed unanimously.

\* \* \* \* \*

#### **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 Treacy called the meeting to order and asked Ms. Petrine to make the motion to return to open session. Ms. Petrine 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 <u>Code of Virginia</u> 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. Valeiras and passed unanimously.

\* \* \* \* \* \* \* \* \*

A motion to approve the following block of resolutions (5) was moved by Mr. Mills, seconded by Mr. Veatch, and passed unanimously.

Approval was given to the resolutions to **Name University Facilities (2)** as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment X.)

\* \* \* \* \*

Approval was given to the resolutions for **Emeritus status (17)** as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment Y.)

\* \* \* \* \*

Approval was given to the resolution for **Endowed Chairs**, **Professorships**, and **Fellowships** (1) as considered in Closed Session. (Copy filed with the permanent minutes and marked Attachment Z.)

\* \* \* \* \*

Approval was given to the resolution for an **Exception to the Conflict of Interests Act** (1) as considered in Closed Session. (Copy filed with the permanent minutes and marked Attachment AA.)

\* \* \* \* \*

The Personnel Changes Report including the President's compensation as considered in Closed Session was ratified. This item was reviewed by the Finance & Resource Management and the Academic, Research, & Student 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 September 10, 2017)

Undergraduate Student Representative to the Board – Mr. Seyi Olusina Graduate Student Representative to the Board – Mr. Brett Netto Staff Representative to the Board – Mr. Robert Sebek Faculty Representative to the Board – Dr. Hans Robinson

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

\* \* \* \* \*

Following a motion by Mr. Valeiras and second by Mr. Quillen, the meeting was adjourned at 3:41 p.m.

\* \* \* \* \*

Subject to modification, the dates of the next regular meeting are November 5-6, 2017, in Blacksburg, Virginia.

Dennis H. Treacy, Rector	
Kim O'Rourke, Secretary	

#### **Committee Meeting Minutes**

# ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE Solitude Room Inn at Virginia Tech September 10, 2017

#### **Committee Members Present**

Committee members: Debbie Petrine, chair, Trish Long, Chris Peterson, Wayne Robinson. Hans Robinson (faculty representative), Brett Sotto (graduate student representative).

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

Dennis Treacy, rector, Greta Harris, C. T. Hill, Anna James, Mehmood Kazmi, Robert Mills, Mike Quillen, Mehul Sanghani, Jeff Veatch, Horacio Valeiras.

#### Guests

Tom Bluestein, Lori Buchanan, Kris Bush, D'Elia Chandler, Sheila Collins, Al Cooper, Joe Crane, Brian Daniels, Karen DePauw, John Ferris, Jack Finney, Lance Franklin, Ron Fricker, Mike Friedlander, Randy Fullhart, Rachel Gabriele, Luisa Havens Gerardo, Hunter Gresham, Cathy Grimes, David Guerin, Lee Hawthorne, Kay Heidbreder, Tim Hodge, Sharon Kurek, Cynda Johnson, Robin Jones, Paul Knox, Peggy Layne, Alison Matthiessen, Theresa Mayer, Christina McIntyre, Steve McKnight, Heidi McCoy, Scott Midkiff, Sally Morton, April Myers, Brett Netto, Kim O'Rourke, James Orr, Mark Owczarski, Charlie Phlegar, Ellen Plummer, Menah Pratt-Clarke, Scot Ransbottom, Thanassis Rikakis, Hans Robinson, Timothy Sands, Savita Sharma, Kayla Smith, John Talerico, Judy Taylor, Tracy Vosburgh, Bev Watford, Lisa Wilkes, Sherwood Wilson, Paul Winistorfer, Chris Yianilos.

#### OPEN SESSION

- **1. Welcome.** Debbie Petrine, chair of the committee, welcomed board members and guests.
- 2. Overview of New Board Committee Structure and Discussion of Committee Agenda Items. D. Petrine provided information on adjustments the board has made to its structure and practices. In addition to the reconstituted committees, the board has agreed to use consent agendas for matters that are routine. A committee member can request that an agenda item be removed from the consent agenda and placed before the committee for discussion. Petrine agrees with the addition of a representative from the university's Council of College Deans to participate in the committee's work. The chairs of each board committee will coordinate when agenda items are shared by committees. Committee members will discuss matters on the agenda before them, board members who

attend committees of which they are not a member, will hold their questions until recognized by the chair of the committee. It is important that everyone associated with the work of the committee be provided ample time during which to present and discuss agenda items. The order of standing agenda items will be rotated for each meeting.

- **3. Consent Agenda**. The committee considered for approval the items listed on the Consent Agenda.
  - A. Approval of June 2017 Minutes
    - i. Academic Affairs Committee June 5, 2017
    - ii. Research Committee June 4, 2017
    - iii. Student Affairs Committee June 5, 2017
  - B. Academic Affairs Resolutions and Reports
    - i. Faculty Affairs
      - a. Report of Reappointments to Endowed Chairs, Professorships, or Fellowships (1). Reappointment of Dr. Webster Santos to the Cliff and Agnes Lilly Faculty Fellowship in the College of Science for three years effective August 10, 2017 with operating support as provided by the endowment and, if available, with funds from the eminent scholars match program.
    - \*b. Resolution to Ratify the 2017-2018 Faculty Handbook
    - ii. Undergraduate Academic Affairs
      - a. Report on the Honors System

The committee unanimously approved the items listed on the Consent Agenda.

#### 4. Committee Discussion.

A. Council of College Deans Update. Paul Winistorfer, dean of the College of Natural Resources and Environment and senior dean of the university's Council of College Deans provided the committee with an update on behalf of the council. Robert Sumichrast, dean of the Pamplin College of Business, will serve as the representative to the committee from the Council of College Deans. Sumichrast was unable to attend this meeting of the committee and Winistorfer agreed to deliver the update on behalf of the council.

The Council of College Deans meets a couple times a month to discuss issues of common interest. Often, the council will invite the provost or other colleague to get an update on a particular program or initiative.

Current topics of interest to the deans include:

 The university's efforts to implement the Partnership for an Incentive Based Budget (PIBB) budget model and its implications to the colleges.

- Destination Areas (DA) initiatives and the implications for curriculum and the hiring of faculty.
- Of concern overall is the desire to properly support quality and competitive faculty startups, and costs associated with a large number of DA hires.
- Deans continue to want to improve and create new facilities.
- Deans are excited to work on diversity and inclusion efforts.
- Scaling faculty and staff as the institution grows increasing enrollment is creating challenges and opportunities.
- College deans are seeing the benefits of embracing the advancement model and realize the gains that can be realized through this model already evident in increased giving.

Discussion from the committee included questions about the impact of the new budget on the colleges. The budget model is being rolled out parallel to current practices and colleges are feeling supported. Menah Pratt-Clarke has created opportunities for very productive conversations with deans about how the colleges can be leading the university on diversity and inclusion initiatives. The deans are excited to partner with the president and provost and the deans are focused on managing change within their colleges and supporting the faculty.

B. College Update. Winistorfer provided an overview and update on the College of Natural Resources and Environment. The college is celebrating its 25<sup>th</sup> year as a college at Virginia Tech. The college is ranked first in the country for studying natural resources and conservation and has several nationally ranked departments and programs including forestry and packaging systems. The college continues to align its academic programs in support of the university's strategic goals. Enrollments in the college continue to rise as does external funding. The college is challenged by aging and crowded infrastructure, significant personnel changes including the retirements of long-serving professors, and aggressive hiring goals for the college and university. Federal funding portfolios will need to adjust to the changing landscape of national funding priorities.

Committee discussion included commenting on the college's impressive status and future plans for corporate partnerships. The college is unique in having 65 corporate partners. The college's advising model is to be commended as is the number of women serving as advisors. The college's Sustainability Institute is competitive and unique. Students are redefining sustainability and bringing an ethic of sustainability to corporate environments. Twelve juniors and seniors from within the college participate in the institute each year.

C. Provost's Update. Thanassis Rikakis, executive vice president and provost, introduced Luisa Havens as vice provost for enrollment management and Dave

Guerin associate vice provost for communication. Provost Rikakis updated the committee on three strategic university initiatives.

- i. Health Science and Technology Campus and Virginia Tech Carilion School of Medicine. The Health Sciences and Technology campus in Roanoke continues to evolve and take shape. Among the elements contributing to developments in Roanoke is the Virginia Tech Carilion School of Medicine (VTCSOM). Since the announcement of a public-private partnership supported by the Commonwealth of Virginia, the school has contributed significantly to the region and nationally in graduating physicians with robust research experience. Virginia Tech and Carilion Clinic continue to aim towards the school's integration in July of 2018 as the Virginia Tech's ninth college. Dean Cynda Johnson was introduced to the committee as the founding dean and president of the school.
- **ii.** Destination Areas. Rikakis described progress made on the Destination Areas initiative. The Destination Areas are designed to synthesize current and future disciplinary and research strengths by creating transdisciplinary collaborations between departmental, college, and research institutes. There are five Destination Areas and four Strategic Growth Areas. The goal is to position Virginia Tech to be responsive to complex and ever-changing 21<sup>st</sup> Century problems and to for the university to be a global leader within and across the nine areas. The university will be hiring faculty to achieve the goals of the Destination Areas and will be investing in strengthening learning and discovery spaces. Curricular advancements will occur at the undergraduate and graduate levels.
- **iii.** Enrollment Planning and Projections. Rikakis provided information on the university's enrollment planning and projections. The university aspires to grow undergraduate enrollments incrementally to enroll 30,000 undergraduate students by 2023. Growth is also projected in the National Capital Region and with the Health Sciences and Technology campus in Roanoke. All projections include aspirations to increase the diversity of the undergraduate and graduate student bodies. To support and in conjunction with enrollment growth, capital projects are forecasted through 2024.

Enrollment growth depends on ability to facilities appropriately and in sync with enrollments. We are in communications with town of Blacksburg regarding off-campus capacity for housing for students. Future plans include consideration of graduate student housing with opportunities for family housing.

**D. Overview Research and Innovation Division**. Theresa Mayer, vice president for research and innovation, provided the committee with an overview of the university's research enterprise and opportunities to strengthen the research portfolio. Virginia Tech's industry research is up, scholarly works are increasing in number, as are "home-grown" Fellows and National Academy members. The university can take pride in being a home for high-impact research that improves the human condition. Virginia Tech was selected to lead one of five national

University Transportation Center programs. The 5 year, \$28M SafeD University Transportation Center award will support the premier group of transportation safety researchers in the nation to conduct innovative research that will improve safety on U.S. roadways. The university is lagging in competitive federal research funding; scholarly citations and faculty awards trail the university's peers: intellectual property protection and licensing revenue is down; comparatively, the university's faculty start-ups are low; and the university lacks several accreditations important for research competitiveness. Areas of improvement focus include developing a university-wide focused research strategy and innovation strategy; clarifying roles and responsibilities for elements of the research enterprise, move from transactional to strategic. Next steps include aligning research and innovation functions to support excellence and growth, reinvigorating the talent pool, contemporizing communications and marketing, enhancing tactical functions to be effective and efficient, developing a strategic approach to industry, federal, partnerships, redesigning the way work gets done, e.g., licensing and ventures. Overall, the plan is to focus on functions to amplify the positive effects of the university's good foundation and the university's geographic advantage.

E. Student Affairs Division Update and Managing Enrollment Growth. Patty Perillo, vice president for student affairs, shared with the committee the manner in which the units within the Division of Student Affairs accommodated additional enrolled students for the fall of 2017. Efforts in housing and residence life included offering reduced returning student contracts, contract buy-outs for upper-class students, requiring a housing deposit earlier than last year, converting lounges, double rooms converted to accommodate three students, assigned roommates to Resident Advisors, and did not offer housing to transfer students. In dining services, students were offered expedited payment processing, extended dining hours, increase "grab-and-go" food offerings, advancing the Dietrick enclosure and plaza, adding mobile food ordering, renovating spaces, centralizing production, and utilizing food trucks. Health and wellness areas are working to increase options and student participation on turf fields, hiring additional counselors, increased office spaces for counselors in Kent Square and East Eggleston, and in targeted locations such as the graduate school, the veterinary college, and cultural centers. Campus life areas extended orientation sessions and programs including those to new students and families and to international students, added resources to community and cultural centers, and expanded meeting room options and classroom hours. Renovations and construction of new residence halls are part of future strategies.

Discussion included responding to the misperception that may exist the university has lowered admissions standards to achieve higher enrollments. A university committee is identifying spaces that can be available for late night studying. The university continues to focus on any safety concerns expressed by students and their families.

**5. Other Items**. Petrine asked members of the committee for agenda items for the November meeting of the committee.

#### **CLOSED SESSION**

#### **Committee Members Present**

Committee members: Debbie Petrine, chair, Trish Long, Chris Peterson, Wayne Robinson.

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

Dennis Treacy, rector, Greta Harris, C. T. Hill, Anna James, Mehmood Kazmi, Robert Mills, Mike Quillen, Mehul Sanghani, Jeff Veatch, Horacio Valeiras.

### **CLOSED SESSION**

- 1. **Motion to begin Closed Session**. The committee moved and voted to go into closed session to consider faculty personnel actions.
- \*2. Resolutions to Approve Appointments to Emeritus/a Status (17). The committee considered and voted unanimously to recommend the 17 appointments to emeritus/a status to the full board for approval.
- \*3. Resolutions to Approve Appointments to Endowed Chairs, Professorships, or Fellowships (1). The committee considered and voted unanimously to recommend the one appointment to an endowed chair, professorship, or fellowship to the full board for approval.
- \*4. **Exception to the Conflict of Interests Act (1)**. The committee considered and voted unanimously to recommend one exception to the Virginia Conflict of Interests Act to the full board for approval.
- \*5. Ratification of Faculty Personnel Changes Report. The committee considered and voted unanimously to recommend for approval the ratification of the Faculty Personnel Changes Report. The committee shares this responsibility with the Finance and Resource Management committee.
- 6. **Motion to end Closed Session**. The committee moved and voted to return to Open Session.

### RETURN TO OPEN SESSION

In Open Session, Petrine reported on agenda items considered and voted on by the committee. Including appointments to emeritus/a status, appointments to endowed

chairs, professorships, or fellowships, one exception to the Virginia Conflict of Interests Act, and the Faculty Personnel Changes report.

There being no further business the Academic, Research, and Student Affairs committee adjourned at 5:30.

### ENDOWED FELLOWSHIP Cliff and Agnes Lilly Faculty Fellowship

Recognizing the continuing need for support and recognition of faculty at Virginia Tech, Agnes Lilly established the Cliff and Agnes Lilly Faculty Fellowship. The Fellowship shall provide annual support for faculty who are involved with the Institute for Advanced Study in the College of Science and shall be awarded upon recommendation of the Dean of the College of Science. The recipient shall hold the Fellowship for a period of three years with possible renewals.

Dr. Sally Morton, Dean of the College of Science, has nominated Dr. Webster L. Santos, associate professor of chemistry, to this endowed fellowship, concurring with the recommendation of the College of Science Honorifics Committee.

Dr. Santos received the Ph.D. in chemistry from the University of Virginia in 2002. He was a postdoctoral fellow at Harvard University from 2002-2006, funded by a Ruth L. Kirschstein National Research Service Award from the National Institutes of Health. He joined the faculty at Virginia Tech as a tenure-track assistant professor in 2006. In 2013, he was promoted to associate professor with tenure.

Dr. Santos, a member of the Virginia Tech Center for Drug Discovery, is an expert medicinal chemist with a strong interest in developing drugs 'from bench to the clinic'. His research is currently focused on compounds with novel modes of action to treat fatty liver disease, neurodegenerative diseases, traumatic brain injury, stroke, and aging. Further, one of the major goals of Dr. Santos' research project is to develop a drug that increases metabolism without exercise, a program that has implications in obesity and diabetes.

Dr. Santos has 13 issued and pending patents. He has received an Innovators award and John C. Schug Research Award from Virginia Tech, serves on the editorial advisory board of Current Medicinal Chemistry, and has over 65 published papers in peer-reviewed journals. Research from his laboratories has resulted in two spin off companies: SphynKx Therapeutics, LLC and Continuum Biosciences, Inc. His work is supported with funds from the National Institutes of Health, National Science Foundation, and various foundations. His laboratory has trained 15 Masters and PhD students, and has an active laboratory that involves undergraduate, graduate, and postdoctoral students in chemistry.

### REAPPOINTMENT:

The president and executive vice president and provost have confirmed the reappointment of Dr. Webster Santos to the Cliff and Agnes Lilly Faculty Fellowship for three years effective August 10, 2017 with operating support as provided by the endowment and, if available, with funds from the eminent scholars match program.

September 10, 2017

# Undergraduate Honor System 2016-2017 Highlights

### **Case Resolution**

- •Case Resolution Time: This time has decreased from around 60 class days under the old system to 15 class days in most instances under the new system, promoting a fair and timely response for both faculty and students.
- **Consultations Given:** The Undergraduate Honor System conducted more than 16,500 consultations with members of the campus community.
- ◆ Case Resolution Type: 65.8% of cases were resolved through the new Faculty-Student Resolution Process.
- •Cases Reported: 788 cases of academic misconduct were reported during the 2016-2017 academic year compared to 396 cases during the 2015-2016 academic year. The reason for the increase in reports is a greater confidence and awareness of the Honor Code process, rather than a reflection of increased instances of academic dishonesty.

Violation Type (n=788):	Percent		
Cheating	69.2%		
Plagiarism	17.3%		
Falsification	4.5%		
Complicity	4.1%		
Violation of Rules	3.3%		
Multiple Submission	0.9%		
Fabrication	0.7%		

Sanction Type (n=788):	Percent	
Zero on the Assignment	29.8%	
F*	24.6%	
Withdrawn/Dismissed After Consultation	21.0%	
Suspension/Expulsion	10.6%	
Lowered Course Grade	8.5%	
Other	5.0%	
Not Responsible	0.5%	

The \* denotes on the academic transcript that a student failed the course due to academic misconduct.

### **Academic Integrity Education**

- •Honor System Presentations: Attended by more than 11,000 students, parents, faculty and staff.
- Academic Integrity & Student Success Learning Module: Completed by more than 4,000 students.
- •Academic Integrity Education Program: Completed by more than 335 students.
- •Academic Integrity Day: Student Delegates joined the International Center for Academic Integrity and institutions around the world to speak up and out against contract cheating.
- **Understanding the Code:** Student Delegates led 13 sessions attended by over 500 students and faculty members.

### Student Leadership: VT Shaped Student

- •Research: Student Delegates completed over 700 hours of scholarly research in the field of academic integrity.
- •Hearing Panels: Student Delegates chaired an average of eight hearing panels per Delegate.
- Meetings: Student Delegates conducted an average of 65 meetings per Delegate that resulted in cross-disciplinary conversations.





# An Update

September 2017

Dr. Paul Winistorfer, Dean

# Celebrating Our 25<sup>th</sup> Anniversary as a College at Virginia Tech September 15-16, 2017

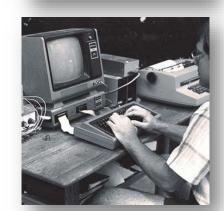
You are Invited to Join us for the Festivities!

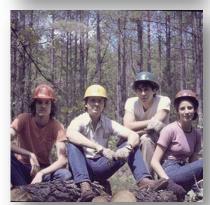
















## Thank you Dr. John Hosner for Your Vision to Establish the College

We are prospering today from the seed you planted more than 25 years ago! Our faculty, staff, and students are outstanding. Virginia Tech and the campus community deserve credit as some of the ranking metrics are broader university measures.

For the third consecutive year, *USA Today College Edition* ranked Virginia Tech as the nation's best for studying natural resources and conservation. Our forestry program was ranked #1 in the same study. Our new packaging systems degree was recently ranked #7 out of the top 20 programs nationally by *Value Colleges*!

# Intentional Positioning of an Academic Enterprise for the Future-A Path and A Pace

### **New College and Department Names – New Initiatives**

- College of Natural Resources and Environment
- Forest Resources and Environmental Conservation
- Sustainable Biomaterials
- Fisheries and Wildlife Conservation
- Geography



- Leadership Institute
- Wood Enterprise Institute
- Sustainability Institute





### **Department of Fish and Wildlife Conservation**

- Wildlife Conservation
- Fish Conservation
  - Freshwater Fisheries Conservation track
  - Marine Fisheries Conservation track

### **Department of Geography**

- Meteorology
- Geography

### **Department of Sustainable Biomaterials**

- Packaging and Systems Design
- Sustainable Biomaterials
  - Sustainable Enterprise track
  - Creating Sustainable Society track
  - Sustainable Residential Structures track

# Department of Forest Resources and Environmental Conservation

- Environmental Informatics
- Environmental Resources Management
  - Environmental Resource Management option
  - Watershed Management option
- Forestry
  - Forest Operations and Business option
  - Forest Resource Management option
  - - Urban Forestry option
- Natural Resources Conservation
  - Conservation and Recreation Management option
  - Environmental Education option
  - Natural Resources Science Education option
- Water: Resources, Policy, and Management

## **New College and Department Names**

**Our Degree Programs Position Us for the Future** 

## **B.S. Packaging Systems and Design**

- Ranked #7 Out of Top 20 Packaging Programs in the U.S.
- 125 students enrolled in the major
- Highest starting salaries for degree programs in CNRE





















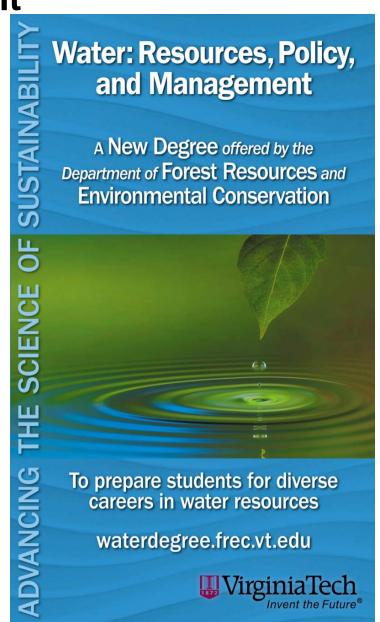




### B.S. Water: Resources, Policy, and Management

- 50 undergraduate majors
- \$750,000 endowment for scholarships and undergraduate research







- The only meteorology degree program in the Commonwealth of Virginia
- 125 students enrolled in degree program
- Largest number of entering students in a single major in CNRE fall 2017
- Moore, Oklahoma tornado in the Cube at Moss Arts Center
- Storm Chasers
- Mountaintop weather monitoring stations



### The Sustainability Institute

Winter Training 2017 - A Look at Our 42 Student Leaders



### 33 Different Majors Represented

- 7 Natural Resources & Environment
  Environmental Resource Management
  Geography
  Natural Resources Education
  Packaging Systems and Design
  Water: Resources, Policy and Management
- Architecture & Urban Studies
  Architecture
  Building Construction

Wildlife Conservation

Building Construction Environmental Policy and Planning Industrial Design Public and Urban Affairs Real Estate

- 5 Science
  - Biological Sciences Economics Geophysics Geoscience Psychology

- 5 Engineering
  Aerospace Engineering
  - Chemical Engineering
    Civil and Environmental
    Construction Engineering and Management
    Materials Science and Engineering
- 5 Liberal Arts & Human Studies

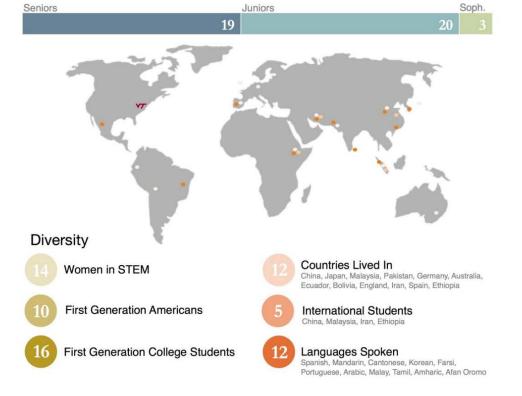
Classical Studies English Multimedia Journalism Property Management Spanish

4 Agriculture & Life Sciences
Applied Economic Management

Biochemistry Environmental Science Human Nutrition, Food and Exercise

1 Business

Business Management

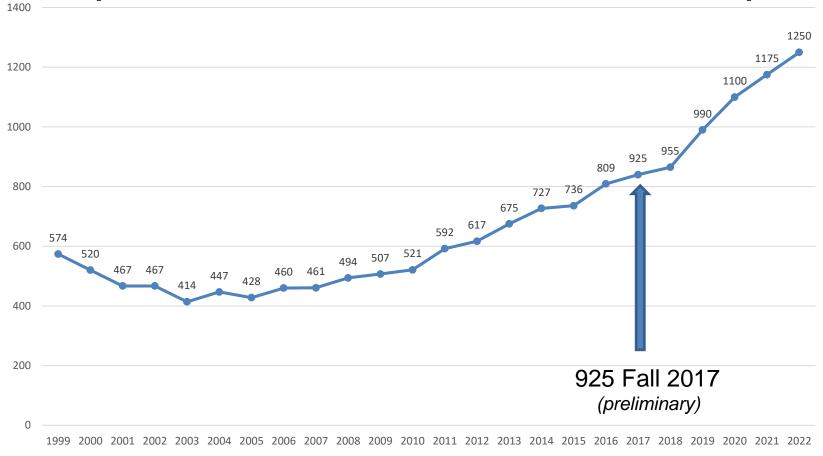


- Reaching the campus community through a 2-week boot camp
- Problem solving with a sustainability lens
- Differentiating VT students in the
- marketplace



Rector Dennis Treacy and Governor McAuliffe at the Virginia Energy and Sustainability Conference in Richmond during the winter 2017 boot camp

# CNRE UNDERGRADUATE ENROLLMENT 1999-2017 (2009-2017 ARE FALL CENSUS DATA)



Undergraduate enrollment is important to our future at Virginia Tech

\* These are numbers as of 8/14/17; enrollment will increase with internal transfers in September Will we need new or additional degree offerings to reach our goal by 2022? How do we scale faculty, collegiate faculty, instructors, GTA, and staff support? We must be proactive.

# CNRE has adopted a model of professional advisors, working in partnership with the academic departments and faculty in support of student success!



CNRE has two of the top ten research award academic departments at VT. FWC is #5 and FREC at #8. CNRE set a college all-time high at over \$21 million in the year ending June 30, 2016. **Fiscal** Award

		1 13041	Awaia		•
Department	College	Year	Total		departme
Mechanical Engineerin     Electrical and	ng College of Engineering	2016	18,864,636		departine
ComputerEngineering	College of Engineering	2016	15,118,527		
Computer Science     Civil & Environmental	College of Engineering	2016	10,710,216		
Engineering	College of Engineering	2016	9,914,357		
5. Fish and Wildlife Co	onservation	Natural F	Resources	2016	8,921,883
b. Cnemistry	College of Science	2016	გ, <u>159,</u> გ46		
7. Biomedical Engineerin Mechanics	g & College of Engineering	2016	8.092.559		
8. Forest Resources &	& Environ Consrv	Natural F	Resources	2016	7,050,827
e. Aerospace and Ocean Engineering	College of Engineering	2016	5,297,792		
<ol><li>Animal and Poultry Sci</li></ol>	iences Agriculture & Life Sciences	2016	5,195,282		
<ul><li>11. Biological Sciences</li><li>12. Materials Science &amp;</li></ul>	College of Science	2016	4,959,242		
Engineering 13. Industrial and Systems	College of Engineering	2016	4,333,441		
Engineering	College of Engineering	2016	3,727,442		
14. Biochemistry	Agriculture & Life Sciences	2016	3,660,783		
15. Entomology 16. Mining and Minerals	Agriculture & Life Sciences	2016	3,410,280		
Engineering 17. Crop & Soil Environme	College of Engineering ental	2016	3,357,114		
Science 18. Biological Systems	Agriculture & Life Sciences	2016	3,115,437		
Finalis a sile d	A minultura O Life Colonese	2040	0.045.044		
19. Conservation Mar	nagement Institute	Natural I	Resources	2016	2,884,333
20. Physics	College of Science	2016	2,799,026		
<ol> <li>Chemical Engineering</li> <li>Human Nutrition, Food</li> </ol>	College of Engineering Is &	2016	2,224,284		
Exercise	Agriculture & Life Sciences	2016	1,980,379		
23. Psychology 24. Food Science and	College of Science	2016	1,659,322		
Technology	Agriculture & Life Sciences	2016	1,643,253		
25. Dairy Science	Agriculture & Life Sciences	2016	1,552,582		
College	Fiscal Year	Awa	rd Total		

**Running 3-year average shows Forestry** (FREC), and Fish and Wildlife Conservation (FWC) among the top ten funded academic ents at Virginia Tech for the period FY 2015-2017

### **Top Sponsors – Federally Dependent**

- National Science Foundation
- US Fish & Wildlife Service
- VA Department of Game & Inland **Fisheries**
- USDA National Institute of Food and Agriculture
- USDA, Forest Service
- NASA
- National Park Service
- **US Geological Survey**
- US Department of Defense

## **Diversity and Inclusion**

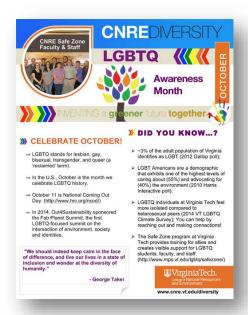




### **2016-2017 Activities**

- Completed series of monthly diversity posters highlighting different aspects of racial, religious, regional diversity (on display on website). All posters contained a natural resource theme or mention of diverse community members working in natural resources.
- Held a 'LGBTQ in Natural Resources' Panel Presentation on October 26,2016 (co-sponsored by Intercultural Engagement Center)
- Held a 'Women in Natural Resources' Panel Presentation on March 15, 2017 (co-sponsored by Intercultural Engagement Center)





### The Dean's Advisory Council: Created Fall 2016

- Advancement/Engagement
- Advice
- Advocacy
- Access



# **Challenges/Opportunities**

- Aging and crowded CNRE infrastructure will impede our growth and impacts moving forward
- 40% of CNRE faculty will retire within 5-7 years
- Faculty start-up packages with a large number of retirements
- Matching 2:1 college/provost on Destination Area faculty hires
- Federal research portfolio will likely be challenged in coming years





# **Bright Spots**

- Committed and passionate faculty and staff
- #1 ranking in U.S.
- On track with enrollment growth and confident in meeting long term goals
- Unique regional and national degree programs
- Unique graduate degree programming in National Capital Region
- New Advising Center model
- Self-funded facilities improvement; new aviary
- New Opportunities with PIBB financial model for CNRE
- Actively serving the Commonwealth with Cooperative Extension Programming

# Moving Forward\* 2017-2018

- Partnership for Performance Based Budget (PIBB) and College Finances
- Enrollment/Recruitment meeting our goals for in state and out-of-state
- Destination Areas/Strategic Growth Areas
- Pathways General Education
- College-wide Strategic Planning
- Diversity and Inclusion
- Student Reading/Writing/Communication/Soft/Social Skills
- Defining a Virginia Tech Brand of Sustainability
- Space the Final Frontier/Capital Requests

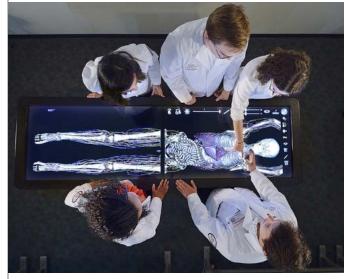
<sup>\*</sup>Moving Forward – Creating and Capturing Opportunities to Advance the College in Alignment with our Vision and Mission. Getting Better and Better Every Day.







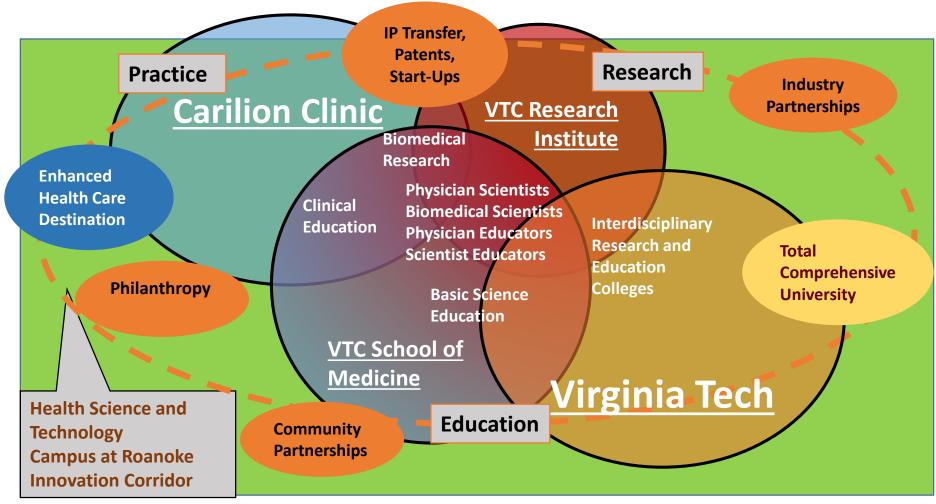
# Health Sciences and Technology Campus



# Virginia Tech Carilion School of Medicine Integration

Thanassis Rikakis, Executive Vice President and Provost

Health, Education, and Research Driving Economic Development in Southwest Virginia





### Carilion Clinic 1

### Virginia Tech

### INNOVATIVE EDUCATION/TRAINING







Clinical departments of emergency medicine, family & community medicine, internal medicine, obstetrics/gynecology, orthopedic surgery, pediatrics, psychiatry and behavioral medicine, radiology, and surgery

(Clinical Enterprise)





Colleges – CALS, CAUS, COE, COS, CVM, CNRE, CLAHS, PCB



Department of Basic Science Education



**VTCRI** 



Department of Biomedical Research

**VTCSOM** 





## **Highlights**

2007- Virginia Tech, Carilion Clinic, and the commonwealth announced a public-private partnership: Virginia Tech Carilion School of Medicine and Research Institute

Address physician shortage

**Grow biomedical research enterprise** 

- 2008 Commonwealth approved \$59M capital project
- 2010 Charter medical school class enrolled
- 2014 Charter medical school class graduated
- 2014 Charter PhD class enrolled in Ph.D. in Translational Biology, Medicine and Health



- 2016 Virginia Tech Board of Visitors approved intent to acquire and integrate VTCSOM
- 2017 VTCSOM included in long-term enrollment projections
- 2017 Virginia Tech Carilion Research Institute (VTCRI) surpassed \$100M in total research funding awarded







### **Medical School Accreditation**

- Acquisition is a substantive change to Virginia Tech's regional accreditation status overseen by Southern Association of Colleges and Schools Commission on Colleges (SACS-COC)
- Change must be approved by the Liaison Committee of Medical Education (LCME) - accreditation of the MD degree
- Coordination with State Council of Higher Education for Virginia (SCHEV)





## **Medical School Funding Model**

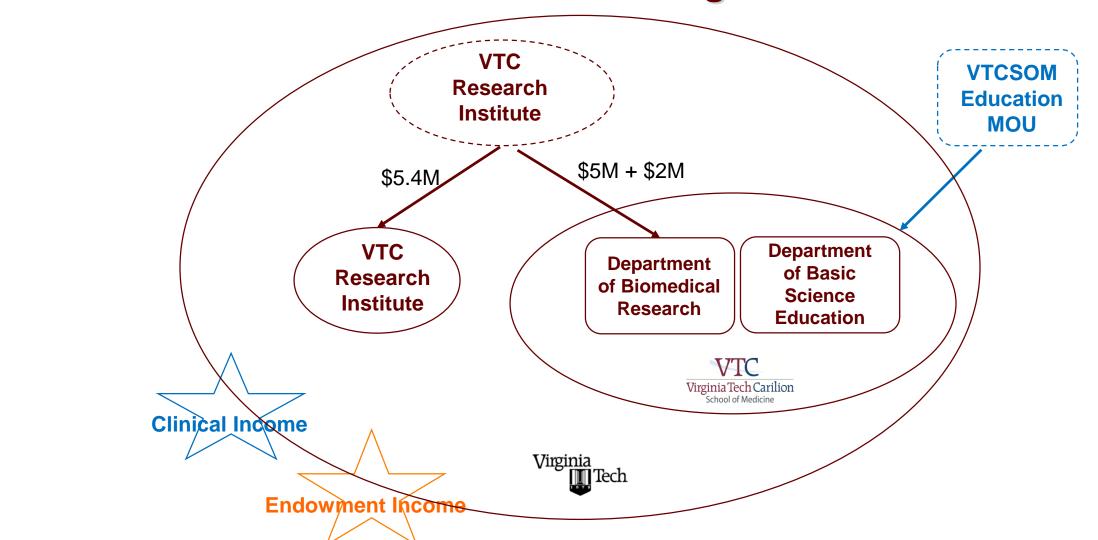
The medical education program will be funded by existing, selfgenerated revenue.

(\$ in millions)	2018-19*
Revenue	
Medical Student Tuition (~\$52K)	\$7.3
Partnership Nongeneral Funds	6.5
Miscellaneous	0.6
Total Revenue	14.4
Expenses	
Medical Instruction	(14.4)
Net	\$0
* Under development.	





## **Medical School Integration**







## **VTCSOM Integration Timeline**

- Joint workgroups coordinating: accreditation, communications, facilities, finance, IT, libraries, personnel, student services
- November 2017 Virginia Tech Board of Visitors approves acquisition



- July 2018 VTCSOM becomes Virginia Tech's ninth college
- Academic Year 2018-19 site visits by SACS-COC and LCME for continued accreditation





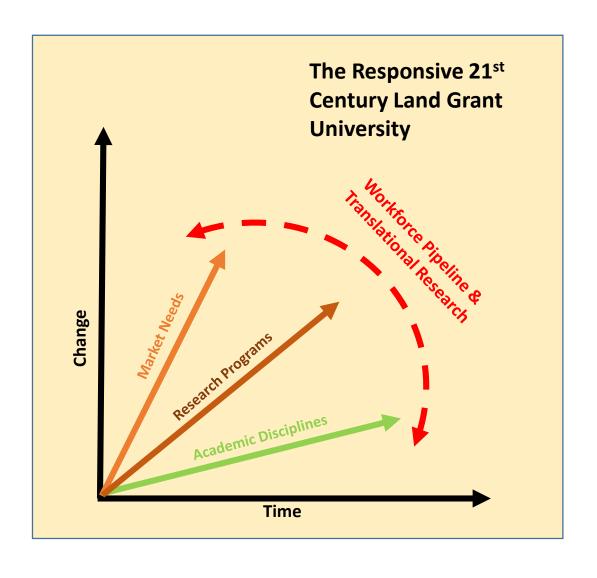
# **Questions and Discussion**

# **Destination Areas**

# Responsive 21<sup>st</sup> Century Land Grant University

Thanassis Rikakis, Executive Vice President and Provost Academic, Research, and Student Affairs committee Virginia Tech Board of Visitors
September 10, 2017

# Destination Areas Context 1: Helping Build the Commonwealth's 21<sup>st</sup> Century Economy



- Market needs change on a much faster cycle than academic disciplines accrue knowledge or research infrastructure can develop
- 21<sup>st</sup> Century problems are complex and global
- An additional layer of organization is needed to:
  - Ensure institutional programs are responsive to our complex and rapidly changing external environment
  - VT develops economies of scales that attract global talent to the university and State

# Destination Areas Context 2: Virginia Tech's Beyond Boundaries Vision

- Communities of Discovery and Learning
  - Inter- and transdisciplinary discovery and learning at a scale that is responsive to 21st century
- Nexus of Discovery
  - Partnerships across academia, industry, and government
  - Spanning basic, applied, and translational research
- VT-shaped Knowledge Framework
  - Disciplinary strength
  - Cross-disciplinary curricula and research collaborations
  - Experiential learning and partnerships



- The Global Land Grant University: advancing society and Virginia's economy in a global context
- Destination Areas and Strategic Growth Areas; A Key Tool for Realizing Beyond Boundaries: enhancing our cross-cutting communities of discovery (horizontal) within VT-shaped discovery
  - Amplify departmental, college, and institute strengths with an additional layer of institutional organization
  - Resulting in economies of scale that advance Virginia Tech as a global destination for talent
  - Developed through iterative identification and design process with faculty, colleges, and institute participation
  - Peers and aspirational institutional peers are engaged in similar activities

# Destination Areas Large-Scale Communities of Discovery and Learning

- Leverage <u>existing</u> disciplinary and interdisciplinary strengths and craft distinctive strengths of scale
- Organized around transdisciplinary themes; themes that can not be reduced to a few component disciplines
- Open, collaborative frameworks that invite participation by all and promote complexity and dynamicity
- Strengthen the horizontal component of VT-shaped learning
- Advance global distinction for each DA community and its disciplinary and interdisciplinary components
- Attract talent, partnerships, and external resources to the university and Virginia to advance the nexus of discovery

## Destination Areas Advance Communities of Discovery at Scale

#### Layer 4 **Partial Data & Decision Sciences Transdisciplinary Cross-university DAs** representation **Health Sciences & Technology Campus** of DA **National Capital Region – VT MIX** Layer 3 **Institute for Society Culture &** Interdisciplinary, **Biocomplexity Institute** Cross-college, **Environment Institutes, Ag Extension & Experiment Station Social Decision Complexity Modeling Modeling & Policy** Layer 2 **College of Liberal Arts & Colleges College of Science College of Engineering Human Sciences Parallel Computing Social Modeling Decision Sciences** Social 😹 Social 📕 **Decision** Complexity Complexity **Parallel Parallel** Modeling Modeling **Neuroscience Modeling** Modeling Computing Computing Laver 1 Human **Departments Electrical and**

**Neuroscience** 

Sociology

Development

**Mathematics** 

**Computer Science** 

Computing

## **Destination and Strategic Growth Areas**

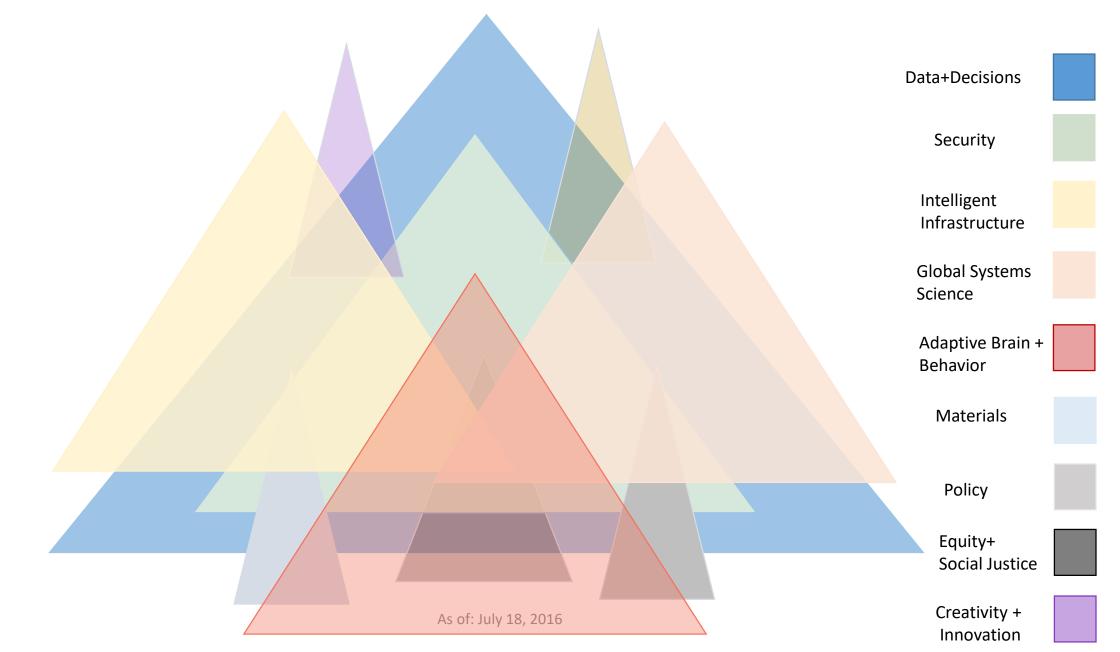
## **Destination Areas (DAs)**

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

## **Strategic Growth Areas (SGAs)**

- Creativity and Innovation
- Economic and Sustainable Materials
- Equity and Social Disparity in the Human Condition
- Policy

## A large scale, resilient network of communities of discovery at VT



## **Destination Areas: Cross-cutting Committees**

## Cluster Operations and Hiring

- Develop and incentivize clusters of existing faculty
- Develop new faculty recruitment and hiring models to integrate DA hires into clusters
- Advance inclusion and diversity through the hiring process

## Research Strategy

- Optimize existing research strategies
- Add new strategies of scale
- Engage external partners in the development of the DA and college plans
- Develop cross-cutting research facilities

## VT-shaped Learning

- Facilitate DA-related transdisciplinary undergraduate and graduate curricula
- Integrate DA curricula with existing and new interdisciplinary curricula (Pathways (undergraduate) and Interdisciplinary Graduate Education Programs (IGEPs))
- Develop cross-cutting advising model with professional advisors for undergraduates
- Develop models of scale for experiential learning
- Enhance innovative teaching facilities

## Cross-committee Integration

- G. Don Taylor, vice provost for learning systems innovation and effectiveness, cross-college and DA facilitation
- Optimize operational and financial synergies between strategic priorities, investments and plans of all committees

## Destination and Strategic Growth Areas Hiring, 2017-22

<b>Destination Areas</b>	Projected Hires
<b>Adaptive Brain and Behavior</b>	60
<b>Creativity and Innovation</b>	36
<b>Data and Decision Sciences</b>	<b>75</b>
<b>Global Systems Sciences</b>	90
Intelligent Infrastructure	
for Human-Centered Communities	<b>75</b>
Integrated Security	75
Total	411

Integrated with college funded faculty positions

Over this period of 8 years we will hire over 900 faculty in total

## Destination Areas: Virginia Tech Capital Priorities

Focus on: Repair and replacement of deteriorating buildings; increase lab space for Science, Technology, Engineering, Math-Health (STEM-H) programs; investing in cost-containment and efficiency efforts

Unive	rsity Division		Nongeneral	
(Agen	cy 208)	<b>General Fund</b>	Fund	Total
1	Undergraduate Science Laboratory	\$ 74.8	\$ 0.0	\$ 74.8
2	Data Analytics & Decision Sciences Building	75.0	0.0	75.0
3	Replace Randolph Hall	155.1	27.4	182.5
4	Corps Leadership & Military Science Building	29.9	20.0	49.9
5	Renovate Robeson Hall	44.6	0.0	44.6
•	erative Extension/Ag Experiment Station Division cy 229)			
1	Global Systems Sciences Building	\$ 94.4	\$ 0.0	\$ 94.4
2	Renew Livestock and Poultry Research Facilities, Phase II	24.3	0.0	24.3

# Destination Areas Undergraduate and Graduate Courses

## Gateway Courses

- Introduce students to transdisciplinary thinking and Destination Areas themes
- Structured to meet general education requirements
- Help students discover dormant interests that they can further pursue by taking up a Destination Pathways Minor (6 courses) or Concentration (8 courses)

## Pathways Minors and Destination Areas Concentrations

- Pathways Minors or DA concentrations can be included into a degree as a cross-cutting credential
- Students who are studying in a non-science, technology, engineering, mathematics (STEM) degree program can add a STEM degree component to their degree
- Students who are studying in a STEM degree program can add a non-STEM degree component to their degree

## Graduate Study and Experiential Learning

- DA faculty will develop transdisciplinary graduate courses and certificates, and work with graduate students on research projects that tackle complex societal problems
- DA courses and concentrations will interact with rich existing network of IGEPs creating economies of scale in graduate inter- and transdisciplinary concentrations

## Destination Areas: Upcoming Activities and Highlights...

## • 2017-18 Hires

- 34 hires as DA faculty: infectious disease, artificial intelligence, creative pedagogies, simulation and modeling, social justice, the adaptive brain, smart construction, decision sciences, and nanoscale physics
- New DA-related research and teaching collaborations
- New promotion and hiring criteria to provide incentives for DA faculty collaborations

## Launch of Cluster Hire Ads and DA Communication Platform

- Ad in September Chronicle of Higher Education
- Cluster hires in 4 DA areas: Creativity and Innovation, Data and Decision Sciences, Intelligent Infrastructure for Human-Centered Communities, and Integrated Security

## Intelligent Infrastructure for Human-Centered Communities, Industry Roundtable

Fall – President Sands to kick off DA-Industry Roundtable; Intelligent Infrastructure DA faculty and industry
executives will develop collaborations and research projects

## Advancing the Human Condition Research Symposium

• The Equity and Social Disparity for the Human Condition SGA will hold a three-day symposium to explore educational, research, and external partnerships

# Destination Areas Advance the Responsive 21<sup>st</sup> Century Land Grant University

## **Inter- and Transdisciplinary**

## **Discovery at Scale**

- DA Faculty Clusters
- Shared Facilities
- Research Institutes
- Cross-cutting Training and Credentials (DAs, Pathways and IGEPs)

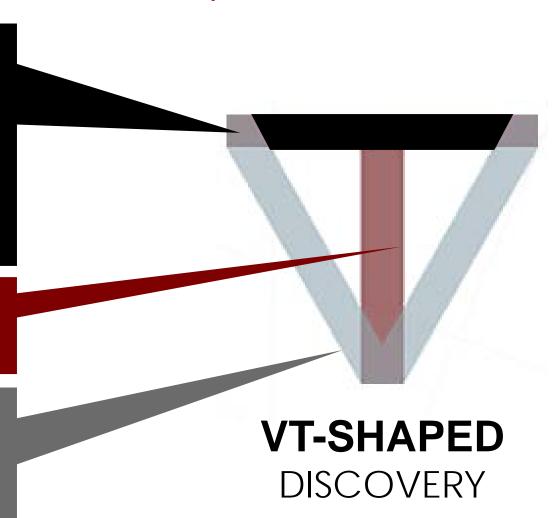
## **Disciplinary Depth**

- Colleges and Departments
- Degrees

## **Experiential Learning and**

## **Partnerships**

- Co-labs
- Internships/Externships
- Undergraduate Research
- Living Learning Communities



# Destination Areas Responsive 21<sup>st</sup> Century Land Grant University

## Questions/Discussion

# Enrollment Planning and Projections

Thanassis Rikakis, Executive Vice President and Provost Academic, Research, and Student Affairs Committee Virginia Tech Board of Visitors
September 10, 2017

## <u>Aspirational</u> Enrollment Projections First-Time Freshmen On-Campus

	2016	Projected 2017	Projected 2018	Projected 2019	Projected 2020	Projected 2021	Projected 2022	Projected 2023
Total First-Time Freshmen (FTF) (In and Out of State)	Total FTF at census* 5,872	6265  Projected  Pre-Census  6750	6830	6954	7078	7203	7327	7451
Total/ALL Undergrads (+ new transfers, continuing)	Total ALL at census* 25,741	27,177	27,500	28,000	28,500	29,000	29,500	30,000

<sup>\*</sup>Census is captured on <u>September 30</u> of each year

# 2022 – 2023 Aspirational Projections to Increase Student Diversity

40% of the 2022-23 incoming class will be comprised of underserved and underrepresented minority students

# Enrollment Planning/Projections <a href="Mational Capital Region">National Capital Region</a>

## **Graduate Education: 2000+ by 2022**

- 1,000+ professional master's/graduate certificate earners
- 300+ full-time master's with research component
- 600 Ph.D. students

## **Undergraduate Education: Expanded experiential learning**

- 300 in residence by 2022
- 300 accelerated bachelor's / master's
- 500 winter/summer sessions

## Enrollment Planning - Projections Health Sciences and Technology / Roanoke

	Undergraduate	Graduate	Medical	Totals
Summer 2017	<b>75</b>	<b>76</b>	168	319
*AY 17 – 18	<b>100</b>	<b>103</b>	168	317
Summer 2018	150	103	168	<b>421</b>
AY 18 – 19	175	125	168	<b>468</b>
Summer 2019	150	125	168	443
AY 19- 20	200	139	168	507
Summer 2020 AY 20 - 21	250 300	139 155	168 168	<b>557</b> 623
Summer 2021	<b>350</b>	155	168	673
AY 21 - 22	<b>400</b>	169	168	737
Summer 2022	<b>450</b>	169	168	<b>787</b>
AY 22-23	<b>500</b>	173	168	<b>841</b>

<sup>\*</sup> AY = Academic Year

# Enrollment Planning and Projections Space 2017-18

Project	Projected Timeline	Funding Projections
Riverside 1 (Roanoke)	Fall 2017	<b>Operating Lease Approved</b>
Creativity and Innovation District (CID), (Stage 1)	Fall 2018	Transfer of Educational and General (E&G) space to Institute for Creativity, Arts, Technology (ICAT). Renovation to be funded from Destination Areas one-time savings when ready.
<b>Derring Lab Renovation</b>	Fall 2018	Capital Project – Internally Funded
3 Renovations: Sandy Hall, liberal arts building, Davidson Hall	Fall 2018	Capital Project – State Funded
Student Success Center	ASAP	Approximately 15,000 sf to accommodate central advising and student completion efforts. Potential to be located in renovated space or CID Living Learning Community building.

## Enrollment Planning and Projections - Space 2019-20

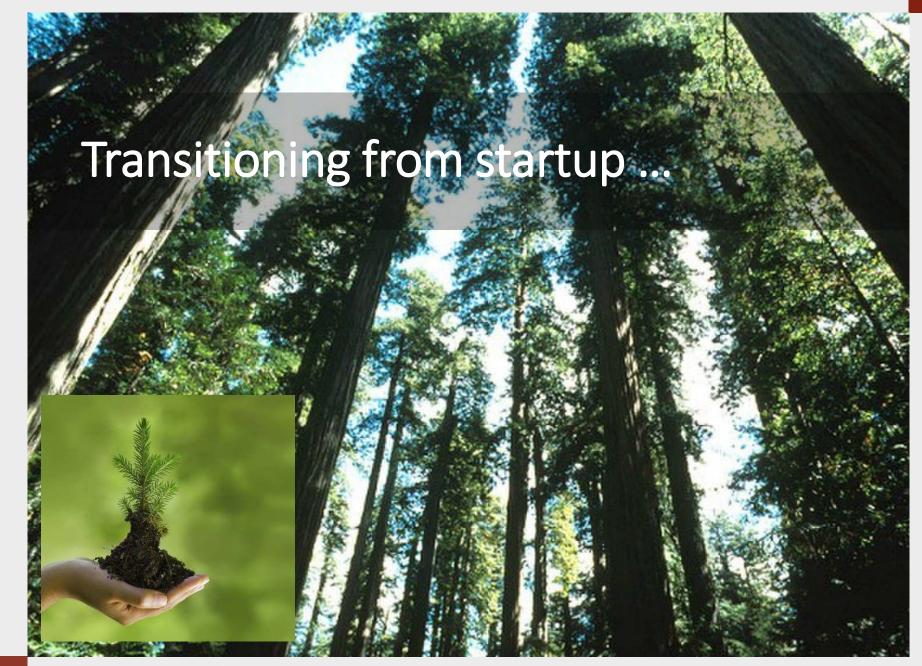
Project	Projected Timeline	Funding Projections
Corporate Research Center (CRC) Applied Research Building	Spring 2019	CRC Project – Internally Funded
Health Sciences and Technology Building – Roanoke	Spring 2020	Capital Project – State Funded with Non-General Funds (NGF) components under consideration with Carilion Clinic.
Roanoke campus	Fall 2020	500 beds for students and rotating faculty; + student services
Intelligent Infrastructure for Human- Centered Communities (IIHCC) Complex	Fall 2020	Capital Project – Combination of Private, Auxiliary, and E&G Funded
Holden Hall Renovation	Fall 2020	Capital Project – State and Research Funded
Creativity and Innovation District Living Learning Community	Fall 2020	Capital Project – Auxiliary and Athletics Funded with potential for internal operating lease for School of Visual Arts and School of Performing Arts spaces. Potential location for Student Success Center.

# Enrollment Planning and Projections Space 2021-24

Project	Projected Timeline	Funding Projections
National Capital Region	Fall 2021	100K square feet of new co-lab space
National Capital Region	Fall 2021	500 beds for students and rotating faculty; + student services
<b>Undergraduate Sciences Laboratory Building</b>	Fall 2021	Capital Project – State Funded
Global Business and Analytics Complex	Fall 2022	Capital Project – State and Philanthropy Funded
Randolph Hall Phase I	Fall 2022	Capital Project – State and Research Funded
War Memorial Hall Renovation	Spring 2022	Auxiliary Funded with E&G Lease for School of Education
Global Systems Sciences	Fall 2024	Capital Project – State Funded in 229 Agency

## **Enrollment Planning and Projections**

**Questions/Discussion** 





## Research Successes

- Industry research is up
- Scholarly works increasing in number
- Home-grown fellows and national academy members
- High-impact research that improves the human condition

Automated Vehicle Research in Virginia Virginia Tech selected to lead one of five

The 5 year, \$28 million SafeD University **Transportation Center** award will support the premier group of transportation safety researchers in the nation to conduct innovative research that will improve safety on U.S. roadways



## VT is lagging

- Competitive federal research funding declining
- Scholarly citations and faculty awards trailing peers
- Intellectual property protection and licensing revenue down
- Faculty start-ups low
- Lacking important accreditations



#### National Center for Science and Engineering Statistics

The National Center for Science and Engineering Statistics (NCSES) is the nation's leading provider of statistical data on thus. science and engineering enterprise.

Explore our website for data on research and development, the science and engineering workforce, the condition and progress of STEM education, and U.S. competitiveness in science, engineering, technology, and R&D.

## NSF Research Funding Surveys

#44 overall, but with 43% institutional support

#58 external, all categories

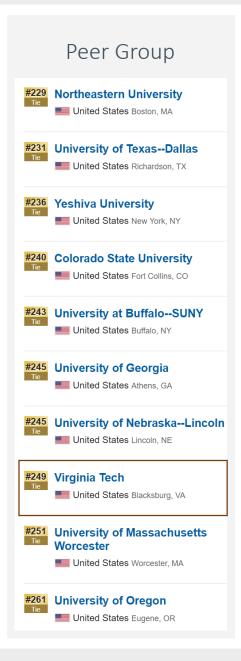
#66 competitive federal S&E

#69 competitive federal R&D



## How big is the gap?

	VA	
	Tech	
Ranking	249	
Global score	60.3	
Global research reputation	145	
Regional research reputation	247	
Publications	206	
Books	234	
Conferences	84	
Normalized citation	513	
Total citations	232	
Pubs in 10% most cited	228	
% of total in10% most cited	476	
International collaboration	601	
Pubs in top 1% most cited	284	
% of total in1% most cited	583	





## How big is the gap?

	VA
	Tech
Ranking	249
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## Aspirational Peers

- #40 University of Maryland--College Park
  - United States College Park, MD
- #42 University of California--Davis
  - United States Davis, CA
- #43 Ohio State University--Columbus
  - United States Columbus, OH
- #47 University of Illinois--Urbana-Champaign
  - United States Champaign, IL
- #56 Pennsylvania State University-University Park
  - United States University Park, PA
- #66 Georgia Institute of Technology
  - United States Atlanta, GA
- #78 Michigan State University
  - United States East Lansing, MI
- #82 University of Florida
  - United States Gainesville, FL
- #90 Purdue University--West Lafayette
  - United States West Lafayette, IN
- #105 Texas A&M University--College Station
  - United States College Station, TX

## Peer Group

- #229 Northeastern University
  - United States Boston, MA
- #231 University of Texas--Dallas
  - United States Richardson, TX
- #236 Yeshiva University
  - United States New York, NY
- #240 Colorado State University
  - United States Fort Collins, CO
- #243 University at Buffalo--SUNY
  - United States Buffalo, NY
- #245 University of Georgia
  - United States Athens, GA
- #245 University of Nebraska--Lincoln
  - United States Lincoln, NE
- #249 Virginia Tech
  - United States Blacksburg, VA
- #251 University of Massachusetts Worcester
  - United States Worcester, MA
- #261 University of Oregon
  - United States Eugene, OR



## How big is the gap?

	VA	GA
	Tech	Tech
Ranking	249	66
Global score	60.3	73.3
Global research reputation	145	34
Regional research reputation	247	79
Publications	206	147
Books	234	109
Conferences	84	10
Normalized citation	513	215
Total citations	232	130
Pubs in 10% most cited	228	109
% of total in10% most cited	476	91
International collaboration	601	156
Pubs in top 1% most cited	284	111
% of total in1% most cited	583	139

## Aspirational Peers

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- #82 University of Florida
  - United States Gainesville, FL
- Purdue University--West Lafayette
  - United States West Lafayette, IN
- #105 Texas A&M University--College Station
  - United States College Station, TX

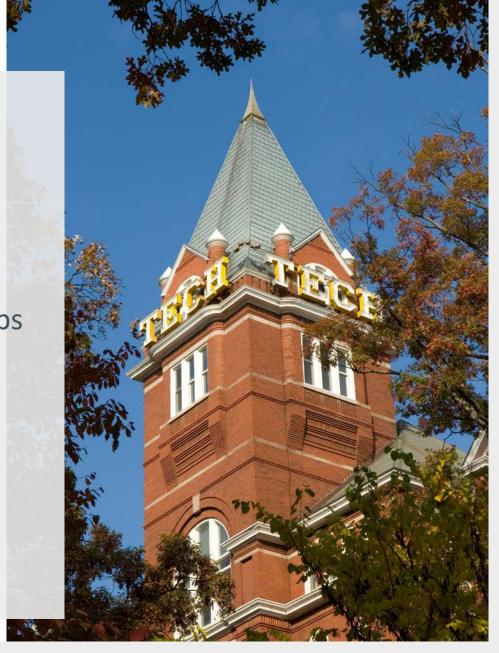
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  - United States Richardson, TX
- #236 Yeshiva University
  - United States New York, NY
- #240 Colorado State University
  - United States Fort Collins, CO
- #243 University at Buffalo--SUNY
- United States Buffalo, NY
- #245 University of Georgia
  - United States Athens, GA
- #245 University of Nebraska--Lincoln
  - United States Lincoln, NE
- #249 Virginia Tech
  - United States Blacksburg, VA
- #251 University of Massachusetts Worcester
  - United States Worcester, MA
- #261 University of Oregon
  - United States Eugene, OR

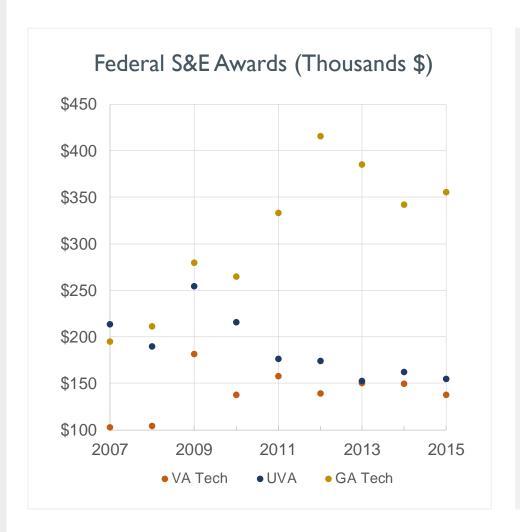


## Our aspirational peers are doing better

- Research support
- Scholarly impact
- Private-public partnerships
- State funds
- Investment funds
- Start-ups



## Proof point – GA Tech





\$600 million invested

**64** active eminent scholars

150 active start-ups







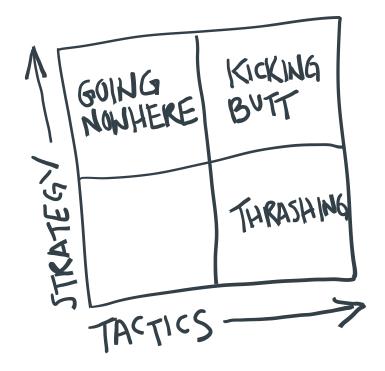


What things are missing? What things will it take to advance?

## A better R&I structure

## Where are we now?

- Research strategy lacks university-wide focus and coordination
- Innovation strategy largely missing
- Unclear and duplicative roles and responsibilities
- Highly transactional



## Proof points

- Number of professionals who are responsible for industry engagement
- Number of professionals who provide university-wide strategic proposal support
  - Number of different reporting lines for the directors of the seven university-level research institutes
- Number of distinct industry contract agreement types (not including the VT Foundation)

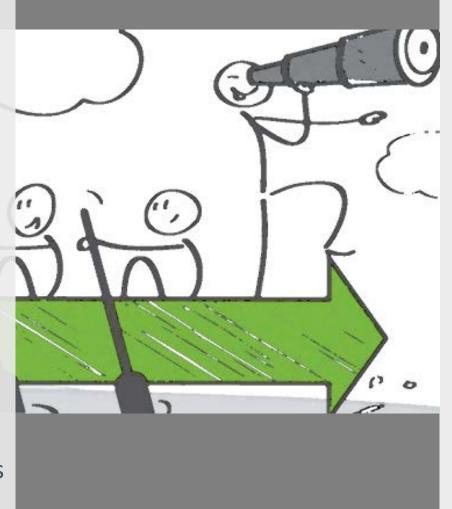
#### Institute Ops + 600.00 Proof point - exec team roles AFLAC / INIMAL CARE - MPD SCHEV Expuntitures/ABD-MD/DD - VPKI RESPONSE VTIP =PC SE EHSS - DD COI - LB/BT SIBC PDI - BK Communications - BT OSP-MPD HPC - SE CREST - MO SCIF SPACE - MPD A cademic Analytics INNOVATION - BT - IRP NETL -SE - scholarship - All boards/Mtgs - All INDUSTRIAL LIAISON DESERVED Relationship u/ uni Dullopment - SE SPACE PLANNING - Assignments/Subs - SERGE ALLOCATION - DD Signature approval/dulegation - MD W/ Gart Relations-BT V BHRC-DD Overhad distributions - MPD-ken Miller VNEC - SE Large Proposals - ALL Associate Deans - DO BOY/GOLINGIE - BT Destination Areas - BT Autonomons Systems. MD Diversity/Inclusion - DD GENTIAR -SE Un dergraduate Received IALR MII - SE MAAR Lmo Center Reviews - SE MI EX PLOY HUME! Research education - BT

What will our focus be?
What does this mean for OVPRI?
Re-design of the engine.



## What we're doing

- Aligning R&I functions to support excellence and growth
- Re-invigorating our talent pool
- Contemporizing our communications and marketing
- Enhancing tactical functions to be effective and efficient
- Taking a strategic approach to industry, federal, partnerships
- Redesigning the way work gets done, e.g., licensing and ventures



## How we are doing it: a focus on functions

#### Programs of scale

- Higher conversion rates
- Focus on global impact; COEs

Competitive analysis

Capture planning

Opportunity identification

Government agency support

Sustaining revenue

#### **OUTCOMES AND IMPACTS**

- Higher win rates
- Larger pipeline
- Efficiencies and quality
- Faculty satisfaction

- Programs of market relevance
- Streamlined paths to market
- Stronger innovation ecosystem
- Diversified revenue

#### **Functional Focal Areas**



### **Gains n Government**

- Peer universities
- Public private
- Philanthropy
- Internal and regional

## Strategic

- Strategic program development
- Young investigator programs
- Foundations and awards
- Broader impacts coordination



## **Proposal Works**

- Teaming agreements
- Matching funds
- Solicitations and "pitches"
- Internal alignment



## **Discovery 2 Market**

- Industry
- Entrepreneurs
- Donors and funders
- Public private

- Industry engagement
- Asset management
- Education and Proof-of-Concept
- Venturing and accelerators



**Partnering** 

# **OVPRI Functional Focus Model**

#### **Functional Focal Area**



- **Discovery 2 Market**
- Industry
- Entrepreneurs
- Donors and funders
- Public private

# Responsibilities

### P<sub>2</sub>P

Industry engagement

Asset management

Venturing and accelerators

Education and Proof-of-Concept

Patent prep and process

- Disclosure intake
- Patent preparation
- Filings and prosecution
- Payments
- Administration

### link

Center for Industry Partnerships

- Industry engagement
- Sponsored programs business terms and relationship management
- Licensing options and agreements
- Faculty engagement, education, culture change

### Ventures

- Investment funds
- Start-ups
- Entrepreneur engagement
- Regional partnering
- Accelerators and facilities

We have a good foundation. We have a geographic advantage.

We have work to do. We must be strategic.



# **Division of Student Affairs**

# Presentation to the Academic, Research, and Student Affairs Committee

Patricia A. Perillo, Ph.D. Vice President for Student Affairs



# **Our Mission**

The mission of the Division of Student Affairs is to promote **student learning**, **life skills**, **and personal growth** through a strong focus on holistic student development and collaborative partnerships that deliver superior service to, and care for, students in the spirit of *Ut Prosim*.



# Organizational Structure and Leadership

- The Vice President for Student Affairs provides leadership to a division comprised of 25 departments and central administrative units.
- The division is one of the largest employers at Virginia Tech, with approximately 3,600 faculty, staff, wage, student employees, and graduate assistants.



# **Division of Student Affairs Departments**

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

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

#### **ADMINISTRATIVE**

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



# The Division of Student Affairs is comprised of...

- Artists, Architects, Administrators, Assessment Specialists...
  - Chefs, Counselors, Cooks, Corps of Cadets Leaders...
  - Designers, Dietitians, Disabilities Specialists, Doctors...
    - Electricians, Editors, Educators, Event Planners...
  - Faculty, Financial Analysts, Farmers, Fraternity Leaders...
- Physician Assistants, Pharmacists, Psychiatrists, Physical Trainers...
  - Radiologists, Receptionists, Residential Learning Coordinators, Regimental Commanders...
    - Tailors, Teachers, Technologists, Trainers...
- Warehouse Clerks, Web Designers, Writers, Wellness Coordinators...
  - and much more!



# **Budget & Facilities**

## **Budget**

The 2016-17 revenue budget for the Division of Student Affairs totaled \$161.7 million, of which approximately \$2.9 million were Education and General Funds and \$2.3 million were Unique Military funds. The remaining \$156.5 million in Auxiliary Enterprises accounts for 49% of the university's total Auxiliary Enterprise funds.

### **Facilities**

The Division of Student Affairs is responsible for an extensive physical plant consisting of more than 3 million assignable square feet and more than 60 buildings across the campus. This represents approximately 31% of the total square feet on the Virginia Tech campus. Included are 10 dining facilities and 47 residence halls.



# **Aspirations for Student Learning**

## **Commit to unwavering CURIOSITY**

Virginia Tech students will be inspired to lead lives of curiosity, embracing a life-long commitment to intellectual development.

### **Pursue SELF-UNDERSTANDING and INTEGRITY**

Virginia Tech students will form a set of affirmative values and develop the self-understanding to integrate these values into their decision-making.

### **Practice CIVILITY**

Virginia Tech students will understand and commit to civility as a way of life in their interactions with others.

## Prepare for a life of COURAGEOUS LEADERSHIP

Virginia Tech students will be courageous leaders who serve as change agents and make the world more humane and just.

## **Embrace UT PROSIM** as a way of life

Virginia Tech students will enrich their lives through service to others.



# MANAGING ENROLLMENT GROWTH

2017-2018 Academic Year and Beyond



# Managing Enrollment Growth Housing and Residence Life Strategies

- Reduced returning student contracts
- Offered contract buy-outs for upper-class students
- Required housing deposit earlier
- Converted lounges
- Created triple rooms (double rooms with 3 residents)
- Assigned Resident Advisors roommates
- Decided not to house Transfer students



# Managing Enrollment Growth Dining Strategies

- Expediting payment processing
- Extending hours
- Adding more grab-and-go food
- Advancing Dietrick enclosure and plaza

- Adding mobile ordering (Tapingo)
- Renovating spaces
- Centralizing production
- Utilizing food trucks



# Managing Enrollment Growth Health & Wellness Strategies

- Turf fields increase options and student participation
- Hired additional counselors
- Created more office space for counselors
  - Kent Square
  - East Eggleston
- Targeted campus locations for counselors
  - Graduate School
  - Vet Med
  - Cultural Centers



# Managing Enrollment Growth Campus Life Strategies

- Extended Orientation Sessions and Programs
  - New Students and Families
  - International Students
- Added more Community and Cultural Centers and human and programmatic resources
- Expanded meeting room options and classroom hours



# Future Considerations Beyond Academic Year 2017-2018

- Build new residence halls
  - Creativity and Innovation District (C&ID)
  - Global and Business Analytic Complex (GBAC)
  - Roanoke
  - National Capital Region
- Build new dining center and increase scope of current dining spaces
- Renovate War Memorial Hall (integrated health and wellness areas)
- Increase communal spaces in C&ID, GBAC, residence halls and Squires



# Questions, Comments, Recommendations?



#### **Committee Minutes**

#### **BUILDINGS AND GROUNDS COMMITTEE**

The Inn at Virginia Tech – Solitude Room 9:30 a.m. - 11:00 a.m. September 11, 2017

#### **Joint Closed Session with Governance and Administration**

**Board Members Present:** Mr. Mehul Sanghani, Mr. Mehmood Kazmi, Mr. Jeff Veatch, Mr. Mike Quillen, Mr. C.T. Hill, Mr. Robert Mills, Mr. Dennis Treacy (Rector)

**VPI & SU Staff:** Dr. Sherwood Wilson, Chief Kevin L. Foust, Ms. Kim O'Rourke, Mr. Whit Babcock, Ms. Tracy Vosburgh, Ms. Kay Heidbreder, Mr. Mike Mulhare, Dr. Patty Perillo, Deputy Chief Mac Babb, Mr. Mark Gess, Ms. Kayla Smith

- 1. Motion for Closed Session. Motioned to begin closed session.
- 2. Discussion of Matter of Public Safety. The committee met in closed session for a discussion led by Dr. Sherwood Wilson, Vice President for Operations, and Chief Kevin L. Foust, Chief of Police, Director of Security, on the Matter of Public Safety.
- 3. Motion to Reconvene in Open Session. Motioned to begin open session

#### Open Session

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

Mr. Mike Quillen, Mr. C.T. Hill, Mr. Robert Mills

#### VPI & SU Staff:

Ms. Jennifer Altman, Deputy Chief Mac Babb, Ms. Jeri Baker, Mr. Joe Crane, Mr. Brian Daniels, Chief Kevin Foust, Dr. Lance Franklin, Dr. Mike Friedlander, Mr. Tom Gabbard, Mr. Mark Gess, Mr. Rodd Hall, Ms. Elizabeth Hansen, Dr. Lee Hawthorne, Mr. Rick Hinson, Dr. Frances Keene, Dr. Chris Kiwus, Ms. Robin McCoy, Ms. Sarah McCoy, Mr. Grant Morris, Mr. Mike Mulhare, Dr. Ed Nelson, Mr. Mark Owczarski, President Tim Sands, Ms. Kayla Smith, Mr. Jason Soileau, Mr. Dwyn Taylor, Mr. Jon Clark Teglas, Mr. Steve Vantine, Mr. Luke Watson, Dr. Lisa Wilkes, Dr. Sherwood Wilson.

#### **Tour Attendees:**

Mr. Mike Dunn, Officer A. Gale, Mr. Mark Gess, Mr. C.T. Hill, Dr. Chris Kiwus, Ms. Sharon Kurek, Ms. Letita Long, Mr. Duane Mann, Mr. Robert Mills, Mr. Charles Phlegar, Mr. Mike Quillen, Rev. Wayne Robinson, Ms. Kayla Smith, Mr. Jason Soileau, Officer J. Tarter, Mr. Jon Clark Teglas, Mr. Dennis Treacy, Dr. Sherwood Wilson.

**1. Tour of the 460 Southgate Drive Interchange:** The Committee toured the Route 460 Interchange construction project, as well as the Virginia Tech – Montgomery Airport Expansion.

Mr. Quillen requested that each Buildings and Grounds Committee member be provided a copy of a campus map that included building names, an excerpt from an overview of the university's facilities that was provided to the full Board as part of the Knowledge Base materials, and a map that shows the approximate location of key facilities throughout the Commonwealth (see attachments a. - c.). These were distributed to and reviewed with each member as part of the Chair's welcome to the open meeting.

- 2. Consent Agenda: The Committee approved or accepted the items listed on the Consent Agenda.
  - a. **Approval of the Minutes for the June 5, 2017 meeting.** The Committee approved the minutes from the last meeting.
  - b. Resolution Amendment for Baseball Facilities Gas Line Easement: The Committee approved a Resolution to revoke the authorization of a gas line extension along Duck Pond Drive and execute an easement to extend an Atmos gas line to serve the planned new Virginia Tech baseball stadium.
  - c. Resolution for Rector Field House Gas Line Easement: The Committee approved a Resolution to execute an easement to extend Atmos' gas line to serve the planned improvements to the Virginia Tech Rector Field House.
  - d. Resolution Updating the University's Capital Construction Delivery Method Approval: The Committee approved a Resolution to approve the Capital Construction Delivery Method Approval Process.
  - e. **Design Preview for Chiller Plant Phase II:** The Committee approved the design preview for the capital project at the Chiller Plant.
  - f. **Acceptance of Capital Project Status Report.** The Committee accepted the Capital Project Status Report.
- 3. Report on Parking and Alternative Transportation Initiatives: The Committee received an update on Parking and Transportation Operations. Increasing focus is placed on Alternative Transportation as the campus population grows and as the regional and global nature of constituents' work (research, internships, other collaborations) requires more frequent connections to other parts of the state and mid-Atlantic. Very successful examples are the expansion of Blacksburg Transit bus services and the new Campus-2-Campus bus that runs between Blacksburg and Arlington, essentially providing a mobile office with amenities such as WiFi and electrical outlets for the 4-hour journey.
- \* 4. Resolution Supporting the Amendment of Chapter 638 Virginia Acts of Assembly Relating to the New River Valley Emergency Communications Authority: The Committee reviewed and approved a resolution supporting amendment of the act to permit implementation of a funding formula and the allocation of annual contributions among the Authority members based on use of authority services.
- \* 5. Resolution on the Comprehensive Agreement for the Health Sciences & Technology and Comparative Oncology Research Center: The Committee received and approved a resolution to approve the Comprehensive Agreement to construct the Virginia Tech Carilion

Health Sciences & Technology and Comparative Oncology Research Center as provided by the PPEA.

- 6. Design Preview for Health Sciences & Technology and Comparative Oncology Research Center: The Committee previewed schematic designs from the PPEA proposal.
- 7. Design Preview for Athletics Facilities Improvements Tennis Facility: The Committee previewed the design underway for the addition to the existing Burrows-Burleson Tennis Center.
- **8. Design preview for Holden Hall Renovation:** The Committee previewed schematic designs underway for renovation of an existing wing and replacement of two dilapidated single story wings with new construction.
- 9. Update on University Club: The Committee received an update on the University Club building. Discussions continue between the Virginia Tech Foundation, Inc. and the university to appropriately compensate the University Club, while also providing Virginia Tech with a vacant lot in the location of the current University Club Building. This will allow development of the Creativity and Innovation District Living-Learning Community currently envisioned by the Campus Master Plan.
- **10. November Agenda Items:** The Committee discussed potential items for the November meeting. Tentatively, the Committee anticipates receiving an update on Safety and Security initiatives and the Annual Sustainability Report.

#### Joint Open Session with Finance and Resource Management

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

Ms. Greta Harris, Mr. C.T. Hill, Ms. Anna James, Ms. Tish Long, Mr. Robert Mills, Ms. Debbie Petrine, Mr. Mike Quillen, Dr. Hans Robinson-faculty representative, Mr. Wayne Robinson, Mr. Dennis Treacy, Mr. Horacio Valeiras

#### VPI & SU Staff:

Mr. Mac Babb, Mr. Bob Broyden, Mr. Jim Buckwalter, Ms. D'Elia Chandler, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Mr. Kevin Foust, Dr. Lance Franklin, Dr. Mike Friedlander, Mr. Mark Guess, Dr. Lee Hawthorne, Mr. Jim Hillman, Mr. Tim Hodge, Dr. Chris Kiwus, Dr. Theresa Mayer, Ms. Robin McCoy, Ms. Sarah McCoy, Dr. Steven McNight, Ms. Nancy Meacham, Mr. Ken Miller, Mr. Grant Morris, Mr. Mike Mulhare, Mr. Mark Owczarski, Mr. Charlie Phlegar, Dr. Menah Pratt-Clark, Dr. Scot Ransbottom, Ms. Lisa Royal, Mr. Charlie Ruble, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Ms. Kayla Smith, Dr. Ken Smith, Mr. Jason Soileau, Mr. John Talerico, Mr. Dwyn Taylor, Mr. Jon Clark Teglas, Dr. Sherwood Wilson, Mr. Chris Wise

- **1. Consent Agenda:** The Committee considered the following item listed on the Consent Agenda.
  - a. Update on the 2018-2024 Capital Outlay Plan: At its April 2017 meeting, the Committees approved the university's list of potential projects for inclusion in the 2018-2024 Capital Outlay Plan and authorized the university to develop and submit a final plan to the state in accordance with future guidance from the state and based on the projects in the approved list. The university proceeded accordingly and met the state's

July 2017 deadline for submission of the plan. Based on the instructions received from the state and consistent with the Board approved Six-Year Capital Outlay Plan, the university submitted a list of projects requesting some portion of General Fund resources in their budget. This report provided the list of projects ranked in priority order submitted to the state, the state capital budget review and approval process, and the list of Nongeneral Fund Projects included in the Six-Year Capital Outlay Plan for 2018-2024.

The Committees approved the Consent Agenda, which included a report on the Update of the 2018-2024 Capital Outlay Plan.

\* 2. Approval of Resolution for Capital Lease for Applied Projects Building in the Corporate Research Center: The Committees reviewed a resolution for the university to enter into a capital lease with the Virginia Tech Foundation for the Applied Projects Building in the Corporate Research Center. The planned building is approximately 45,000 gross square feet of office, laboratory, and applied projects research space to support research and experiential learning programs in the areas of economic, homeland, and national security for a total project cost of \$8.4 million.

The Committees recommended the Resolution for a Capital Lease for the Applied Projects Building in the Corporate Research Center to the full Board for approval.

\* 3. Approval of Resolution for Capital Lease for Virginia Tech Transportation Institute Intern Park Facility: The Committees reviewed a resolution for the university to enter into a capital lease with Virginia Tech Foundation for the Virginia Tech Transportation Institute (VTTI) Intern Park Facility. The project is an element of the larger \$78.4 million Intelligent Infrastructure and Human-Centered Communities initiative approved by the Board at the April, 2017 meeting. The Intern Park is designed as an interdisciplinary advanced-learning facility and includes flexible studio space and multiple garage and shop facilities equipped with state-of-the-art tooling with a total project cost of \$2.5 million.

The Committees recommended the Resolution for a Capital Lease for the Virginia Tech Transportation Institute Intern Park Facility to the full Board for approval.

\* 4. Approval of Resolution for Dietrick Renovation and Plaza Improvements: The Committees reviewed a resolution for Dietrick Hall first floor renovation and plaza improvements. The project includes inserting a modern food service venue and adding 200 indoor seats to the building and making improvements to the outdoor plaza to create additional outdoor seating for dining customers, serve as informal gathering spaces for the campus community, and support special event activities. The total project costs for the building renovations and plaza improvements is \$7 million.

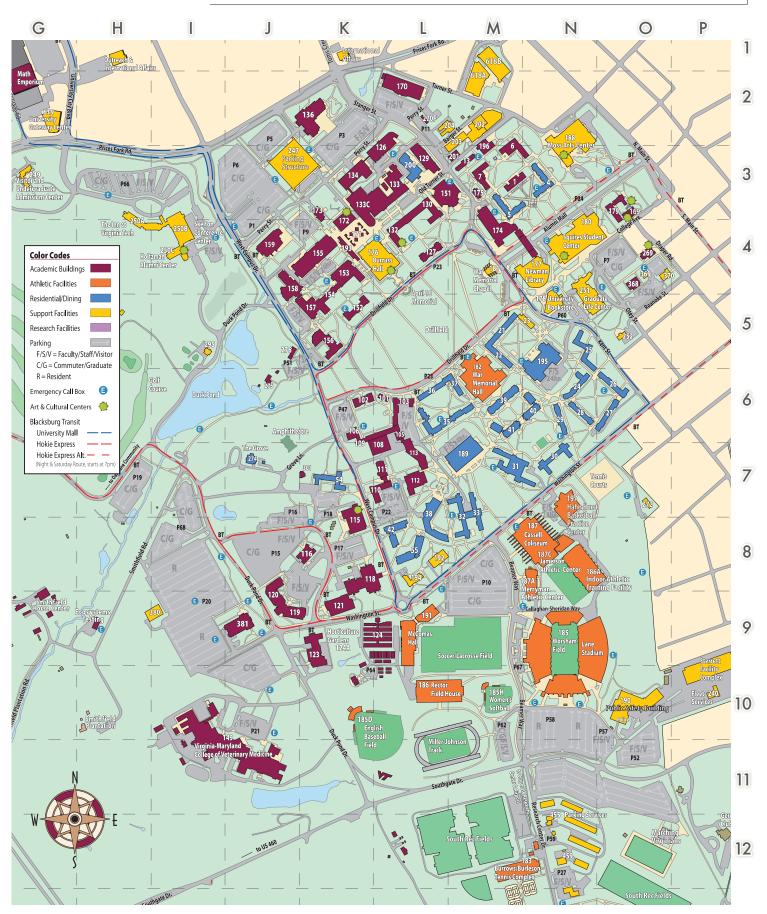
The Committees recommended the Resolution for the Dietrick Renovation and Plaza Improvements to the full Board for approval.

There being no further business, the meeting adjourned at 11:30 a.m.

\*Requires full Board approval.



# MAIN CAMPUS MAP



#### Alphabetical Kev

Alphabetical Key		
K-7 109	Agnew Hall	
M-2 204	Air Conditioning Plant	
M-8 33	Ambler Johnston Hall - East Wing	
M-8 32	Ambler Johnston Hall - West Wing	
	Architecture Annex	
O-4 269		
O-6 26	Art and Design Learning Center	
K-3 173	Bishop-Favrao Hall	
	Building 270F [VPAS-IT]	
	Classroom Building	
M-3 270G	College of Science	
	Administration Building	
K-4 171		
L-4176	Burruss Hall - East Wing	
	Campbell Hall - Main Wing	
N-8 187	Cassell Coliseum	
	Cheatham Hall	
L-8 38	Cochrane Hall	
K-3 172		
K-5 156		
K-4 155		
M-7 189 L-2 126		
	Eggleston Hall - East Wing	
	Eggleston Hall - Main Wing	
M-5 22	Eggleston Hall - West Wing	
L-7 110		
	English Baseball Field	
	Etgen Dairy Pavilion	
M-3 13 P-10 240	Femoyer Hall	
	Food Science and Technology	
	Fralin Biotechnology Center	
	G. Burke Johnston Student Center	
I-5 295	Golf Course Club House	
	Graduate Life Center at	
	Donaldson Brown	
L-9 124	Greennouse Grounds Building (Central Stores)	
K-2 136		
	Hahn Hall - North Wing	
	Hahn Hall - South Wing	
	Hahn Hurst Basketball Practice	
K-3 133C		
L-8 42	нагрег пан Нarry T. Peters Animal Clinic	
	Health & Safety Building	
	Henderson Hall	
K-754	Hillcrest Hall	
L-3 130		
	Holtzman Alumni Center	
	Human and Agricultural	
	Biosciences Building I Hutcheson Hall	
	Institute for Critical Technology	
	and Applied Science II (ICTAS II)	
	Institute for Society, Culture and	
	Indoor Tennis Courts	
N-8 187C N-6 28	Jamerson Athletic Center	
N-628 L-3129		
M-3 1		
N-9 185	Lane Stadium	
L-7 113	Latham Hall	
L-3 200	Lavery Hall	
N-730		
M-3 175	Liberal Arts Building	
rv-9 I∠I	Life Sciences I Facility	

K-8118	Litton-Reaves Hall
	Major Williams Hall
M-3 151	
	McComas Hall
O-4369	
	Media Building
	Merryman Athletic Facility
0-627	
	Military Building / Laundry
	Moss Arts Center New Cadet Hall
	New Hall West
	New Residence Hall East
N-624	
	Newman Library
L-4 132	Norris Hall
M-2 618A	North End Center
	North End Center Garage
	O'Shaughnessy Hall
	Old Security Building
N-5 195	
K-4 153	
	Parking Services
L-4 127 M-6 39	Pallon Hall
N-34	
	Peddrew-Yates Residence Hall
M-2202	
K-6102	
M-7 31	
O-10 190	Public Safety Building
L-3 133	
L-10 186	Rector Field House
I-11 149B	Richard B. Talbot Educational
	Resources Center
K-5 154	
L-6 101	
K-6 106 L-7 108	
N-26	
M-6 35	
	Smith Career Center
L-6 105	
J-6275	
I-9380	Southwest Chiller Plant
	Squires Student Center
J-9 119/120	Stoger Hall
	Sterrett Facility Complex
L-8 192	Sterrett Facility ComplexStudent Services Building
L-8 192 L-2 170	Sterrett Facility Complex Student Services Building Surge Space Building
L-8 192 L-2 170 J-7 274	Sterrett Facility Complex Student Services Building Surge Space Building The Grove [President's House]
L-8 192 L-2 170 J-7 274 O-3 169	Sterrett Facility Complex Student Services Building Surge Space Building The Grove [President's House] Theater 101
L-8 192 L-2 170 J-7 274 O-3 169 M-4 174	Sterrett Facility Complex Student Services Building Surge Space Building The Grove [President's House] Theater 101 Torgersen Hall
L-8 192 L-2 170 J-7 274 O-3 169 M-4 174 N-5 178	Sterrett Facility Complex Student Services Building Surge Space Building The Grove [President's House] Theater 101 Torgersen Hall University Bookstore
L-8 192 L-2 170 J-7 274 O-3 169 M-4 174 N-5 178 O-5 252	Sterrett Facility Complex Student Services Building Surge Space Building The Grove [President's House] Theater 101 Torgersen Hall University Bookstore University Club
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#### **Numerical Key**

Nume	rical Ke	у
M-3 1		Lane Hall
		Pearson Hall
M-3 5	j	New Cadet Hall
		Shanks Hall
		Major Williams Hall
M-3 1	3	Femoyer Hall
		Eggleston Hall
		Newman Hall
N-52	25	Vawter Hall
0-62	26	Barringer Hall
U-62		.Miles Hall Johnson Hall
		.O'Shaughnessy Hall
		Lee Hall
M-7 3	10	Pritchard Hall
		Ambler Johnston Hall - West Wing
		Ambler Johnston Hall - East Wing
		Slusher Hall
		.Campbell Hall
L-8 3	88	.Cochrane Hall
M-6 3	9	Payne Hall
		New Residence Hall East
		.Peddrew-Yates Res. Hall
L-8 4	12	Harper Hall
K-75	i4	Hillcrest Hall
		New Hall West
		Sandy Hall
		Price Hall
L-0 I	05	.Hutcheson Hall .Smyth Hall
		Saunders Hall
		Seitz Hall
		Agnew Hall
		Engel Hall
L-7 1	11	Fralin Life Science Institute
		Cheatham Hall
L-7 1	13	Latham Hall
		.Wallace Hall
		Institute for Critical Technology
		and Applied Science II (ICTAS II)
		Litton-Reaves Hall
		Steger Hall
		Life Sciences I
		Food Science and Technology .Greenhouses
		.Hahn Horticulture Gardens
		Durham Hall
		Patton Hall
		Kelly Hall
L-31	30	Holden Hall
L-4 1	32	Norris Hall
L-3 1	33	Randolph Hall
		.Hancock Hall
K-31	34	Whittemore Hall
		Goodwin Hall
J-111	49	Virginia-Maryland Regional
144 4	40 4	College of Veterinary Medicine
		.William E. Lavery Health .Research Center
		Richard B. Talbot Educational
		Resources Center
I-10 1	49C	.Harry T. Peters Animal Clinic
		McBryde Hall
		Williams Hall
		Pamplin Hall
K-51	54	Robeson Hall
		Derring Hall
		Davidson Hall
		Hahn Hall - South Wing
		Hahn Hall - North Wing
		Classroom Building
U-3 1	b9	Theater 101

	Attachment B	
	Surge Space Building	
	Burchard Hall	
	Cowgill Hall	
	Bishop-Favrao Hall	
M-4 1/4	Torgersen Hall	
M-3 1/5	Performing Arts Building	
	Burruss Hall	
	Newman Library	
N-5 178	University Bookstore Henderson Hall	
	Squires Student Center	
M_4 101	War Memorial Chapel	
	War Memorial Hall	
N-12 183	Burrows/Burleson Tennis Center	
N-9185	Lane Stadium/Worsham Field	
K-10185D	English Field	
M-10 185H	Women's Softball Field	
	Rector Field House	
	Cassell Coliseum	
	Merryman Athletic Center	
	Jamerson Athletic Center	
	Moss Arts Center	
M-7 189	Dietrick Hall	
O-10 190	Public Safety Building	
L-9 191	McComas Hall	
L-8 192	Student Services Building	
K-4 193	Burke Johnston Student Center	
	Smith Career Center	
	Owens Hall	
	Art and Design Learning Center	
	Hahn Hurst Basketball Practice	
L-3 200	Lavery Hall	
	Old Security Building	
	Power Plant	
M 2 204	Military Building Air Conditioning Plant	
	Fleet Services	
	Central Stores	
	Sterrett Facilities Complex	
	Visitor and Undergraduate	
	Admissions Center	
H-4 250A	The Inn at Virginia Tech	
I-4 250B	Skelton Conference Center	
I-4 250C	Holtzman Alumni Center	
	Graduate Life Center at	
	Donaldson Brown	
	University Club	
O-4 269		
	Building 270F [VPAS-IT]	
0-7272	417 Clay Street	
	College of Science	
	Administration Building	
J-7274		
J-6 275		
J-5 2/6	Wright House	
	Golf Course Clubhouse	
	Institute for Society, Culture andEnvironment	
	Environment	
	Media Annex	
	Media Building	
	Southwest Chiller Plant	
	Human and Agricultural	
	Biosciences Building I	
	Parking Services	
N-12 459	Health and Safety Building	
J-12 475	Dairy Science Complex	
M-2 618A	North End	
M-1 618B	North End Center Garage	

# **Excerpt from Overview of the University's Physical Assets**

Virginia Tech is committed to providing an adequate infrastructure of facilities, grounds, transportation systems, and equipment to support the institution's learning, discovery, and engagement missions. Extensive land holdings, effectively maintained and growing facilities, and a modern inventory of equipment and systems provide a sound foundation for current programs and future initiatives.

#### **The Campus**

Virginia Tech's campus consists of 6,351 acres and 440 buildings located in Montgomery County. These buildings include 338 Educational and General buildings, containing approximately 6.6 million gross square feet (GSF), and 96 Auxiliary buildings, containing approximately 5.2 million GSF. The campus proper is located in the Town of Blacksburg and consists of 2,560 acres. Associated with the main Blacksburg campus (not including the Virginia Tech Foundation, Inc. [VTF] owned buildings) are 309 buildings containing over 10.1 million GSF. The university provides approximately 329 square feet (sf) per student, for each of its 31,090 students at the Blacksburg campus.

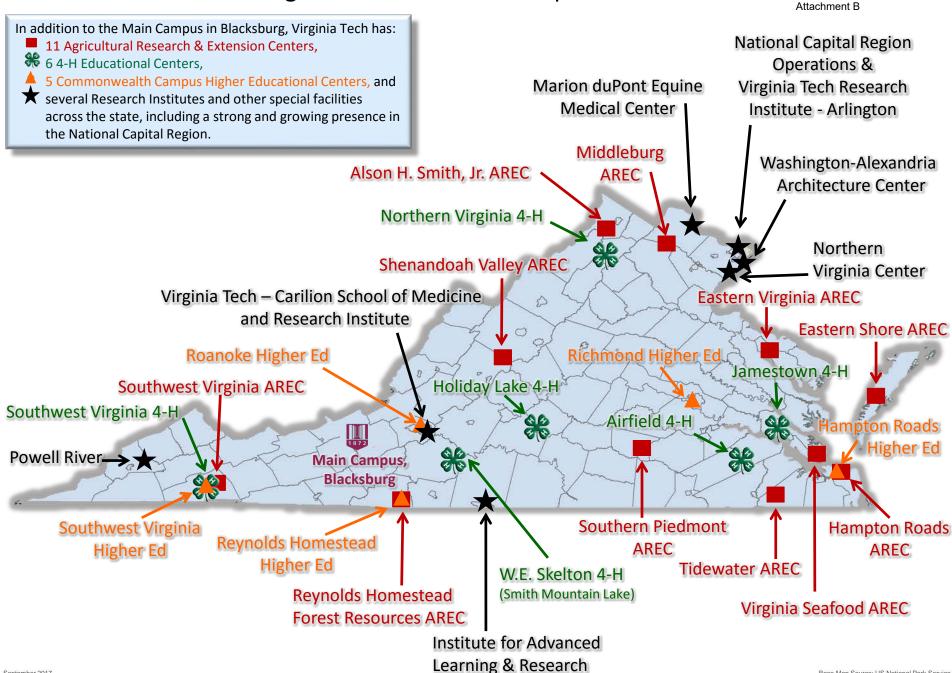
The university has extended campus and outreach sites throughout the Commonwealth of Virginia and the world.

- Academic-focused centers include: the Virginia Tech Roanoke Center in Roanoke; the Southwest Virginia Higher Education Center in Abingdon; Reynolds Homestead in Critz; the Virginia Tech National Capital Region, which includes the Northern Virginia Center in Falls Church, the Washington-Alexandria Architecture Center in Alexandria, and the Language and Culture Institute in Fairfax; the Virginia Tech Richmond Center in Richmond; the Hampton Roads Educational Center in Virginia Beach; the Technology Research and Innovation Center in Hampton Roads; the Caribbean Center for Education and Research in Punta Cana, Dominican Republic; and Virginia Tech's Steger Center for International Scholarship in Riva San Vitale, Switzerland.
- The Virginia Agricultural Research and Extension Centers (ARECs) serve as key field research sites, but also as field laboratories for undergraduate and graduate students and field day program sites for producers, school groups, and other citizens. The 11 ARECs total nearly 4,556 acres (506 acres of adjacent leased land) and 221 buildings with approximately 563,000 GSF of space. These centers comprise a portion of Virginia's Agricultural Experiment Station research system.
- Virginia Cooperative Extension, a partnership with Virginia State University, provides research-based information to the commonwealth through 107 county and city extension offices and six 4-H education centers.
- The university also has several unique centers for research and special activities such as medical education. The Virginia Tech Carilion School of Medicine and Research Institute (VTCRI), constructed in Roanoke under the provisions of the Public Private Education Facilities and Infrastructure Act (PPEA), consists of 152,000 square feet. The Technology Research and Innovation Center (TRIC), also constructed under the provisions of PPEA,

in Hampton Roads is 60,000 square feet. The National Capital Region Research Facility (Arlington), a VTF-owned project, provides an additional 150,000 square feet of office and research space. The Virginia Tech India Institute for Critical Technology and Applied Science (ICTAS) Innovation Center, opened in spring 2014 as the first laboratory of a new research center on a 30-acre research park near Chennai, India; expanding the university's global presence in critical research fields such as renewable energies.

Generally, the leasing of off-campus space by the university is an interim solution to space challenges. Off-campus leases are intended to continue only if appropriate university-owned space does not become available, except for those buildings owned by the VTF for long-term use by the university. Overall, the university leases approximately 2,200 acres of land and roughly 2 million square feet of space (offices, labs, classrooms, residential units, and warehouses) throughout various areas in Virginia, other states, and internationally in Senegal and Switzerland. There are 80 leased buildings containing approximately 1.5 million GSF that support the main Blacksburg campus.

### Virginia Tech Extended Campus Locations



#### **DESIGN PREVIEW FOR CHILLER PLANT PHASE II**

Preliminary Design is underway for a project to upgrade existing North and Southwest Chiller Plant equipment, to install the necessary thermal distribution networks to connect both plants, and to provide distribution to existing buildings and integrate buildings into the chilled water loop. The North Chiller Plant is located in the North-East District, along Stanger Street. A Design-Bid-Build procurement method is being utilized to construct the project. Project Completion is anticipated for fall 2020.

#### Capital Project Information Summary - Chiller Plant Phase II

#### **BUILDINGS AND GROUNDS COMMITTEE**

#### **September 11, 2017**

#### **Title of Project:**

Chiller Plant Phase II

#### Location:

The project spans all of main campus, between downtown Blacksburg and Route 460. Primary areas of work include the North Chiller Plant, located in the North-East District, at the intersection of Stanger and Barger Streets, and the Southwest Chiller Plant, located in the Life Sciences District, to the west of parking lot P20. New chilled water mains will be installed to interconnect the North Chiller Plant and the Southwest Chiller Plant, primarily along West Campus Drive and Perry Street. Additionally, new chilled water mains will be installed to serve the College of Veterinary Medicine, and around the south and east side of campus generally from Wallace Hall to Moss Arts Center. Plans also include interconnection of several existing buildings to the system.

#### **Current Project Status and Schedule:**

The project is complete through the schematic design phase. Further design and construction are contingent upon state funding. Completion is anticipated in fall 2020.

#### **Project Description:**

The project includes the phased upgrade of the campus chilled water system and addresses the following four key strategic goals for shifting the campus to a lower resource consuming cooling service:

- 1. Replace outdated, inefficient existing non-centralized chilled water capacity on campus.
- 2. Update and add machines and equipment in existing central plant facilities to maximize the existing plant foot print and optimize refrigerant use.
- 3. Install the necessary thermal distribution networks to accommodate campus growth and retirement of the non-centralized facilities throughout the campus to include provisions for the installation of an above ground chilled water thermal energy storage system connected to the district cooling loop.
- 4. Make provisions for chilled water distribution to future development in the Gateway and 21<sup>st</sup> Living & Learning Community Districts. The 21<sup>st</sup> Living & Learning Community will be located at the existing golf course.

#### **Brief Program Description:**

The program includes the following elements:

- 1. Replace outdated chilled water equipment in the North Chiller Plant with two new, approximately 3,000 ton chillers, packaged cooling towers adjacent to the existing cooling tower, and packaged equipment and transformers along Barger Street. Work also includes a screen wall along the Stanger Street elevation, and installation of new overhead doors to support removal and installation of equipment. A new egress path will be added on the west side of the plant through the existing cooling tower yard.
- 2. Install one, possibly more, approximately 1,500 ton chiller increments (chiller, pumps, and cooling tower) at the Southwest Chiller Plant to increase system capacity and provide for future thermal energy storage.
- 3. Installation of new chilled water distribution piping to interconnect the two chiller plants, increasing overall system operating efficiency and reliability.
- 4. Extend new chilled water distribution piping to several existing campus facilities. Retire the existing stand-alone chilled water production equipment in those facilities.
- 5. Upon completion, the project accommodates federally mandated and LEED refrigerant requirements by replacing outdated, inefficient chilled water capacity with new equipment that utilizes compliant refrigerant types.

#### **Contextual Issues and Design Intent:**

The notable architectural element for the project occurs at the North Chiller Plant in the form of the screen wall and revisions to the northeast facade.

The architectural design of the screen wall around the cooling tower yard responds to the character of Virginia Tech's campus and is consistent with other screening elements on campus. While the height of the wall will not fully screen the cooling towers and chiller plant, it will provide an element with pedestrian scale and a more uniform appearance from multiple approaches along Stanger Street. The screen wall piers will be faced with Hokie Stone and capped with architectural precast concrete. Connecting the piers will be a painted steel slat system, similar to the screen enclosure to the north of Pearson Hall. Additional landscaping is proposed.

The northeast facade of the chiller plant will be modified to provide two new electrically operated 14' x 14' overhead coiling steel doors and aluminum storefront windows above.

#### **Architect/Engineer:**

Affiliated Engineers, Inc. in association with Glavé & Holmes Architecture

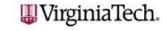
#### **Construction Manager:**

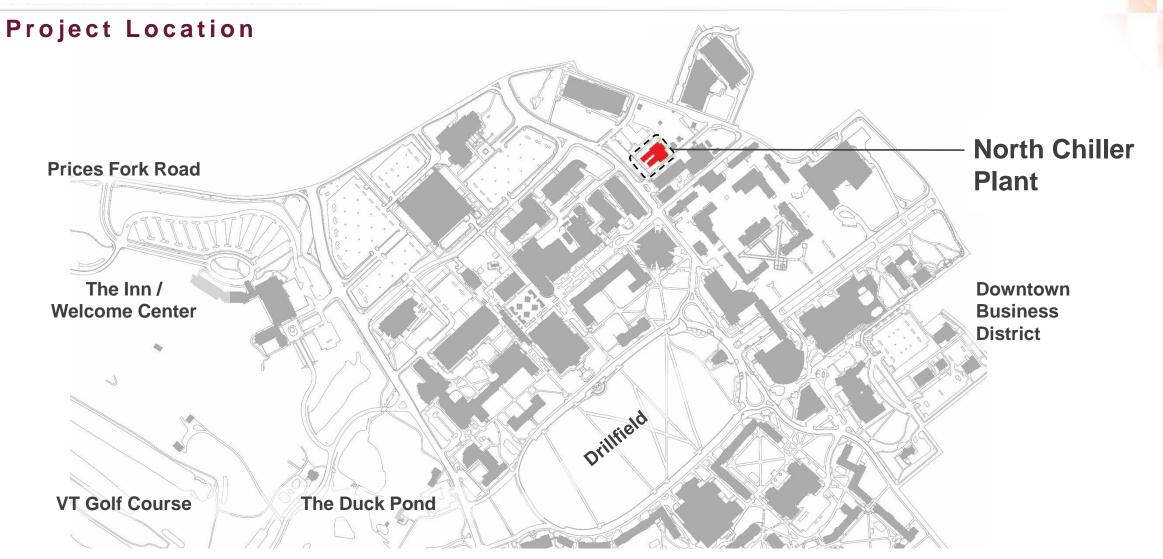
To be determined

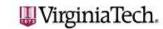
**Design Preview for:** 

# Chiller Plant Phase II

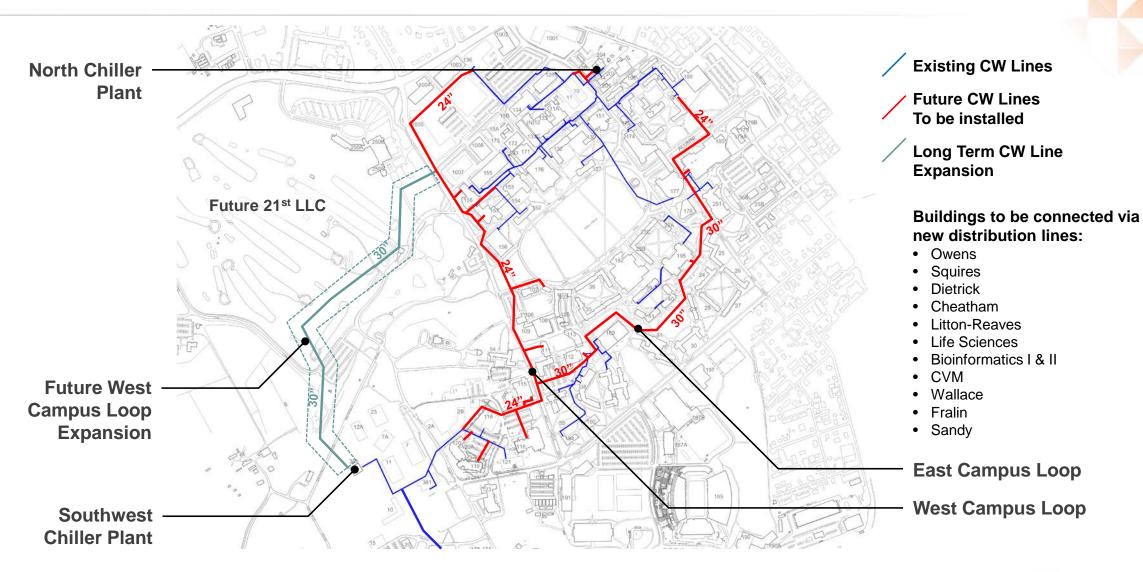
Board of Visitors Meeting: September 11, 2017

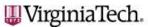






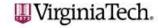
## **Chilled Water Distribution**



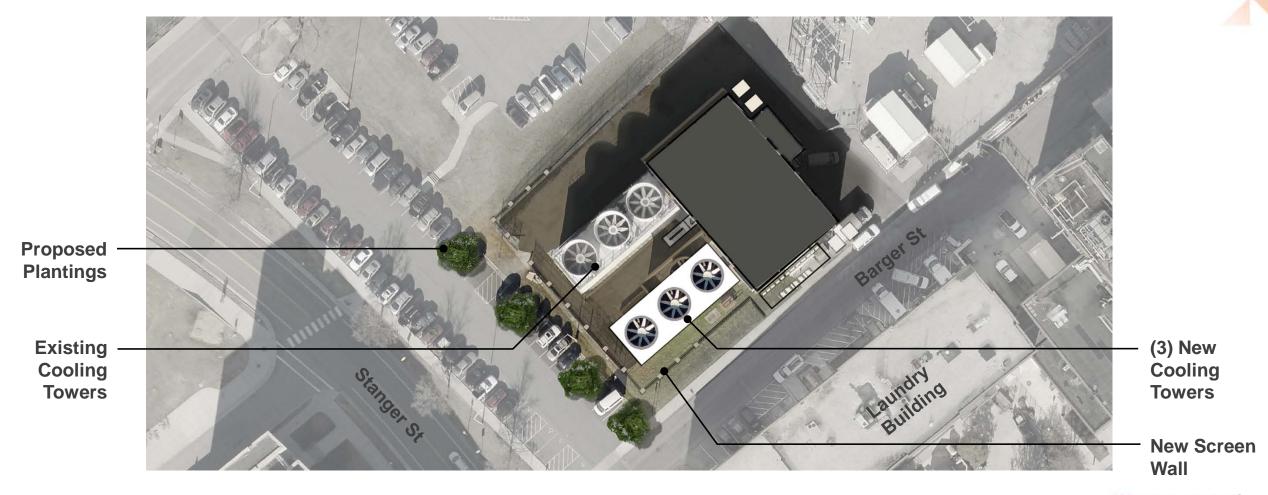


### **Project Information**

- Chiller plant equipment upgrade and distribution loop
- Design-Bid-Build project delivery method
- Funding
  - Total project budget \$40.8M
  - Anticipated construction cost \$33.2M
- Preliminary Design phase
- Completion anticipated: Fall 2020



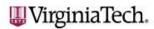
## North Chiller Plant, Site Plan



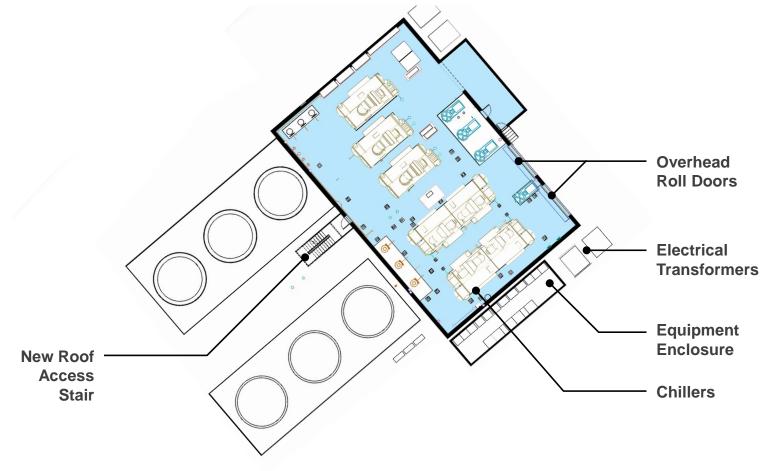
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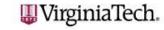
## North Chiller Plant, Existing Conditions





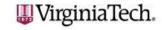
North Chiller Plant, Floor Plan





#### Recommendation

• That the design preview graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion in fall of 2020.



# BUILDINGS AND GROUNDS COMMITTEE September 11, 2017 Capital Project Status Report

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
FEASIBILITY						
Global Business Analytics Complex	The Feasibility Study for the Global Business and Analytics Complex (G-BAC) will investigate facility options for up to four buildings comprising a replacement for the Pamplin School of Business, creation of a Data Analytics and Decision Sciences facility, and two living/learning communities.	TRD	TBD	Moseley Architects/RAMSA TBD	TBD	The Feasibility Study is well underway and will provide programming requirements, site analysis, conceptual facility and site designs, cost estimates, and conceptual renderings for fundraising purposes in the fall of 2017.
Global System Sciences	Envisioned as a destination, the facilities will serve as the headquarters of what is anticipated to be a world-renowned group focused on solving critical regional and global problems, including environmental, animal and human health. This facility will include disciplinary and interdisciplinary faculty of the College of Science, College of Natural Resources, College of Agriculture and Life Sciences, and the College of Veterinary Medicine, and University Institutes to facilitate education and research related to this important destination area.	al n e d ty	TBD	TBD		Interviews for shortlisted Architect/Engineer (A/E) firms occurred in August 2017. Selection, price proposal negotiation, and A/E contract award processes underway.
				TBD	TBD	
Health Center Improvements/	The project provides a comprehensive solution for student wellness services through upgrades to McComas Hall and major renovations to War Memorial Hall to meet the needs of the Schiffert Health Center, Cook Counseling Center, Recreational Sports, College of Liberal Arts and Human Sciences programs, and the College of Agriculture and Life Sciences (Human Nutrition Foods & Exercise).	g S	\$3,071,000	CannonDesign	TBD	Feasibility Study is well underway and targeted for completion in fall 2017, with intent to transition directly to project delivery design services.
Student Wellness Services				TBD		
Northwest Utility Study	The Utility Feasibility Study for the Northwest Community Precinct examines campus cooling systems, heating systems, civil utilities, electrical systems and provides recommendations for immediate needs projected through 2020 and long-term campus infrastructure needs projected through 2042.	s \$303.025	N/A	Affiliated Engineers, Inc. (AEI) Atlanta, GA	Jul-17	Feasibility Study is complete. Last report for this project.
				N/A		
	The project will construct a new undergraduate science laboratory facility of 102,000 gross square feet (GSF) to accommodate the growing demand for STEM-H degrees at Virginia Tech.		\$0	ZGF Architects Washington, DC	TBD	The project has been authorized for planning by the Bureau of Capital Outlay Management (BCOM). A/E has been selected and contract is in place. The feasibility study is in progress and will be completed in October 2017.
Undergraduate Science Laboratory				TBD		
PROGRAMMING		l l				
Creativity & Innovation District Living Learning Community	This project involves the provision of a new residential life building in the newly emerging Creativity & Innovation District on campus. The proposed ~203,000 square foot (520 bed) facility will support the growing living/learning community (LLC) anticipated for this key area of campus and is a realization of Virginia Tech's Beyond Boundaries initiative.	d g TBD	TBD	TBD	TBD	Building programming services were provided by Sasaki. The final programming study report was delivered in July 2017.
				TBD		Four (4) A/E firms were shortlisted to interview in August 2017 to develop Criteria/Bridging Documents in preparation for Request for Proposals from design-build teams for design and construction of the facility.
Health Sciences & Technology, Comparative Oncology Research Center	This project, executed under the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA), will construct an approximately 139,000 GSF building adjacent to the Virginia Tech - Carilion Research Institute in Roanoke, VA. The new facility will include high intensity biomedical research capable laboratories with surgical-type suites, Bio-safety Level Three laboratories, and animal imaging facilities that require high field magnetic resonance imaging. The remaining space will include high intensity dry laboratory research and training spaces including computational facilities, offices, procedural training rooms, and technical training space.	889,865,000 5 6 7	\$0	AECOM	TBD	The state has authorized university submittal of a request for planning funds. The forms have been submitted for Virginia Department of Planning and Budget approval. This project is following the university's PPEA process. A conceptual stage unsolicited proposal was submitted by Carilion and accepted by Virginia Tech. Public notice of receipt of an unsolicited proposal was published for 45 days and no additional proposals were received. The university requested that Carilion move ahead with a detailed proposal. The resulting Comprehensive Agreement between the two parties as well as the Design Preview is being presented for BOV approval at the September 2017 meeting. Assuming approval by the BOV, the Comprehensive Agreement will be made available for public comment for 30 days prior to signature/execution.
				Skanska		

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
Intelligent Infrastructure (Hitt/Smart Dining)	Program elements envision a 30,000SF Hitt Hall space connected to Bishop-Favrao Hall, a 15,000SF Fusion Lab, a 30,000SF Smart Dining space and a 5,000SF Data for the Masses student activity space. Project intent is to showcase technology and innovation as a key component of the Intelligent Infrastructure Destination Area.	TBD	\$0	TBD	- TBD	Program development is preceded by industry engagement through the ongoing campus master plan update. Industry forums to be conducted in fall 2017 to provide additional insight into program definition.
DESIGN						
Boiler Package 12	Demolition and disposal of decommissioned coal fired boiler (No. 6) and installation of a new 100 lbs/hour natural gas/oil fired packaged boiler (No. 12)		\$0	Affiliated Engineers, Inc. (AEI) Atlanta, GA TBD	- TBD	A/E selected for design. A/E fee proposal received in August 2017; negotiations underway and A/E contract award to immediately follow.
Chiller Plant Phase II	This project includes the replacement and upgrade of plant equipment in the existing campus chiller plants and the expansion of the underground distribution infrastructure to link campus chiller substations and bring existing campus buildings on line. The improvements include the replacement of two outdated chillers in the North Plant with two new upgraded larger capacity chillers; and addition of up to two new 1,500 ton chillers in the Southwest Plant. The project also includes the replacement and upgrade of ancillary equipment with state-of-the-art, optimally sized pumping and system support equipment.	d g g g g g g g g g g g g g g g g g g g	\$0	Affiliated Engineers, Inc. (AEI) Atlanta, GA	TBD	Schematic Design is complete, cost review documentation is being finalized for submission to BCOM. Design Preview is presented at the September 2017 BOV meeting for approval.
				TBD		issuing for approval.
	Three story structure that provides a centralized and consolidated home to the Corps of Cadets administration and ROTC programs.	TBD	TBD	Clark Nexsen	- TBD	Preliminary Design documents completed. Project currently on hold pending
Corps Leadership and Military Science				TBD	IBU	authorization for general fund for development of working drawings and construction.
Holden Hall Renovation	This project includes the renovation of an approximately 20,000 GSF portion of Holden Hall fronting the Drillfield. The remaining 20,000 GSF of the existing building will be demolished and replaced with approximately 81,000 GSF of new engineering instruction and research space for a total building size of 101,000 GSF.	e 0 \$61,886,000	\$17,500,000	Moseley Architects Virginia Beach, VA	TBD	The A/E Team completed the revised Schematic Design documents in August 2017. Schematic Design Cost estimates from the A/E and CM will be completed in September 2017 and will be submitted to BCOM for their Cost Review/Approval. Design Preview is presented at the September 2017 BOV meeting for approval.
				W.M. Jordan Co.		
Improve Kentland Facilities	This project includes new construction of three (3) buildings totaling approximately 28,900 GSF including a metabolic research laboratory, an applied reproduction facility, and a bovine extension teaching/research facility to serve Agency 229, Virginia Cooperative Extension and the Virginia Agricultural Experiment Station.		\$0	Spectrum Design, PC Roanoke, VA	- TBD	Bids for construction of the three (3) buildings were received in December 2016. All bids exceeded the target construction budget. Value engineering (VE) negotiations with the apparent low bidder have rendered savings, but the savings were not sufficient to close the gap. Project to be re-bid with the VE items incorporated by September 2017 in anticipation of starting construction later in fall 2017.
				TBD		
Livestock and Poultry Research Facilities (Phase I)	This project is the first of two (2) phases to renew existing facilities for the College of Agriculture and Life Sciences' livestock and poultry programs. This first phase includes approximately 126,000 GSF of new and renovated facilities located along Plantation Road and Giles Road and at Kentland Farm.	d \$22,500,000	\$0	Spectrum Design, PC Roanoke, VA		The A/E contract has been awarded and Schematic Design is underway. Schematic Design is targeted for completion in October 2017.
				TBD	TBD	
Multi-Modal Transit Facility	This is a Capital Lease Project administered by the Town of Blacksburg (ToB) and funded by Federal Transportation Administration grants and a university match. The project is targeted for LEED Platinum to provide a campus sustainability demonstration showcase.	\$38,000,000	TBD	Wendel Associates Buffalo, NY	- August 2020	Ninety percent (90%) design documents were scheduled for delivery by the A/E to the ToB for review in June 2017 but are now anticipated in late September 2017. Design Review to be presented to BOV for approval at the November 2017 meeting. Construction is anticipated to begin in spring/summer 2018.
				TBD		
Undergraduate Science Laboratories Renovations	This project will repurpose six laboratory/teaching spaces in Derring Hall and one laboratory in Hahn Hall. These repurposed laboratories will expand space to meet growing demand for course sections in biology, chemistry, organic chemistry, and microbiology.	d \$10,000,000	\$10,000,000	Studio Twenty Seven Architecture Washington, DC	August 2018	Preliminary Design is in progress and documents were released for review in June 2017. Authorization to proceed to working drawings design and construction was received at the June 2017 BOV meeting. Revised documents for funding are circulating for approval. Preliminary design documents submitted for University Building Official comment.
				TBD		

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
CONSTRUCTION		-				
Athletic Facilities Improvements	This is an umbrella project for improvements to multiple athletics facilities, including Rector Field House, Baseball, Tennis, and Cassell Coliseum Bowman Room (Nutrition Center).		\$37,500,000	Rector: Cannon Design Baseball: Cannon Design Tennis: TKA Architects (Criteria Documents) Nutrition: Hanbury Architects	Rector: Spring 2018 Baseball: Spring 2018 Tennis: TBD Nutrition: TBD	Sub-projects as follows: 1) Rector Field House - Includes building renovation and new additions to provide indoor infield, batting and pitching cages for softball, and indoor throws area for Indoor Track & Field, new entry, restrooms, team rooms, and support spaces. Concrete foundations are 95 percent complete; structural steel erection began in late July; precast concrete began in August. 2) Baseball - Includes demolition of the existing press box and seating bowl, and construction of a new, larger press box structure to include suites, press, game operations, radio/TV broadcast, ticket office, team store, concessions, restrooms, and support spaces. Also includes renovations to the existing Weaver Baseball Center to add a team locker room, team lounge, training, equipment, coaches locker room, and support spaces. Structural steel completed in July; precast concrete erection began in August. 3) Tennis - Includes an addition and renovation to provide for improved tennis team and training facilities. The Design/Build Team has been selected. Design Preview is presented at the September 2017 BOV meeting for approval. Project is on hold pending funding authorization. 4) Nutrition Center - Includes the potential renovation and/or new construction to provide improvements for athletic team training and nutrition program. A Feasibility Study to identify a site, and to provide concept plans and cost, has been completed. Project is on hold pending funding authorization.
				Rector: Branch Associates Baseball: Whiting-Turner Contracting Co. Tennis: D/B Contractor TBD Nutrition: TBD		
Eastern Shore AREC Equipment Storage	This project provides a 7,500 GSF agricultural equipment storage building at the agricultural research extension center (AREC) in Painter, Virginia.	\$502,000	\$535,000	Dewberry Charlotte, NC	- July 2017	Achieved construction substantial completion in July 2017; final inspection scheduled for September 2017. Last report for this project.
Building				Asturian Group, Inc. Virginia Beach, VA		
	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 Architecture Annex, Food Science & Technology, Lane Hall, Litton-Reaves Hall, Norris Hall, Patton Hall, Randolph Hall, War Memorial Hall (Gym), Wallace Annex, and Whittemore Hall.	e 5, n- \$4,900,000	\$0	Multiple A/E Firms		Architecture Annex, Food Science & Technology, Lane Hall, Patton Hall, Wallace
Fire Alarm Systems and Access				Multiple Contractors	Spring 2018	Annex, War Memorial Hall (Gym), and Whittemore Hall are complete. Randolph Hall - final testing completed in August 2017. Norris Hall - construction has been approved and began in August 2017. Funding for Litton-Reaves Hall will be requested from the Virginia Department of General Services.
Lane Electric Substation Expansion	This project will expand the existing electrical sub-station to add approximately 37 percent additional power capacity to serve the campus Life Sciences and Northwest Precincts and the Corporate Research Center's proposed expansion.	e \$6,500,000	\$6,500,000	Appalachian Electric Power and Virginia Tech Electric Service		The project is administered by Virginia Tech Electric Service in coordination with Appalachian Power Company (APCo) and Appalachian Electric Power (AEP). Construction of two control buildings is complete and VTES is continuing electrical fit-out inside. New electrical lines have been checked and are satisfactory. APCo is continuing fit-out of additional metering points. Transformer procurement is complete, and delivery is scheduled for the fall of 2017.
				Appalachian Electric Power and Virginia Tech Electric Service	Anticipated Summer 2019	
O'Shaughnessy Hall Renovation	This project includes major renovation of a 72,000 GSF student residence building into a living-learning community. The residence hall originally housed 350 students and upon completion will house 344 students.		\$1,750,000	Moseley Architects Virginia Beach, VA	August 2018	Construction is underway, hazardous material abatement is currently completed up through the sixth floor. Renovations are underway on multiple floors simultaneously. Project is on schedule for occupancy in the fall of 2018.
				WM Jordan, Roanoke, VA		

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
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. Small additions are planned for Sandy and Liberal Arts Building to meet current emergency egress code requirements. New elevators in Sandy Hall and Liberal Arts Buildings will provide ADA access.	\$35,029,000 \$35,029,000	\$0	Glavè & Holmes Architecture Richmond, VA	- June 2018	Construction is underway on all three buildings. Substantial completion for all three buildings is scheduled for June 2018.
				Branch & Associates Roanoke, VA		
Residential Door Access Improvements	Project to retrofit and install wireless electronic door access locks on approximately 4,520 student room doors campus-wide.	\$7,735,000	\$7,735,000	Hokie Passport, CNS, and CBORD	Fall 2017	Project is physically complete. Final University Building Official inspections are pending. Last report for this project.
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.	nt s \$16,508,000	\$16,508,000	Multiple A/E Firms	- December 2017	The data center team has completed the technical evaluation of the orchestration and automation frameworks. The team is continuing to test software defined networking (SDN) solutions to validate integration strategies. Procurement planning activities for the project are underway. The cabling team is working to terminate and test the new cabling in Litton-Reaves Hall.
				Various Contractors		
Upper Quad Residential Facilities	This project provides for the demolition and construction of replacements for 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.	w 100 se	\$91,000,000	Clark Nexsen Charlotte, NC	_	Construction of Pearson Hall (Rasche Hall replacement) and New Cadet Hall (Brodie Hall replacement) are complete. Sitework around the stairs to Alumni Mall completed in August 2017. Demolition of Monteith and Thomas underway and scheduled for completion in September/October 2017.
				Barton Malow Company Charlottesville, VA		

# CAPITAL PROJECT STATUS REPORT



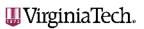






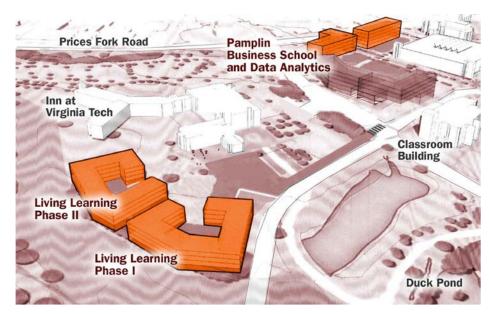
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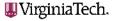
- ▶ Board of Visitors Meeting: September 11, 2017
- Christopher H. Kiwus, PE, PhD
   Associate Vice President and Chief Facilities Officer



#### PROJECTS IN FEASIBILITY

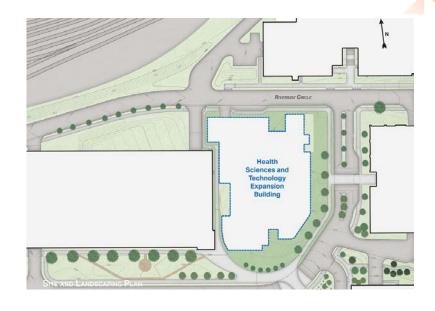
- Global Business Analytics Complex
- Global System Sciences
- Health Center Improvements/
   Student Wellness Services
- Northwest Utility
- Undergraduate Science Laboratory

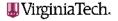




#### PROJECTS IN PROGRAMMING

- Creativity & Innovation District Living Learning Community
- Health Sciences & Technology
   Comparative Oncology Research Center and Classroom Building
- Intelligent Infrastructure (Hitt/Smart Dining)

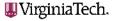




#### PROJECTS IN DESIGN

- Boiler Package 12
- Chiller Plant Phase II.
- Corps Leadership and Military Science
- Holden Hall Renovation
- Improve Kentland Facilities
- Livestock and Poultry Research Facilities (Phase I)
- Multi-Modal Transit Facility
- Undergraduate Science Laboratories Renovations

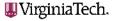




#### PROJECTS UNDER CONSTRUCTION

- Athletic Facilities Improvements
- Eastern Shore AREC Equipment Storage Building
- Fire Alarm Systems and Access
- Lane Electric Substation Expansion
- O'Shaughnessy Hall Renovation
- Renovate/Renew Academic Buildings
- Residential Door Access Improvements
- Unified Communications and Network Renewal Project
- Upper Quad Residential Facilities







#### Parking and Transportation

Parking // Fleet // Alternative Transportation





# **Parking**



- Fully self-funded auxiliary of the University
- Responsibilities
  - Provide safe and efficient parking for members of the university community
  - Maintain parking assets (lots and structures)
  - Regulate and enforce parking rules seven days/week
- 16,400 total parking spaces on campus

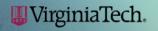




# Parking and Transportation

# PARKING PERMITS & NUMBERS





# 2017

# Special Event Passes 15,500

Visitor Passes 29,493



# **Citations**

**Issued: 24,202** 

**Voided: 2,737** 

**Appealed:** 1,730 or 7.1%

**Dismissed:** 561 or 33.2%

**Upheld: 1,129 or 66.8%** 

**Second Appeal:** 63

Upheld: 40

Dismissed: 23



# Fleet Services

2016-17



Total miles - 7,656,626



Total gallons dispensed
Unleaded - 238,000 gallons
Diesel - 48,070 gallons



Total passengers on the VTCRI Shuttle - 14,706

# Alternative Transportation



**ANY** service that gets you to and from campus in anything other than a single occupancy vehicle.

- Blacksburg Transit
- SmartWay bus
- Campus-to-Campus Bus
- VTCRI Shuttle
- HomeRide
- College Transit
- DRPT Bus\*

- Carpool
- Van pool
- Biking
- Walking
- Zipcar
- Zimride

Alternative Transportation Numbers

# **Alternative Transportation Numbers**



Bike Hub visits for year - 3,254



Total Zipcar use for year - 2,390



Total **Zimride** users for the year New users - 1,104 Total rides - 1,420





# **Hokie Bike Hub**



- Started in FY15
- Average over 2,800 visitors a year
- Growing an average rate of 20% a year

# to CAMPUS BUS

- President and Provost Initiative to create campus connectivity
- Two round trips a day between Arlington and Blacksburg
- \$50 for a one-way ticket during pilot
- Service started June 5, 2017

#### **Passengers**

June - 94 July - 104 August - 150\*

\*Expected





# **Blacksburg Transit**

BLACKSBURG

2016 2017

Passengers 3,513,538 3,734,989

Miles 878,241 945,586

**FY 17 Funding** 

Operating: \$3,568,516 Capital: \$320,299

# Virginia Tech Carilion Research Institute Shuttle

8 round trips a day between Blacksburg and the Roanoke campus





# **Bike Share Program**

- A Consortium between Virginia Tech, Towns of Blacksburg and Christiansburg, and Montgomery County
- Regional approach to Bike Share
- Goal is to have Bike Share in the Region by November 2017



# Alternative Transportation supports sustainability.

BEST Workplaces for Commuters<sup>SM</sup>



## What Does the Future Hold?

## **Parking and Transportation**

- Anticipated loss of 2,500 parking spaces in the next five to ten years
- Building parking, especially garages is expensive
- Leverage Alternative Transportation Programs to help curb demand
- Utilize other TDM strategies to mitigate the need for additional parking

# DESIGN PREVIEW FOR THE HEALTH SCIENCES & TECHNOLOGY COMPARATIVE ONCOLOGY RESEARCH CENTER AND CLASSROOM BUILDING

An unsolicited Public-Private Education and Infrastructure Act (PPEA) proposal was received by Virginia Tech from Carilion Clinic and is under review. Carilion Clinic and their design team are currently proceeding with the schematic design phase for approximately 139,300 gross square feet (GSF) of new construction. The project will include research and education spaces that bring together researchers and clinicians in areas of human and animal medical sciences with a focus on five thematic areas. The site is located at the Riverside Center Research Education and Medical Park in Roanoke. Subsequent design phases and a construction schedule are to be determined.

# Capital Project Information Summary – Health Sciences & Technology Comparative Oncology Research Center and Classroom Building

#### **BUILDINGS AND GROUNDS COMMITTEE**

#### **September 11, 2017**

#### **Title of Project:**

Health Sciences & Technology Comparative Oncology Research Center and Classroom Building

#### Location:

The building site is located at the Riverside Center Research Education and Medical Park in Roanoke, Virginia on the Carilion Clinic campus. The site, 4 Riverside Circle, is currently a surface parking lot serving the other buildings in Riverside Center.

#### **Current Project Status and Schedule:**

An unsolicited Public-Private Education and Infrastructure Act (PPEA) proposal was received by Virginia Tech and is currently under review in accordance with the PPEA process. Carilion Clinic and their design team are proceeding with the schematic design phase and preparing a detailed proposal. Subsequent design phases and a construction schedule are to be determined.

#### **Project Description:**

The project will construct approximately 139,300 gross square feet (GSF) and provide facilities for Health Sciences & Technology Comparative Oncology research and classrooms. The project will bring together researchers and clinicians in areas of human and animal medical sciences, focusing on five thematic areas. Five principal investigators (PIs) will be recruited for each of the thematic areas: Biomaterials; Body Device Interfaces; Brain Health and Disease; Cardiovascular Sciences; Infectious Disease and Immunity; and Metabolism and Obesity.

#### **Brief Program Description:**

Key programmatic elements to support research and education in the facility include high-intensity biomedical research capable laboratories with surgical-type suites, Biosafety Level Three laboratories, and animal imaging facilities that require high field magnetic resonance imaging. The Comparative Oncology Research Center facility, in order to provide oncology services for companion animals, will include a linear accelerator. Additionally, high-intensity dry laboratories, experiential learning classrooms, procedural training rooms, computational facilities, and core facilities will support the initiatives. These spaces will occupy three elevated levels above a ground floor. The ground floor will provide a public atrium, research-on-display workshop, and a café which connects the building to the public and Virginia Tech Carilion Research

Institute/Virginia Tech Carilion School of Medicine at the street level. The new facility will connect to the existing Virginia Tech facility across Riverside Circle via an enclosed bridge.

#### **Contextual Issues and Design Intent:**

The exterior veneer of the building will combine Hokie Stone from the Virginia Tech campus in Blacksburg with the brick and precast architectural concrete of the Carilion Riverside campus in Roanoke.

The current, ongoing 2017 Campus Master Plan update scope includes work at sites other than main campus, and will conduct a master planning effort for Virginia Tech's facilities and holdings in the Roanoke area.

#### **Architect/Engineer:**

AECOM

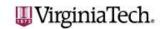
#### **Construction Manager:**

Skanska

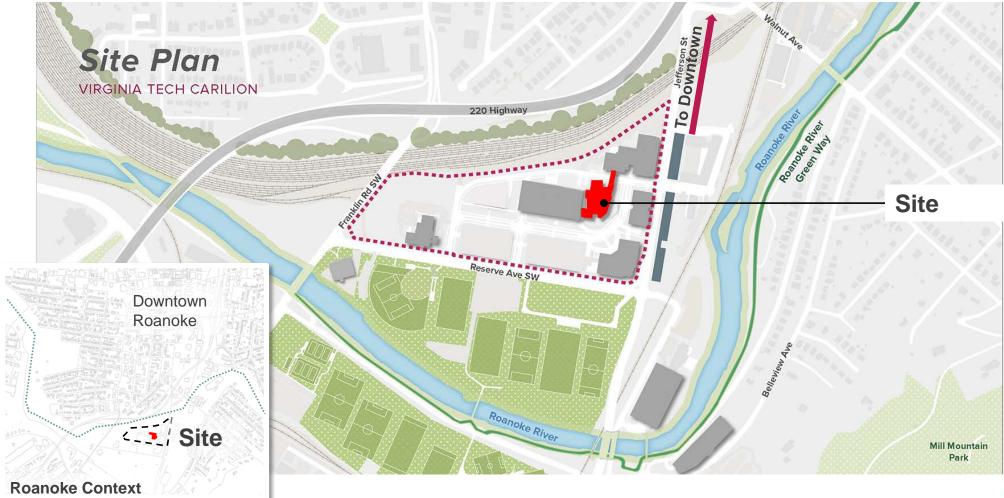
**Design Preview for:** 

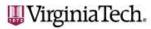
# Health Sciences & Technology Comparative Oncology Research Center & Classroom Building

Board of Visitors Meeting: September 11, 2017



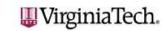
#### Master Plan Vision



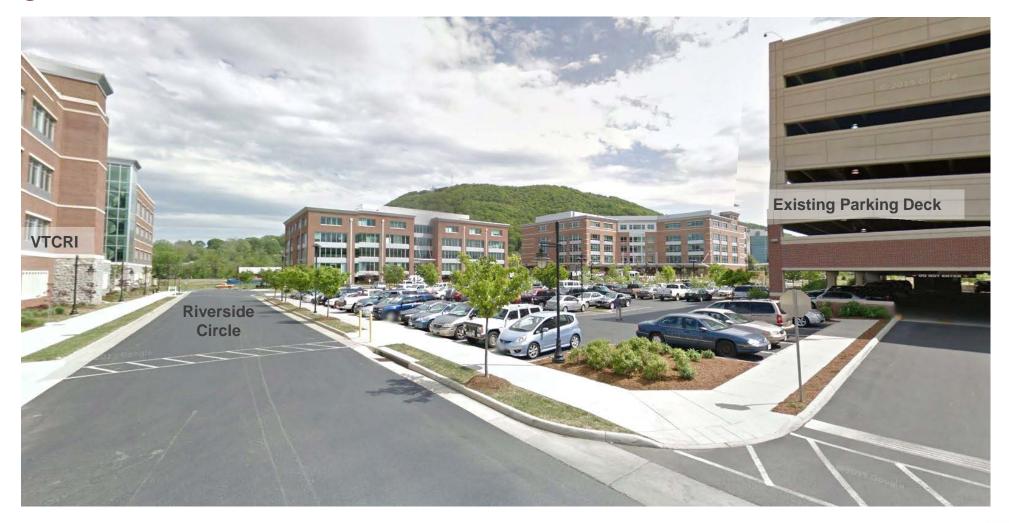


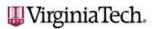
## **Project Information**

- New construction 139,300 GSF
- PPEA project delivery method
- Funding
  - Total project budget \$89.9M
- Carilion Clinic preparing detailed proposal
- Occupancy date: Early 2020



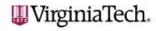
## Existing Conditions; Riverside Circle, East view to Mill Mountain



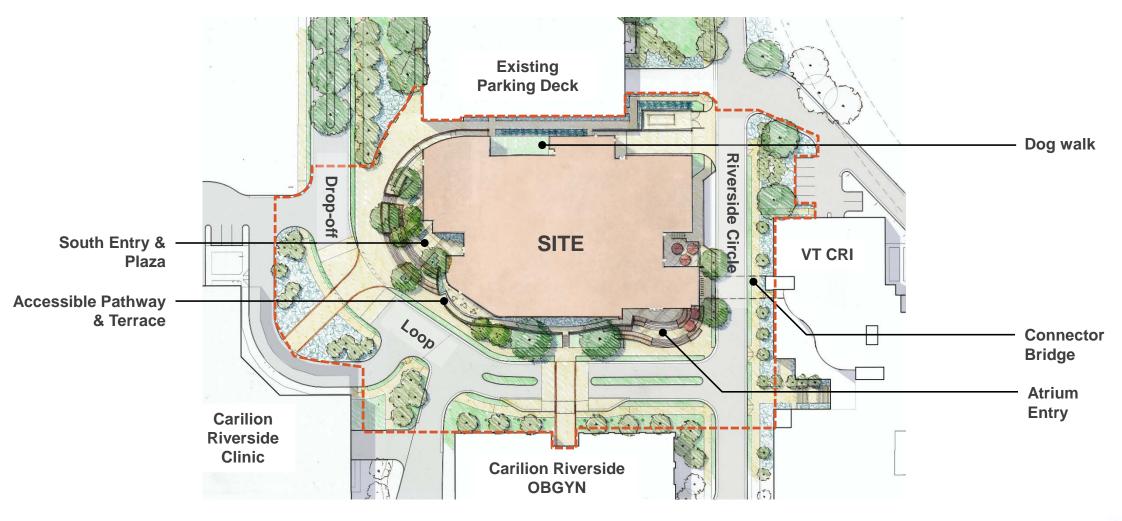


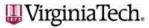
## Existing Conditions: Riverside Circle, viewing west





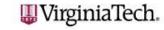
#### Site Plan



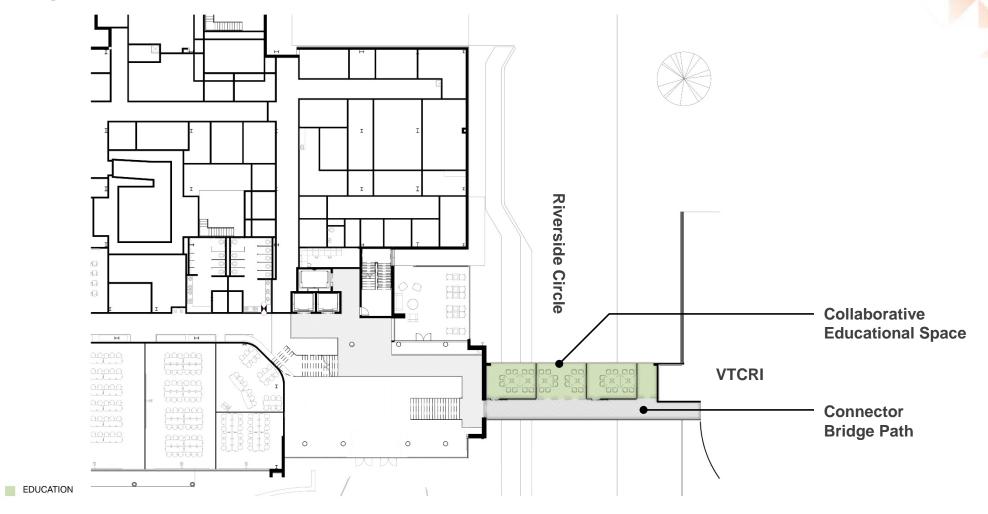


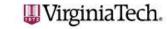
#### Floor Plan- Ground Floor





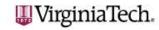
## Floor Plan- Bridge Level



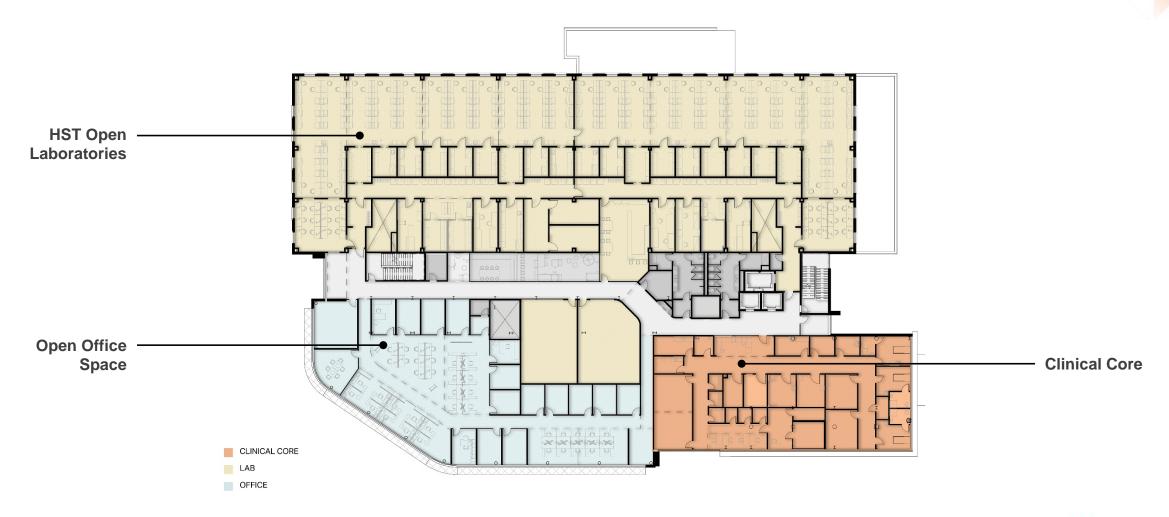


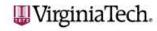
#### Floor Plan- First Floor



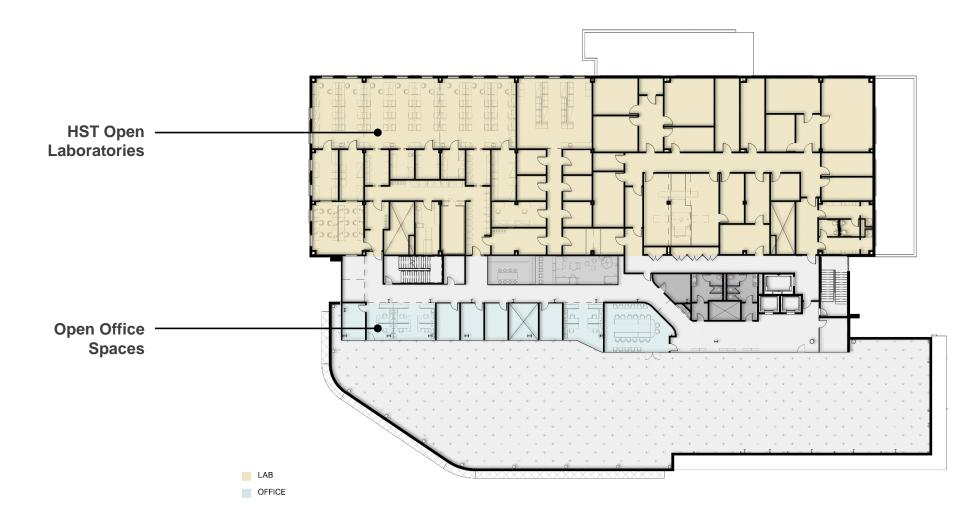


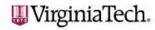
#### Floor Plan- Second Floor





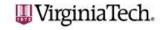
## Floor Plan- Third Floor





#### Recommendation

• That the design preview graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion in early 2020.



## DESIGN PREVIEW FOR ATHLETICS FACILITIES IMPROVEMENTS – TENNIS FACILITY

Schematic design is underway for an approximately 7,100 gross square foot (GSF) addition to the existing Burrows-Burleson Tennis Center facility located on Research Center Drive. The Design-Build procurement method is being utilized to construct the project and will add new tennis team facilities including locker rooms, team lounges, training, restrooms, coaches' offices, lobby, mechanical and electrical space, and storage. A subsequent design phase schedule is to be determined, and construction is pending further fundraising efforts.

## Capital Project Information Summary – Athletics Facilities Improvements – Tennis Facility

#### **BUILDINGS AND GROUNDS COMMITTEE**

#### **September 11, 2017**

#### **Title of Project:**

Athletics Facilities Improvements – Tennis Facility

#### Location:

Located in the Athletics & Recreation District, the project site is on the southwest side of the existing Burrows-Burleson Tennis Center at 670 Research Center Drive, adjacent to the exterior hard courts.

#### **Current Project Status and Schedule:**

Following development of a criteria set, a design-build team was selected to deliver the project via the design-build procurement method. The project is currently in the schematic design phase and funding is authorized for planning. A subsequent design phase schedule is to be determined, and construction is pending further fundraising efforts.

#### **Project Description:**

The project is consistent with the current, ongoing 2017 Campus Master Plan update and will support the intercollegiate tennis program and provide state of the art support spaces for the women's and men's varsity tennis teams, with as little disruption as possible to ongoing activities within the building. Plans include an approximately 7,100 gross square foot (GSF) addition to the existing facility. The project includes associated site work required for the new addition.

#### **Brief Program Description:**

The project will add a lobby, team locker rooms, coaches' offices, team lounge, kitchenette, training and rehabilitation space, and restrooms in the addition. Team support spaces will also be added and these include a video/copy room, laundry facility, stringing area, and storage.

#### **Contextual Issues and Design Intent:**

The building aims to complement the existing structure, relate broadly to architecture found on the main campus, and engage building patrons in an upgraded experience.

The design is sited directly adjacent to the existing structure at the southwest corner as indicated in the criteria documents. The addition should harmonize with the existing building and respect the simplicity of the interior program. The basic diagram of the addition is a simple, low, solid rectilinear form that is punctuated by a minimally decorated glass entry box. It absorbs the existing

southern bathroom/entry protrusion as a means of unifying the south elevation and reducing the number of disparate materials in close proximity to one another.

The primary exterior materials will include Hokie Stone water table capped with precast concrete, cement fiber wall panels, storefront individual windows, single ply roof membrane, and metal wall panels with gothic relief detailing along with curtain wall glazing at the entry element.

#### **Architect/Engineer:**

TKA Architects (SportsPLAN Studio) - Criteria Consultant Tymoff+Moss Architects - Design-Build Consultant

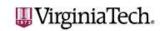
#### **Construction Manager:**

Hourigan Construction

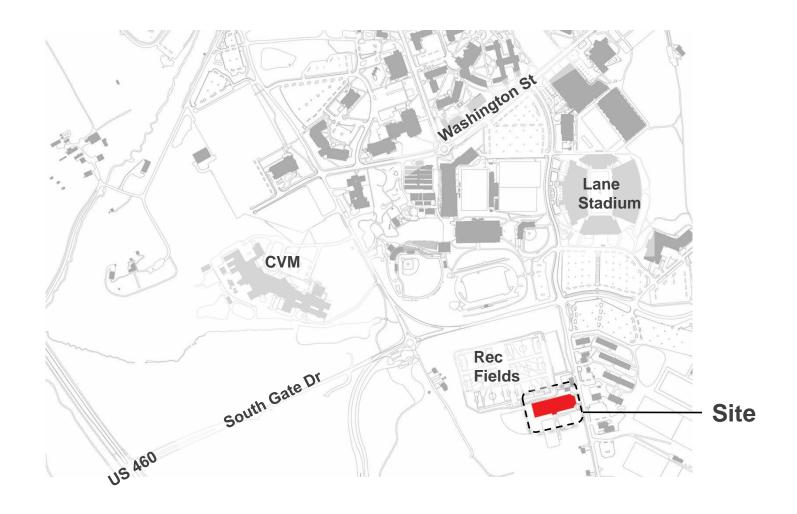
**Design Preview for:** 

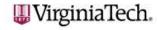
# Athletics Facilities Improvements - Tennis Facility

Board of Visitors Meeting: September 11, 2017



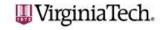
## **Project Location**





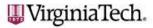
## **Project Information**

- 7,100 GSF addition
- Design-Build project delivery method
- Funded for planning initiatives under Athletics Facilities Improvements (parent project)
  - Anticipated total project budget \$4.2M
  - Anticipated construction cost \$3.2M
- Schematic Design phase
- Occupancy date: TBD



Existing Conditions, view from Research Center Drive





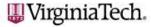
Existing Conditions, view from Research Center Drive



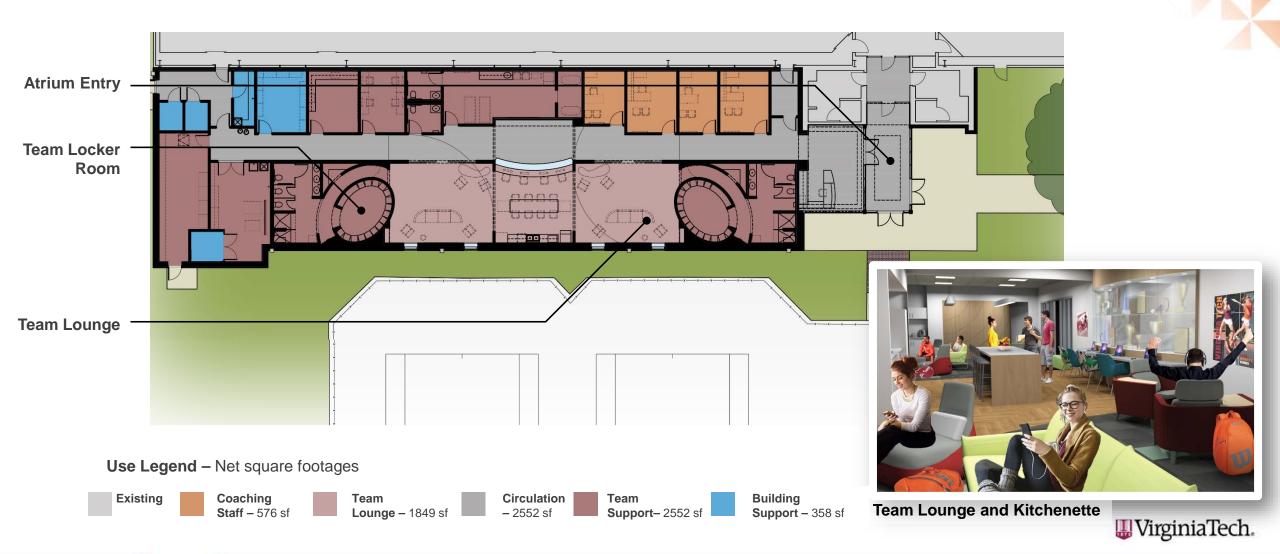
**WirginiaTech**.

**Project Site** 



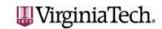


#### Floor Plan



#### Recommendation

 That the design preview graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion that is to be determined.



#### **DESIGN PREVIEW FOR HOLDEN HALL RENOVATION**

Schematic Design is underway for an approximately 20,240 gross square foot (GSF) renovation of an existing wing, and 81,000 GSF addition of two wings. The addition replaces two existing, dilapidated wings. The project site is located in the Academic District, between the Drillfield to the south, Old Turner Street to the north, and Norris Hall to the west. The facility will support the College of Engineering and create a showcase venue for the Department of Materials Science and Engineering (MSE) and the Department of Mining and Minerals Engineering (MME). A Construction Manager at Risk procurement method is being utilized to construct the project. Funding is currently authorized for Detailed Planning. Project schedule is to be determined.

#### Capital Project Information Summary – Holden Hall Renovation

#### **BUILDINGS AND GROUNDS COMMITTEE**

#### **September 11, 2017**

#### **Title of Project:**

Holden Hall Renovation

#### Location:

The building site is located in the Academic District, between the Drillfield to the south, Old Turner Street to the north, and Norris Hall to the west. This building will be located along significant east-west and north-south pedestrian patterns.

#### **Current Project Status and Schedule:**

A feasibility study was completed in December 2014. The project is currently in the schematic design phase. Subsequent design phases and construction schedule are to be determined.

#### **Project Description:**

The project is consistent with the current, ongoing 2017 Campus Master Plan update and will support the College of Engineering. Plans include the replacement of two deteriorated wings of Holden Hall, bringing the total facility to approximately 101,240 total gross square feet (GSF). The project will retain the south wing closest to the Drillfield.

#### **Brief Program Description:**

The facility will provide highly collaborative, thematically clustered spaces, as well as create a showcase venue for the Department of Materials Science and Engineering (MSE) and the Department of Mining and Minerals Engineering (MME). MSE is currently distributed across campus and the expansion and renovation will allow consolidation of the program and provide better integration of undergraduates. MME is one of the largest programs of its type in the U.S. and consistently ranks in the top ten. The project will allow MME to co-locate and optimize laboratories in an innovative setting, including high-bay mock mine and robotics/automation laboratories.

#### **Contextual Issues and Design Intent:**

The existing south wing will be repaired and renovated, and new construction will feature Hokie Stone, precast concrete with ornamental reveals and decorative heraldry, and metal cladding. The architectural expression will be consistent with core campus collegiate gothic and the remaining wing of Holden Hall as well as provide a visual and physical connection to Norris Hall.

Demolition of the dilapidated single story wings will require approval through the Virginia Department of Historic Resources and the Art and Architecture Review Board prior to the issuance of a demolition permit.

#### **Architect/Engineer:**

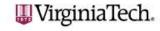
Moseley Architects | SMITHGROUPJJR

#### **Construction Manager:**

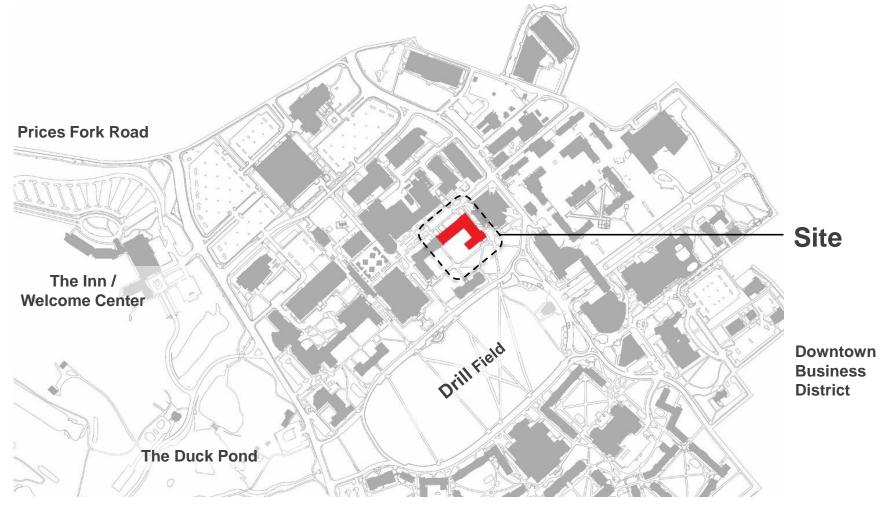
WM Jordan

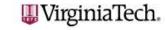


Board of Visitors Meeting: September 11, 2017



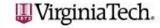
## **Project Location**





### **Project Information**

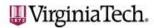
- Renovation 20,240 GSF, addition 81,000 GSF
- CMAR project delivery method
- Funding
  - Total authorized budget \$61.8M
  - Authorized construction cost \$42.3M
- Authorized for Detailed Planning
- Schematic Design phase
- Occupancy date: Winter 2021



## **Existing southwest facade**

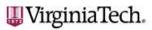


To Be Demolished



Existing east facade, to remain





## Existing north facade, work to connect with Norris Hall



Norris Hall To Remain

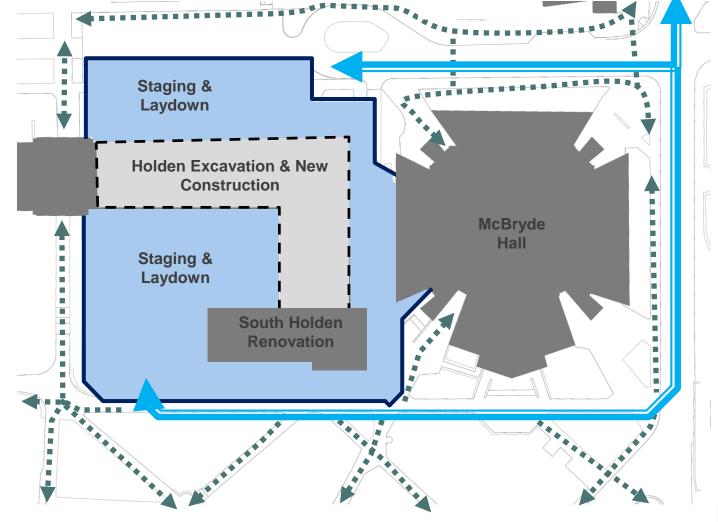
**WirginiaTech**.

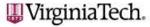
To Be

Demolished

## Construction staging & access

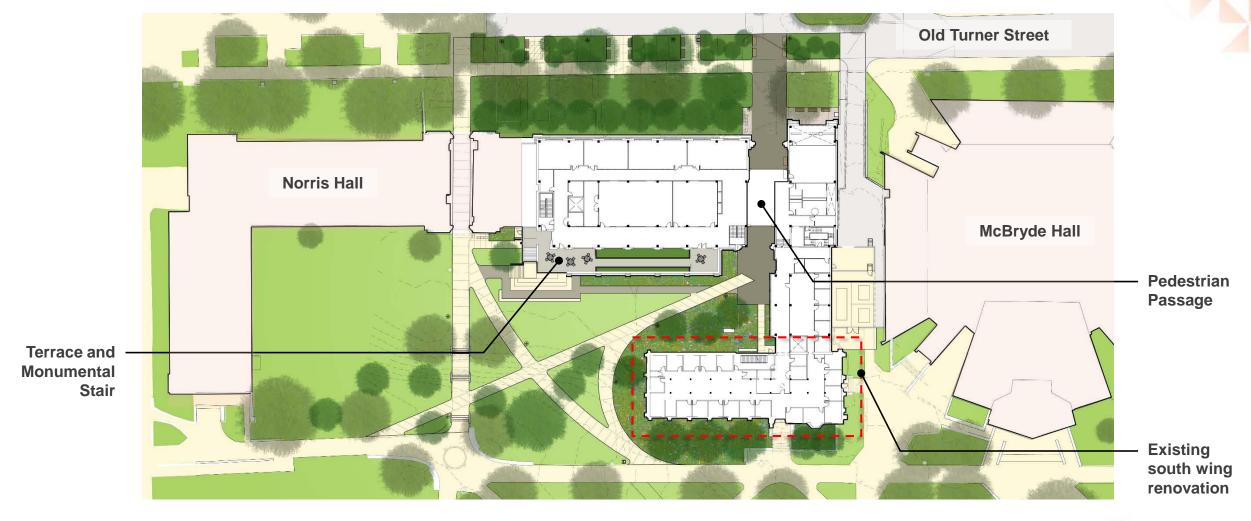
- / Site Fencing / Perimeter
- Staging Areas
- Pedestrian Circulation
- Delivery & Construction Vehicular Access

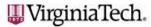




Temporary swing space during construction **Surge Building** - Faculty & Graduate **Student Offices** Randolph Hall - Academic Labs CRC To CRC - Research Labs surge support - Research Labs **Temporary Office Relocations Temporary Lab Relocations WirginiaTech**.

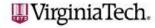
## Site plan





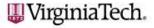
#### First Floor Plan





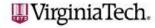
#### Second Floor Plan



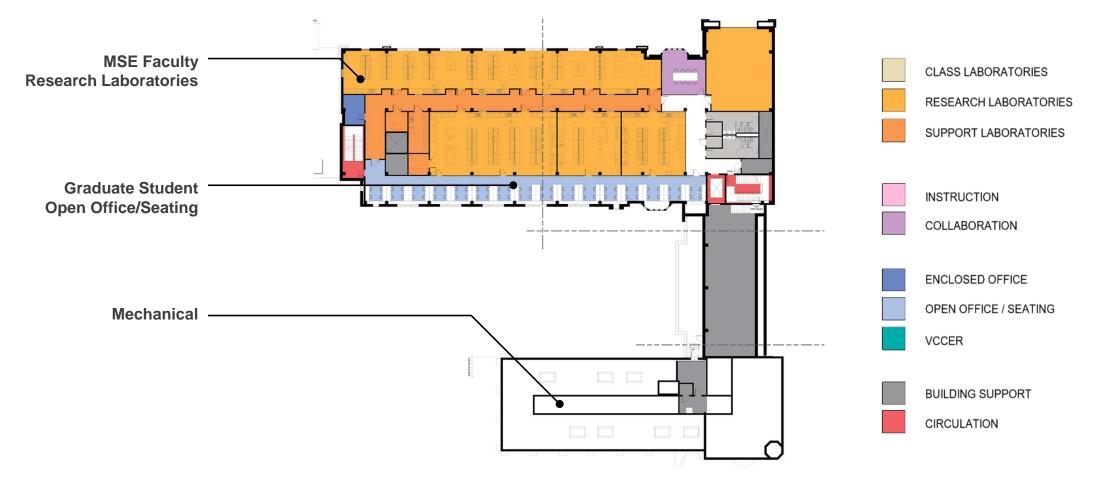


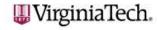
#### Third Floor Plan





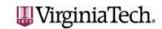
#### Fourth Floor Plan





#### Recommendation

• That the design preview graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown, with an anticipated building construction completion in late 2021.



#### Update on the Capital Outlay Plan for 2018-2024

## JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

August 1, 2017

#### **Background:**

At its April 2017 meeting, the Board of Visitors reviewed a resolution requesting approval of the University's 2018-2024 Capital Outlay Plan (Plan) and authorization to submit an updated Capital Plan to the state, in accordance with future guidance from the state and based on the projects on the approved list. The resolution was approved, and the university has proceeded accordingly.

On June 5, 2017, the state issued instructions for the preparation and submission of the 2018-2024 Capital Outlay Plan. The deadline for submission of the Six-Year Capital Outlay Plan to the state was July 7, 2017, and the university prepared and submitted the plan by the due date. The state instructions required submission of only projects requesting some portion of General Fund resources in their budget.

Attachment A shows the list of projects with General Fund support submitted to the state with the listing ranked in priority order for state support. This project arrangement reflects the needs of the university, priorities of the state, and positions the university with options to respond to various funding abilities of the state in the future. The list of items is consistent with the list approved by the Board of Visitors at its April 2017 meeting, with a few minor adjustments for refined project costs and fund splits.

#### **State Capital Budget Review and Approval Process:**

The General Fund projects on Attachment A may be included by the state to update its capital outlay plan and to make funding decisions in the 2018 General Assembly.

The next steps for the state's 2018 budget session include at least five major phases as summarized below:

- 1) A state appointed Six-Year Capital Outlay Plan Advisory Committee (staffed by several central agencies and offices) will review all 2018-2024 capital plans submitted by agencies and institutions over the summer of 2017. This phase will include ongoing interactions between the state and the university to position its projects.
- 2) By November 1, 2017, the Advisory Committee will provide a set of recommendations to the Governor, Chairman of the Senate Finance Committee,

1

- and Chairman of House Appropriations Committee to update the state's capital outlay plan for the 2018-2024 period.
- 3) On December 18, 2017, the Governor is scheduled to present to the General Assembly a bill proposing the state's updated capital outlay plan and a budget bill including planning funds or full funding for high priority items in the plan.
- 4) The legislature may amend the proposed plan and the proposed funding program in the Executive Budget Bill during the 2018 General Assembly. Depending on the overall size of the capital program and the amount of General Fund support for its projects, the University may submit legislative amendments for projects. This phase includes ongoing interactions by the university until a budget bill is passed.
- 5) On July 1, 2018, the state's updated 2018-2024 plan, capital funding program, and list of projects for the 2018-2020 biennium becomes effective.

#### Early Indications of State Capital Funding for the 2018-2020 Biennium:

Preliminary signals from Six-Year Capital Outlay Plan Advisory Committee indicate modest capital funding expectations for the 2018-2020 biennium. The state funds nearly all of its capital program with external debt and actively manages debt to a five percent debt burden ratio as part of a strategy to preserve its AAA Credit Rating. The large capital funding program for the 2016-2018 biennia combined with revenue performance in fiscal year 2018 has consumed projected debt capacity through fiscal year 2019. The recovery of debt capacity may accelerate or subdue based on the pace of revenue growth.

The total dollar value of General Fund items listed in Attachment A exceeds projected resources likely to be allocated to Virginia Tech from the state during the planning period. Including a variety (large, small, new construction, renovation) of high priority needs in the listing ensures the university has some flexibility to adapt to various state capital funding programs that may emerge over the next nine months.

#### **Nongeneral Fund Projects and University Debt:**

The university Six-Year Capital Outlay Plan also includes projects with 100 percent nongeneral fund support and these are shown on a separate schedule (Attachment B) because they do not compete for General Fund resources. The state instructions for this submission specified not to submit any projects supported entirely with nongeneral fund resources. Under the university's Management Agreement for Capital Projects, the state has authorized the Board of Visitors to approve and implement projects supported 100 percent by nongeneral funds. Each project must be individually approved by the Board of Visitors. Under this authority, the university may bring resolutions to the Board to initiate projects from the Plan independent of the state budget process. When the university is prepared to initiate a project supported entirely with nongeneral funds, including a financing plan, the university submits a capital

project resolution to the Board for consideration. The list in Attachment B includes the high priority projects for which nongeneral fund resources are anticipated to be sufficient to start a project during the six-year period or for which a private fund raising campaign is a high priority.

Projects with nongeneral fund support, including portions of some gift campaigns, may use external debt to finance a portion of the budget. Each potential debt financing undergoes a financial feasibility assessment to ensure resources are sufficient to cover the full debt service term without unnecessary financial risk to the unit's operations. The positioning of debt is further analyzed to ensure the university does not exceed the parameters of the university debt policy and guidance from the Board of Visitors, which has consistently held the maximum allowable debt ratio (total annual debt service to total operating expenses) to below five percent. The university projects the debt ratio analysis six-years out and includes anticipated issuances for projects in the Plan in the analysis. This practice provides an important check to ensure the institution's debt obligations do not become a point of inflexibility in reaching the operational goals of the institution and to ensure the university is holding sufficient debt capacity for its highest priorities.

A brief narrative description of each project on Attachment A and Attachment B is shown on Attachment C.

#### Attachment A

#### General Fund Six-Year Capital Outlay Plan for 2018-2024

#### as of August 1, 2017

		Dollars in Thousands					
		General Fund		Nongeneral Fund		Total	
University Division							
1	Undergraduate Instruction Science Laboratory	\$ 75,000	\$	-	\$	75,000	
2	Global Business and Analytics Complex Data Analytics and Decision Sciences Building College of Business Building Global and International Programs Honors Program Space Living Learning Community Residence Halls	75,000 - - - - - 75,000		75,000 10,000 5,100 73,500 163,600		75,000 75,000 10,000 5,100 73,500 238,600	
3	Randolph Hall Replacement	155,125		27,375		182,500	
4	Corps Leadership and Military Sciences Building	29,900		20,000		49,900	
5	Robeson Hall Renovation	44,600		-		44,600	
6	Academic Support and Student Success Center	14,800		-		14,800	
7	Renovate/Replace Brooks Center	6,750		-		6,750	
8	Life, Health, Safety, Code Compliance Package Fire Alarms and Building Accessibility Library Code Compliance	5,500 5,500 11,000		- - -		5,500 5,500 11,000	
	Total University Division Projects	\$ 412,175	\$	210,975	\$	623,150	
Cooperative Extension / Agriculture Experiment Station							
1	Global Systems Sciences Buildings	\$ 94,400	\$	-	\$	94,400	
2	Animal Production and Livestock Facilities Phase II	24,300		-		24,300	
3	Center Woods Complex Improvements	5,600				5,600	
	Total CE/AES Division Projects	\$ 124,300	\$		\$	124,300	
Grand Total of General Fund Capital Plan for 2018-2024		\$ 536,475	\$	210,975	\$	747,450	

# **Attachment B**

# Nongeneral Fund Six-Year Capital Outlay Plan for 2018-2024 as of August 1, 2017

	Dollars in Thousands		
	General	Nongeneral	
	Fund	Fund	Total
Intelligent Infrastructure Complex			
Hitt Hall	\$ -	\$ 15,000	\$ 15,000
Intelligent Infrastructure Building	-	10,000	10,000
Smart Dining Hall	-	25,000	25,000
Smart Design and Construction Complex (Plantation Rd)	-	7,500	7,500
Intern Hub (VTTI)	-	2,000	2,000
Rural Smart Track		10,000	10,000
	-	69,500	69,500
Health Sciences and Technology			
Comparative Oncology Center	-	12,375	12,375
Translational Medicine, Phase 1		21,000	21,000
	-	33,375	33,375
Creativity and Innovation District			
Academic Space	-	8,250	8,250
Innovation and Athletics Residential Programs, 500 beds	-	57,000	57,000
	-	65,250	65,250
Academic Quality			
Applied Projects Building (CRC)	_	8,400	8,400
Enterprise / High Performance Computing Data Center	_	5,500	5,500
Falls Church property acquisition	_	3,350	3,350
	-	17,250	17,250
Student Experience			
Student Wellness Services	_	55,000	55,000
Dietrick Hall Dining Renovation and Expansion	_	5,000	5,000
Food Processing Center and Warehouse	_	7,000	7,000
Residential Renovations of 1000 beds by 2024	_	55,000	55,000
Dietrick Plaza Improvements	_	2,000	2,000
Owens Hall Renewal	_	57,000	57,000
CWOTO Flair Festiowal		181,000	181,000
Athletics Facility Improvements			
ACC Broadcasting studio expansion	_	4,000	4,000
Tennis Stadium Expansion	<del>-</del>	4,000	4,000
Cassell Coliseum Entrance Improvements	_	2,500	2,500
Athlete Nutrition Center, 250 seats	_	10,800	10,800
Attricte Nutrition Center, 250 Seats		21,300	21,300
Duildien Envelope Denovuele		27.750	27.750
Building Envelope Renewals	-	37,750	37,750
nd Total of Nongeneral Fund Capital Plan for 2018-2024	\$ -	\$ 425,425	\$ 425,425
AND TOTAL CIV VEAD CADITAL OUTLAY DUAN	¢ 520 475	£ 626.400	¢ 4 470 975
AND TOTAL SIX-YEAR CAPITAL OUTLAY PLAN	\$ 536,475	\$ 636,400	\$ 1,172,875

#### Attachment C

#### Project Descriptions for the 2018-2024 Capital Outlay Plan

# JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

August 1, 2017

### General Fund Projects:

## **University Division**

#### 1. Undergraduate Science Laboratory Building

This project is essential for accommodating the university's growing demand for STEM-H degrees. The proposed project envisions a new facility of 102,000 gross square feet of high quality instructional laboratories for basic and upper division sciences that will be located proximal to the new Classroom Building.

#### 2. Global Business and Analytics Complex

The overall project includes five major components. The Data Analytics and Decision Sciences Building calls for 100 percent state support and will be submitted as part of the state General Fund capital plan. Entirely nongeneral fund financing strategies have been developed for the remaining four components and include a new facility for the Pamplin College of Business, new living-learning community residence halls, a Global and International Affairs facility, and space for the Honors College. These components will be authorized under the University's restructuring authority.

#### 3. Randolph Hall Replacement

Randolph Hall was constructed in 1952 with an addition in 1959, and no major renovations since the construction was completed. The project envisions razing and replacing the entire 166,000 gross square foot existing building in phases and constructing a new building of approximately 284,000 gross square feet at the same site.

### 4. Corps Leadership and Military Science Building

The Corps Leadership and Military Science Building envisions a 75,460 gross square foot building to provide permanent space for Corps of Cadets and ROTC programs that are currently dispersed on the north area of campus. The proposed building location is in the northern portion of the existing Upper Quad near Lane Hall.

#### 5. Robeson Hall Renovation

Robeson Hall was constructed in 1960 and there have been no major improvements or renovations since the original construction. The project includes renovating the entire 67,000 gross square foot existing building to provide modern laboratories and support space to meet the needs for instructional classrooms and laboratory space for the physics programs.

### 6. Academic Support and Student Success Center

The envisioned project includes 28,000 gross square feet of new construction for an Academic Support and Student Success Center located on Washington Street in proximity to the Student Services Building and Smith Career Services Buildings.

#### 7. Brooks Center Renewal

The Brooks Center facility is approximately 40 years old and is 35,000 gross square feet of office, classroom, conference room, and high bay laboratory space located on university property adjacent to the Corporate Research Center and across from the airport. The existing building is carrying a significant backlog of deferred maintenance. The project includes renovating the entire facility to provide modern high bay laboratory and support space to meet the needs for instructional and research laboratory space for the College of Natural Resources programs.

#### 8. Health and Safety Improvements

The university's health, safety, and accessibility initiative for the campus is an ongoing effort, and the university includes a request for this program in each capital plan. This project is to continue progress on needed campus improvements including accessibility improvements, fire alarm systems, and life safety repairs that are beyond the scope of the Maintenance Reserve program. This project includes addressing code compliance issues specific to the Newman Library (restroom renovations, access, and egress).

## Cooperative Extension/Agricultural Experiment Station Division

#### 1. Global Systems Sciences Buildings

This project is to provide an additional 135,000 gross square foot research space that will focus on interdisciplinary plant sciences within the Agricultural Experiment Station including research laboratories, laboratory support space, research offices, faculty offices, and graduate student research space.

#### 2. Renew Animal Production and Livestock Research Facilities, Phase II

The agency has 37 facilities that support a variety of commercial agriculture industries in the Commonwealth. The assets total approximately 250,000 gross square feet, are generally 40 to 50 years-old, and have aged past their useful life. The state appropriated a first phase of the project which is underway. This project requests the second phase of improvements for 97,000 gross square feet to complete the program.

#### 3. Center Woods Complex Improvements

This project proposal is to renew the Center Woods Complex for the Fisheries and Wildlife program, located off Plantation Road, through a combination of renovations and replacements. This project envisions a total 28,000 gross square feet of new and refurbished mixed-use space that would include teaching and research space, offices, equipment storage and other support facilities.

#### Nongeneral Fund Projects:

#### **Intelligent Infrastructure Complex**

Intelligent Infrastructure and Human-Centered Communities is one of the five original Destination Areas, will be the pioneering implementation of a new interdisciplinary collaborative educational and research environment. This Destination Area focuses on three themes: smart transportation, smart construction, and smart energy. The overall vision of the Destination Area includes several facility improvements that will be a multiphased development occurring on the north side of campus, Plantation Road, and at the Virginia Tech Transportation Institute.

#### Hitt Hall

Hitt Hall is envisioned as a 26,000 gross square foot building to provide needed instruction and laboratory space, as well as faculty, staff, and graduate student work space for the growing School of Construction. It would be a joint venture between the College of Architecture, the College of Engineering, and the Department of Building Construction that brings together faculty and students from various discipline to advance the education and research in design and construction sciences.

#### Intelligent Infrastructure Building

The Intelligent Infrastructure Building, located adjacent to Hitt Hall, is envisioned as part of a multi-use building containing 15,000 gross square feet of Makers Laboratory space that would be an innovative learning environment to promote interdisciplinary collaboration to support emerging research.

#### Smart Dining Hall

The Smart Dining Hall, located adjacent to Hitt Hall, is envisioned as part of a multiuse building containing 35,000 gross square feet of dining space. By providing at least one thousand new seats the Smart Dining Hall would significantly expand the dining options available on the north side of campus.

#### Smart Design and Construction Complex

The envisioned complex would provide facilitates for faculty and students to conduct research and develop applications in areas ranging from smart houses to smart energy.

# • Intern Hub (VTTI)

This project would be located at the Virginia Tech Transportation Institute and provide an opportunity for faculty and students to work directly with industry leaders.

#### Rural Smart Track

This project would provide the Virginia Tech Transportation Institute Research with a new test bed for its work with industry partners and sponsors that would be focused on intelligent roadways, self-driving cars, and unmanned aircraft systems.

#### **Health Sciences and Technology**

#### Comparative Oncology Center

This project envisions a small animal medical center that provides comprehensive cancer care. The facility would be a valuable educational resource for referring veterinarians, future veterinarians, and clients by utilizing the field of comparative oncology to develop and refine diagnostic technologies and treatments. The program would recognize the inextricable linkages between animal and public health and promote productive collaborations in translational cancer research and graduate education.

#### • Translational Medicine, Phase I

The proposed facility is a critical element for the university's capacity to continue growing its medical and medical-related research. The project envisions 30,000 gross square feet of facility improvements and expansion at the veterinary hospital to provide biomedical facilities to support translational medical research and training.

#### **Creativity and Innovation District**

#### Academic Space

The inclusion of academic programing and offices within the residential living learning community helps provide a supplement and enhancement to traditional classroom learning. The academic space is envisioned to include classroom, assembly, and exhibition space.

#### Innovation and Athletics Living Learning Community

The proposed living learning community would include two 520 bed residence halls that include academic, social, research, and collaboration space to support the Creativity and Innovation District. Members of the living/learning residence hall will include students with an interest in interdisciplinary creation and entrepreneurship as well as approximately 176 student athletes.

#### **Academic Quality**

#### Applied Projects Building (CRC)

This project would be located in the Corporate Research Center and provide 30,000 gross square feet to accommodate integrated security research.

#### • Enterprise / High Performance Computing Data Center

The University's new Enterprise / High Performance Computing Data Center is envisioned to be a 5,000 gross square foot modularized building system located in the Corporate Research Center that will be a resource to facilitate high performance computing and large scale data storage. This project will support and partner with institutes, colleges, departments, and administrative areas to address needs for information storage, data transmission, and administration of university enterprise systems.

#### • Falls Church Property Acquisition

This request provides authorization to exercise the land purchase option available to the University for property in Falls Church, Virginia where the Northern Virginia Center is located.

### **Student Experience**

#### • Student Wellness Services

This project envisions a comprehensive renovation of War Memorial Hall inclusive of envelope, mechanical, electrical, and plumbing upgrades. Interior renovations convert a majority of the gymnasium to new spaces to accommodate modern priorities in student recreation and sports, showers and lockers will be upgraded, and an addition will provide a new entry and expanded program space. Additionally, the project would renovate portions of Schiffert Health Center and Cook Counseling Center space within McComas Hall.

#### Dietrick Hall Dinning Renovation and Expansion

This project encloses the overhang to create 200 additional seats and increases outdoor seating. Additional dining capacity would be created by reallocating and renovating space on the first floor.

#### Food Processing Center and Warehouse

A new 36,000 gross square feet food processing center and warehouse would provide Dining Services with modern space for central pre-prep, bake shop, and cold storage to handle the growing demands of campus dining centers.

### Residential Renovations of 1,000 beds by 2024

This project is part of a long-range strategic plan to modernize the inventory of campus residential facilities. The proposed renovations will fully update 1,000 beds in the residential inventory at a cost of approximately \$55 thousand per bed.

#### Dietrick Plaza Improvements

The project would modernize the hardscaping in front of Dietrick to create large gathering spaces and provide updated lighting and landscaping to make the area more inviting.

#### Owens Hall Renewal

Owens Hall is a 98,000 gross square foot dining facility constructed in 1939 with several small scale interior renovations, the latest completed in 1991. The building has accumulated substantial deferred maintenance and requires a major renovation to continue service in the long term.

#### **Athletics Facility Improvements**

#### ACC Broadcasting studio expansion

This project would provide Athletics with space to support the increased demand for TV and radio broadcast capabilities.

#### Tennis Stadium Expansion

Tennis Facilities would be renovated to include expanded locker rooms, team lounges, medical training support, and fan viewing areas.

#### Cassell Coliseum Entrance Improvements

This project would expand and enclose the Beamer Way entrance to provide a new gathering area for fans and enhance energy efficiency by creating an air lock to prevent outside air from entering the building when doors are opened.

#### Athlete Nutrition Center

This project is envisioned as a renovation and expansion of the Bowman Room to update the space and provide nutrition dining and training options to athletes.

#### **Building Envelope Renewals**

This project is intended to address ongoing leaks that have been taking place on six buildings on campus. Structural evaluation and facilities condition studies identified numerous problems with structural supports and connections of precast panels that support the exterior walls.

#### **Committee Minutes**

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

# Duck Pond Room, The Inn at Virginia Tech 8:30 a.m.

#### September 10, 2017

## **Closed Session**

**Committee Members Present:** Mr. Mehmood Kazmi (chair), Ms. Tish Long, Mr. Robert Mills Jr., Mr. Horacio Valeiras

**Board Members Present:** Ms. Deborah Petrine, Mr. Dennis Treacy (rector)

**VPI & SU Staff:** Mr. Brian Daniels, Ms. Carolyn Fulk, Ms. Kay Heidbreder, Ms. Sharon Kurek, Dr. Theresa Mayer, Ms. Kim O'Rourke, Dr. Timothy Sands, Mr. M. Dwight Shelton Jr.

- 1. **Motion to Reconvene in Closed Session.** Motion to begin closed session.
- 2. Review and Acceptance of the Following Report Issued by University Internal Audit. The Committee received an internal audit report on IT: Printers and Networked Devices. Where applicable, management developed action plans to effectively address the issue in the reports with a reasonable implementation timeframe. University Internal Audit will conduct follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations.
  - i. IT: Printers and Networked Devices: The audit received a rating of improvements are recommended. An audit recommendation was issued to management where opportunities for further improvement were noted in the area of secure printing of personally identifiable information (PII). Additionally, an observation with university-wide impact was noted with respect to insecure services and out-of-date firmware for multifunction printers (MFPs). Furthermore, observations for selected departments were noted in the areas of protection of PII and sensitive data, access control, secure management, secure configuration, and device hardening of MFPs and networked devices.

- 3. **Update on Fraud, Waste, and Abuse Cases.** The Committee received an update on outstanding fraud, waste, and abuse cases.
- 4. **Annual Performance Review of the Director of Internal Audit.** The Committee provided an annual performance review to the Director of Internal Audit.
- 5. **Discussion with the Director of Internal Audit.** The Director of Internal Audit discussed audits of specific departments and units where individual employees were identified.

#### **Open Session**

**Committee Members Present:** Mr. Mehmood Kazmi (chair), Ms. Tish Long, Mr. Robert Mills Jr., Mr. Brett Netto (graduate student representative), Mr. Horacio Valeiras

**Board Members Present:** Ms. Greta Harris, Mr. C.T. Hill, Ms. Anna James, Mr. Seyi Olusina (undergraduate student representative), Mr. Mike Quillen, Dr. Hans Robinson (faculty representative), Mr. Dennis Treacy (rector)

**VPI & SU Staff:** Mr. Bill Abplanalp, Mr. Bob Broyden, Mr. Brock Burroughs, Dr. Kris Bush, Ms. Shelia Collins, Mr. Al Cooper, Mr. Brian Daniels, Dr. Lance Franklin, Ms. Carolyn Fulk, Mr. Tony Haga, Ms. Deanna Harris, Ms. Kay Heidbreder, Ms. Kina Kelly, Ms. Sharon Kurek, Mr. Randy Marchany, Dr. Theresa Mayer, Dr. Scott Midkiff, Mr. Ken Miller, Dr. David Moore, Ms. Kim O'Rourke, Mr. Mark Owczarski, Dr. Scot Ransbottom, Dr. Timothy Sands, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Ms. Kayla Smith, Mr. John Talerico, Mr. Steve Vantine, Dr. Lisa Wilkes, Dr. Sherwood Wilson

- 1. **Motion to Reconvene in Open Session.** Motion to begin open session.
- 2. **Welcome and Introductory Remarks.** The chair of the Compliance, Audit, and Risk Committee welcomed committee members and guests and provided opening remarks, emphasizing establishment of the new governance structure.
- 3. **Consent Agenda.** The Committee approved and accepted the items listed on the Consent Agenda.
  - a. Approval of Minutes of the June 5, 2017 Meeting. The Committee reviewed and approved the minutes of the June 5, 2017 meeting.

- b. Update of Responses to Open Internal Audit Comments. As of June 30, 2017, the university had 11 open recommendations. Seven audit comments have been issued during the fourth quarter of this fiscal year. As of June 30, 2017, the university has addressed 14 comments, leaving 11 open recommendations in progress. As of August 1, 2017, University Internal Audit has closed seven of the 11 open recommendations.
- c. Acceptance of Reports Issued by University Internal Audit. The Committee received six internal audit reports. Where applicable, management developed action plans to effectively address the issue in the reports with a reasonable implementation timeframe. As noted above, University Internal Audit conducts follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations.
  - i. Athletics NCAA Recruiting: The audit received a rating of improvements are recommended. An audit recommendation was issued where opportunities for further improvement were noted in the area of communication of compliance regulations to outside entities.
  - ii. Compliance Program Assessment: The audit received a rating of improvements are recommended. Audit recommendations were issued where opportunities for further improvement were noted in the areas of governance and accountability and also risk assessment and monitoring. Additionally, low-priority recommendations of a less significant nature were noted where opportunities for improvement were identified in the areas of education and communication strategies incident management.
  - iii. Controller's Office Fixed Assets: The audit received a rating of effective.
  - iv. IT: General Controls Review: The audit received a rating of improvements are recommended. An observation with university-wide impact was noted with respect to security awareness training. Additionally, observations for selected departments were noted in the areas of end-user device security, security awareness training, and software installation.
  - v. University Policy Review: The audit received a rating of improvements are recommended. An audit recommendation was issued where opportunities for further improvement were noted in the area of policy governance strategy. Additionally, low-priority recommendations of a less

- significant nature were noted where opportunities for improvement were identified with regards to updated policy awareness and communication strategies, accessing authoritative guidance, and policy management resource documentation.
- vi. Virginia Tech Carilion Research Institute: The audit received a rating of improvements are recommended. An audit recommendation was issued where opportunities for further improvement were noted in the area of payments to human behavior study participants.
- d. Status Update of the June 30, 2017 Audit of the University's Financial Statements. This report provided the current status of the audit of the university's financial statements for 2016-17.
- e. Statewide Reviews and Special Report. This report was related to ongoing and forthcoming statewide reviews. Virginia Tech is subject to reviews by a variety of Commonwealth agencies, including the Auditor of Public Accounts (APA) and the Office of the State Inspector General (OSIG).
- 4. Acceptance of University Internal Audit's Annual Status Report for the Fiscal Year Ended June 30, 2017. The Committee reviewed University Internal Audit's Annual Status Report as of June 30, 2017. This report documented the Committee's review of the effectiveness of the internal audit function, including staffing resources, financial budget, training, objectivity, and reporting relationships as required by the Committee's Charter. In addition to conducting scheduled audits, compliance reviews, and advisory services, the department participated in annual audit activities, fraud investigations, and professional development activities. Thirty audit projects, or 86 percent of the audits on the fiscal year 2016-17 audit plan, have been completed. One risk-based audit and four advisory projects were underway at fiscal year-end and will be carried forward to fiscal year 2017-18. The Committee also received an overview of cost containment recommendations, recurring audit issues, and survey results for evaluating University Internal Audit services.
- 5. Approval of the Fiscal Year 2017-18 Internal Audit Plan. The Committee approved the proposed audits on the fiscal year 2017-18 annual audit plan. University Internal Audit conducted the annual risk assessment after reviewing financial and operational data and seeking input from senior management. In addition, a university-wide information technology risk assessment and audit plan were created in accordance with industry standards. For fiscal year 2017-18,

approximately 30 audit projects are proposed, with 74 percent of available resources committed to the completion of planned projects. Audits not completed in the fiscal year scheduled will be carried forward to the next fiscal year.

- 6. Acceptance of the following Reports Issued by University Internal Audit. The Committee also received and accepted an internal audit report outside of the Consent Agenda on High Performance Computing. Where applicable, management developed action plans to effectively address the issue in the reports with a reasonable implementation timeframe. As noted above, University Internal Audit conducts follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations.
  - a. High Performance Computing: The audit received a rating of improvements are recommended. An observation with university-wide impact was noted with respect to investment decisions and utilization metrics of HPC. Additionally, low-priority recommendations of a less significant nature were noted where opportunities for improvement were identified with regards to data restoration procedures and account removal for separated users.
- 7. Enterprise Risk Management Program. The Committee received a report on efforts at the university to evaluate best practices related to Enterprise Risk Management (ERM) in higher education and establishment of an ERM program at the university. Risk management, as an essential part of a strong control environment, helps ensure that risk appetite aligns with management's decisions and an organization's strategy. The committee discussed the estimated timeline for sharing the proposed ERM framework during the November meeting and reviewing the initial high-level risk diagram in the spring.
- 8. Overview of an Effective Compliance Program. The Committee received a report on effective compliance programs within the higher education construct. Although applicable laws and regulations come in many forms, a comprehensive compliance program helps institutions and their employees conduct operations ethically, comply with legal and regulatory requirements, and achieve operational accountability and transparency. It was noted during discussion that the university is interested in pursuing a compliance oversight committee to coordinate best practices regarding risk assessment and monitoring activities. While the committee structure and charter will be shared during the November meeting, it was noted that this work would lag behind the implementation of the ERM program.

9. **Discussion of Future Topics.** The Committee discussed agenda items for future meetings. It was noted that the committee is looking forward to receiving more indepth information on top risk areas once they are identified through the ERM program.

There being no further business, the meeting adjourned at 10:45 a.m.

# Review and Acceptance of Reports Issued by University Internal Audit

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

#### September 10, 2017

#### **Background**

One audit project will be presented in closed session due to the presence of specific IT security vulnerabilities. This report provides a summary of audit ratings issued this period (of those excluded from the open agenda), and the full rating system definitions.

#### **Ratings Issued This Period**

IT: Printer and Networked Device Security	Improvements Are Recommended
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#### **Summary of Audit Ratings**

University 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 Compliance, Audit, and Risk Committee.
September 10, 2017

#### **Update of Responses to Open Internal Audit Comments**

#### COMPLIANCE, AUDIT, AND RISK MANAGEMENT COMMITTEE

June 30, 2017

As part of the internal audit process, university management participates in the opening and closing conferences and receives copies of all University 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, University Internal Audit performs a follow-up visit within two weeks after the target implementation date. University 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 Compliance, Audit, and Risk Committee (formally 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 June Board meeting, the report of open recommendations includes three attachments:

- Attachment A summarizes each audit in order of final report date with extended and on-schedule open recommendations.
- Attachment B details all open medium and high priority recommendations for each audit in order
  of the original target completion date, and with an explanation for those having revised target
  dates or revised priority levels.
- Attachment C charts performance in implementing recommendations on schedule over the last seven years. The 100 percent on-schedule rate for fiscal year 2017 reflects closing 36 of 36 recommendations by the original target date.

The report presented at the June 5, 2017 meeting covered University Internal Audit reports reviewed and accepted through March 31, 2017 and included 18 open medium and high priority recommendations. Activity for the guarter ended June 30, 2017 resulted in the following:

Open recommendations as of March 31, 2017	18
Add: Medium & High priority recommendations accepted June 5, 2017	7
Subtract: recommendations addressed since March 31, 2017	14
Remaining open recommendations as of June 30, 2017	11

While this report is prepared as of the end of the quarter, management continues to receive updates from University Internal Audit regarding auditee progress on action plans. Through August 1, 2017 University Internal Audit has closed seven of the eleven outstanding medium and high priority recommendations for an adjusted total of four 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 conjointly with all units and provides assistance as needed to ensure action plans are completed timely.

#### ATTACHMENT A

#### Open Recommendations by Priority Level

#### COMPLIANCE, AUDIT, AND RISK MANAGEMENT COMMITTEE

June 30, 2017

				Tota	l Recommend	Recommendations				
D 1 D - 1 -	Audit Name	Audit Number	ISSUED	COMPLETED		OPEN				
Report Date	Audit Name	Audit Number			Extended		On-schedule		Total	
					High	Medium	High	Medium	Open	
19-Oct-16	IT Project Management	16-1288	1					1	1	
20-Oct-16	Departmental Scholarships	16-1283	2				1	1	2	
01-Feb-17	University Scholarships and Financial Aid	17-1303	1					1	1	
14-Feb-17	IT: Surplus Property	17-1308	2	1				1	1	
17-Feb-17	IT: Network Security	17-1299	5	4			1		1	
28-Feb-17	Dining Services	17-1314	1				1		1	
27-Apr-17	Geosciences	17-1322	2					2	2	
28-Apr-17	Vice President for Outreach and International Affairs	17-1321	2					2	2	
_	Totals:	_	16	5	0	0	3	8	11	

#### Attachment B

#### University Internal Audit Open Recommendation

#### COMPLIANCE, AUDIT, AND RISK MANAGEMENT COMMITTEE

#### June 30, 2017

					Pri	ority	Targe	t Date	Follow	
Report Date	Item	Audit Number	Audit Name	Recommendation Name	Original	Revised	Original	Revised	Up Status	Status of Recommendations with Revised Priority / Target Dates
20-Oct-16	1	16-1283	Departmental Scholarships	Monitoring of Timely Scholarship Awarding	High		01-Jul-17		1	
20-Oct-16	2	16-1283	Departmental Scholarships	Awarding Based on Fund Criteria	Medium		01-Jul-17		1	
14-Feb-17	3	17-1308	IT: Surplus Property	Exception to Data Sanitization Process	Medium		01-Jul-17		1	
28-Apr-17	4	17-1321	Vice President of Outreach and International Affairs	Leave Reporting	Medium		05-Jul-17		1	
28-Apr-17	5	17-1321	Vice President of Outreach and International Affairs	Fiscal Responsibility	Medium		17-Jul-17		1	
28-Feb-17	6	17-1314	Dining Services	Management of Wage Employees	High		01-Aug-17		1	
27-Apr-17	7	17-1322	Geosciences	Service Center Billing	Medium		01-Aug-17		1	
17-Feb-17	8	17-1299	IT: Network Security	Full Compliance with Network Security Standards	High		31-Aug-17		1	
27-Apr-17	9	17-1322	Geosciences	Oversight of Lab Safety Training	Medium		01-Dec-17		2	
19-Oct-16	10	16-1288	IT Project Management	Visibility, Clarity, Implementation and Measurement of the Standard for IT Project Management	Medium		31-Dec-17		2	
01-Feb-17	11	17-1303	University Scholarships and Financial Aid	Awarding Not Based on Fund Criteria	Medium		01-Mar-18		2	

<sup>(1)</sup> As of June 30, 2017, 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.

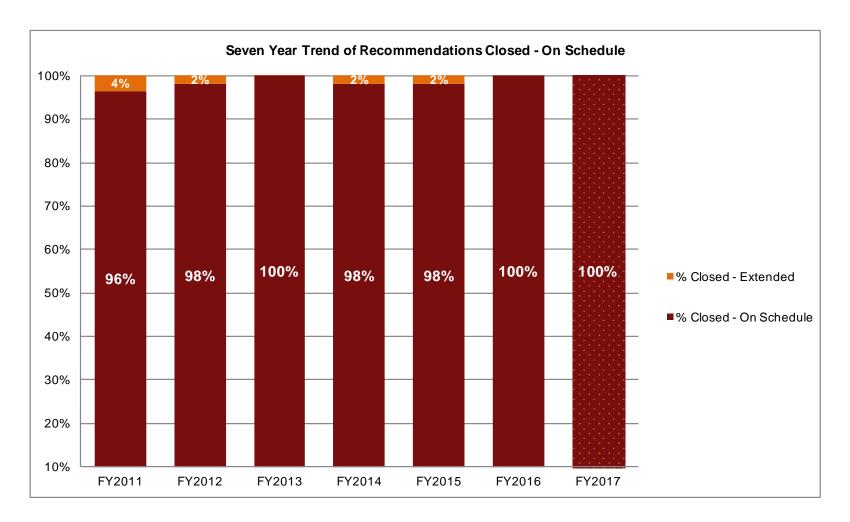
For Open Detail Report: "current calendar quarter" is used to refer to the current working quarter instead of the quarter being reported on.

<sup>(2)</sup> 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

#### COMPLIANCE, AUDIT, AND RISK MANAGEMENT COMMITTEE



# Acceptance of Reports Issued by University Internal Audit

#### COMPLIANCE, AUDIT, AND RISK COMMITTEE

#### **September 10, 2017**

#### Background

This report provides a summary of audit ratings issued this period (of those included within the consent agenda), and the full rating system definitions. With the submission of these reports, University Internal Audit has completed all but one of the audit projects on the Fiscal Year 2016-17 Internal Audit Plan. The remaining project is underway and will be presented at the November Board of Visitors meeting.

#### **Ratings Issued This Period**

Athletics NCAA – Recruiting	Improvements are Recommended
Compliance Program Assessment	Improvements are Recommended
Controller's Office – Fixed Assets	Effective
IT: General Controls Review	Improvements are Recommended
University Policy Review	Improvements are Recommended
Virginia Tech Carilion Research Institute	Improvements are Recommended

#### **Summary of Audit Ratings**

University 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 reports listed above be accepted by the Compliance, Audit, and Risk Committee.

September 10, 2017

# Status Update of the June 30, 2017 Audit of the University's Financial Statements COMPLIANCE, AUDIT, AND RISK COMMITTEE

#### **August 8, 2017**

The Auditor of Public Accounts (APA) began the audit of the university's financial statements for fiscal year 2017 with the entrance conference on May 22, 2017. The APA is currently in the initial stage of the audit where they review transactions and test internal controls over the university's financial processes. Through the middle of August 2017, the audit seems to be progressing as planned and the APA has not provided any audit comments or recommendations for improvements. At this time, we are not aware of any issues that would prevent the successful completion of the fiscal year 2017 audit by the targeted deadline of October 31, 2017.

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#### **Statewide Reviews and Special Reports**

#### COMPLIANCE, AUDIT, AND RISK COMMITTEE

**August 24, 2017** 

#### **Background**

Virginia Tech is subject to reviews by a variety of Commonwealth agencies, including the Auditor of Public Accounts (APA) and the Office of the State Inspector General (OSIG). In addition to the annual audits of the university's financial statements and its Intercollegiate Athletics program, the APA has included Virginia Tech along with other agencies in program reviews designed to assess controls on a statewide basis. These special reviews are typically included as part of the agency's annual work plan. Due to the breadth of the programs and the dollar volume of activities at Virginia Tech, the university is often selected for inclusion in the reviews. The following report provides an analysis of the statewide audit activities consistent with the university's planned approach to manage and report on these audit activities.

#### **APA Recent Audit or Review Activities**

Since our last report in March 2016, the APA has issued two reports that reference or might affect Virginia Tech. These APA reports are summarized below:

#### Statewide Review of Travel Expenses (July 2016)

This review follows up on the APA interim report issued in January 2015. The objectives of this review were for the APA to gain an understanding of statewide travel policies and processes and to identify areas for improvement or efficiencies. This report included total expenditures for travel by the Commonwealth, and for selected state agencies for fiscal years 2012 through 2014. These totals showed that institutions of higher education spend approximately 73 percent of the total annual travel expenditures of approximately \$200 million for the Commonwealth. For fiscal year 2014, Virginia Tech (\$44.6 million) and the University of Virginia (\$37.2 million) had the largest travel expenditures. This expenditure level is not unexpected given the size and scope of the research, academic, and auxiliary programs of the two institutions.

The report included five general recommendations related to the potential to obtain cost savings by better leveraging the purchasing power of the Commonwealth:

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- The first recommendation was directed at the General Assembly and asked them to consider whether legislative changes were needed to either Department of General Services' (DGS) enabling legislation or the Restructuring Act to enhance cooperation between DGS and university related to procurements.
- The next two recommendations related to the DGS coordinating with the institutes of higher education to further leverage procurement processes to possibly obtain savings. The APA acknowledged that many of the larger universities already have robust travel management programs and contracting experience in this area and that DGS should consider leveraging the expertise of these institutions. These larger institutions, including Virginia Tech, have used contracts with competing travel agencies to obtain cost savings for many years.
- The last two recommendations were directed at DGS to enhance contracting procedures related to other state agencies and determine if national procurement cooperatives meet the requirements of the Virginia Public Procurement Act and could be used to obtain further cost savings.

In response to this report, 11 of the larger higher education institutions sent a joint response stating their willingness to work with DGS on these recommendations. The institutions of higher education have yet to be contacted by DGS to discuss the recommendations in the report for possible implementation.

<u>Schedule of Revenues and Expenses of Intercollegiate Athletics Financial Reporting</u> Guidance (October 2016)

The APA convened an Athletics task force to develop a standardized reporting format for intercollegiate athletics revenue and expenses in response to the requirement included in Chapter 704 of the Virginia Acts of Assembly – 2015 Session, which amended the Code of Virginia pertaining to intercollegiate athletics programs. Item B from section 23-1.2 had the following requirements:

No later than November 1, 2015, the Auditor of Public Accounts, in collaboration with the State Council of Higher Education for Virginia, the State Comptroller, the Department of Planning and Budget, and each institution, shall develop and implement a standardized reporting format for each institution to annually report its intercollegiate athletics revenue and expenses to the Auditor of Public Accounts that shall include treatment of student fees and classification of specific intercollegiate athletics programs and shall require expenses for spirit groups, indirect cost policy requirements, and debt service for previously approved intercollegiate athletics capital outlay projects and other intercollegiate athletics capital outlay projects to be reported on separate lines.

Representatives from Virginia Tech participated in an athletic task force of all public institutions of higher education to develop the standardized reporting format to comply with these requirements. The APA report includes the conclusions and recommendations of the task force as accepted by the APA, SCHEV, Department of Accounts, and Department of Planning and Budget. Additionally, the report includes details and guidance about each line item of NCAA revenues and expenses contained in the standardized format. Virginia Tech used this new format for the fiscal year 2016 NCAA report.

## **APA 2018 Work Plan (May 2017)**

The APA work plan for 2018 included numerous special projects or audits, but only one seems targeted towards higher education. A brief summary about the project is provided below. Additionally, Virginia Tech has the potential to be included in the APA's annual reviews of all state agencies for items such as Information Technology systems and security, or capital outlay project management. However, as of August 24, 2017, the university had not been contacted to provide any additional information on any such projects.

#### Comparative Report for Higher Education

Provide financial comparison and analysis of the various public institutions of higher education in Virginia, considering the size and type of institution, and utilize techniques such as ratio analysis to further analyze and compare financial information. Transition this information into an annual report to aid decision makers and improve transparency and comparability for citizen-users of financial information.

Since the APA has access to all audited financial statements for higher education, it is anticipated that the auditors will use these statements to conduct the analysis. This project has been carried forward from the 2017 APA work plan.

# OSIG 2018 Work Plan (June 2017)

In accordance with the Code of Virginia § 2.2-309 [A](10), OSIG conducts performance audits of executive branch state agencies, including colleges and universities, to ensure state funds are spent as intended and to evaluate the efficiency and effectiveness of programs. The OSIG work plan for 2018 includes numerous performance reviews, but only one seems targeted towards higher education. A brief summary about the project is provided below. Additionally, Virginia Tech has the potential to be included in OSIG's Small Purchase Charge Card initiative, which seeks to identify potential fraudulent,

improper, and abusive state agency purchase card activity. However, as of August 24, 2017, the university had not been notified of inclusion in this initiative.

## **Chemical Inventory Management**

All higher education institutions, including Virginia Tech, have been notified that OSIG will conduct a performance audit at a sampling of Virginia's colleges and universities during fiscal year 2018. Although it is presently unclear as to which institutions will be included in the scope, Virginia Tech may be selected for review based on the substantial research portfolio and associated significant chemical inventory at the university.

# University Internal Audit Annual Status Report for the Fiscal Year Ended June 30, 2017

#### COMPLIANCE, AUDIT, AND RISK COMMITTEE

### **August 7, 2017**

#### Mission Statement – Scope of Work

The mission of University Internal Audit at Virginia Tech is to provide independent, objective assurance and advisory services designed to add value and improve the university's operations. Additionally, University Internal Audit helps university departments accomplish their objectives by bringing a systematic, disciplined approach to the identification of opportunities for improvement in the areas of risk management, internal control, efficiency, policy, and procedure.

Internal audit coverage encompasses reviews of all university operations and activities to appraise:

- the accuracy, reliability, and timeliness of significant financial, managerial, and operating information and the adequacy of the internal controls employed over the compilation and reporting of such information;
- compliance with policies, procedures, standards, laws, and regulations;
- appropriate identification and management of risk;
- measures taken to safeguard assets, including tests of existence and ownership;
- the adequacy, propriety, and cost-effectiveness of accounting, financial, and other controls throughout the university, as well as compliance therewith;
- measures taken to foster continuous improvement in control processes;
- whether university resources are being acquired, managed, and protected in an economical, efficient, and effective manner; and
- the achievement of programs, plans, and objectives.

University Internal Audit reports functionally to the Compliance, Audit, and Risk Committee (formally the Finance and Audit Committee) of the Board of Visitors. For day-to-day operations, the Director reports administratively to the President.

#### **Executive Summary – State of Control Environment**

The university's internal audit function continues to be a significant element of the university's overall control structure and a positive influence on the control environment. During fiscal year 2016-17, University Internal Audit examined and tested the operations and systems of internal control within a number of university departments to assist management and the Board of Visitors in the discharge of their fiduciary responsibilities.

As a result of the audit, advisory service, and investigation work performed during fiscal year 2016-17, no deficiencies representing material control weaknesses were identified; however, a number of areas requiring improvement were noted. The scope of audit work was not limited in any way by management or others, nor were there any instances where University Internal Audit considered its independence or objectivity to have been

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impaired. Management and others were found to be conscientious, cognizant, and accepting of their responsibility for internal control, open and cooperative, and supportive of audit efforts. Management has generally accepted audit findings and responded by developing action plans that address the concerns included in report recommendations.

These statements are made with the understanding that no system of internal control provides absolute assurance that controls are functioning effectively. These statements are also not meant to imply that fraud and other irregularities do not exist or, if they do exist, are certain to be detected. Decisions as to the level of risk that is tolerable and should be accepted by the university are the responsibility of management. That said, based on the audit, advisory service, and investigation work performed during fiscal year 2016-17, University Internal Audit did not identify any areas where management decided to accept a level of risk that we believed to be unacceptable.

#### **Summary Observations – Audit Program**

Audits were performed in accordance with the fiscal year 2016-17 annual audit plan at a level consistent with the resources of University Internal Audit. Thirty audit projects on the fiscal year 2016-17 audit plan were completed, including three carry forwards from the previous year. During the fiscal year, four additional projects were added to the audit plan at management's request.

Due to personnel turnover, the risk-based audits of Biochemistry, Global Activities, and Human Resources: Benefits were deferred to next year's audit plan. Audits of Student Engagement and Campus Life and Virginia Tech Police Department were cancelled. Two advisory projects were deferred to next year's audit plan. Eight audit projects were completed since the June board meeting.

For fiscal year 2016-17, University Internal Audit completed 86 percent of its audit plan as depicted in Exhibit 1. One risk-based audit (Research: Lab Safety) and four advisory reviews (Club Sports, Marketing Study Abroad Program, Steger Center for International Scholarship, and Virginia Tech Carilion School of Medicine) are currently underway. These projects will be carried forward into fiscal year 2017-18.

Exhibit 1
FY 2016-17 Completion of Audit Plan

Audits	
Total # of Audits Planned	35
Total # of Supplemental Audits	4
Total # of Carry Forwards (From FY2015-16)	3
Total # of Planned Audits Canceled and/or Deferred	7
Total <b>Audits</b> in Plan as Amended	35
Total Audits Completed	30
Audits - Percentage Complete	86%
Note: Includes Compliance and Advisory Reviews	

Exhibit 2 displays the distribution of direct audit hours (66%) by category. The indirect hours for administration, computer/network support, training, and compensated absence

hours (34%) are not included in this chart. Indirect hours were higher than previous years as a result of an extended compensated absence for the Director of Internal Audit.

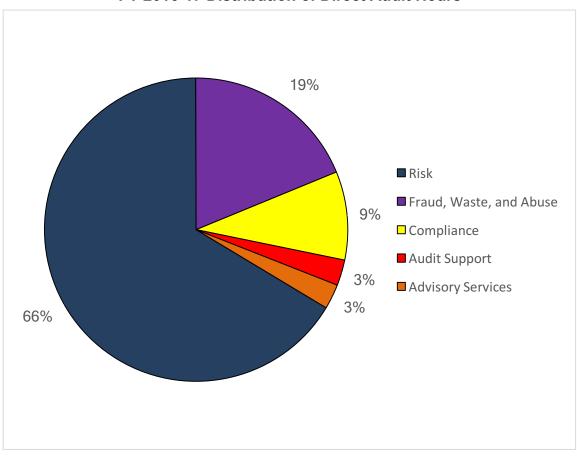


Exhibit 2
FY 2016-17 Distribution of Direct Audit Hours

The department was able to increase the amount of effort spent on risk-based audits compared to previous years as a result of dedicated resources that performed data analytics during most audits. Additionally, the overall effort spent on fraud, waste, and abuse investigations increased as the number of cases received increased from projections based on historical tendencies. This specific increase led to fewer hours spent on advisory projects.

Exhibit 3 below displays the status of the fiscal year 2016-17 audit plan as amended. All compliance review projects were completed, while the only remaining risk-based audit is in progress and will be carried forward to the fiscal year 2017-18 audit plan.

# Exhibit 3 FY 2016-17 Audit Plan Status

Audit Project	Risk Ranking	BOV Mtg		
Risk-Based Audit	· ·			
Athletics NCAA – Recruiting*	High	Sept-17		
Biochemistry	High	Deferred		
Compliance Program Assessment	High	Sept-17		
Construction Management (Carryover)	High	Nov-16		
Controller's Office – Fixed Assets	High	Sept-17		
Departmental Scholarships (Carryover)	High	Nov-16		
Dining Services	High	Apr-17		
Emergency Preparedness	High	Jun-17		
Geosciences	High	Jun-17		
Global Activities	High	Deferred		
High Performance Computing	High	Sept-17		
Human Resources: Benefits*	High	Deferred		
Investments and Debt Management	Medium	Apr-17		
IT: General Controls Review	High	Sept-17		
IT: Network Security	High	Apr-17		
IT: Printer and Networked Device Security	High	Sept-17		
IT: Project Management (Carryover)	High	Nov-16		
IT: Surplus Property	Medium	Apr-17		
Mining and Minerals Engineering	High	Apr-17		
Physics	High	Apr-17		
Research - Lab Safety	High	Carry-Forward		
Student Engagement and Campus Life	Medium	Cancelled		
Travel and Employee Reimbursements	Medium	Apr-17		
Undergraduate Admissions	High	Nov-16		
University Policy Review	High	Sept-17		
University Scholarships and Financial Aid*	High	Apr-17		
Virginia Tech Carilion Research Institute	High	Sept-17		
Virginia Tech Police Department	Cancelled			
Compliance Reviews				
College of Architecture and Urban Studies	Apr-17			
Other Executive Offices	Apr-17			
Vice President for Finance	Jun-17			
Vice President for Outreach and International Affairs	Jun-17			
* Annual Audit on Different Components				

Additionally, University Internal Audit responded to management's requests for advisory services and consultative guidance including the following areas:

#### Completed:

- Advancement System (Blackbaud) The Division of Advancement procured and began implementation of a system designed to support its operations to allow managers to control and evaluate the diverse activities critical to the university, including alumni cultivation, donor relations, prospect management, campaign solicitation, gift processing and accounting, and pledge tracking. University Internal Audit participated as an ex-officio member of the implementation team.
- Department of Athletics ACC Report Review During 2015, the Atlantic Coast Conference (ACC) conducted an independent assessment of the Department of Athletics' (Athletics) compliance operation in relation to NCAA Bylaws. The result of that assessment was a report with recommendations and agreed upon management action plans that Athletics would perform. Included as part of their action plans, Athletics agreed to an independent review of action taken to address the recommendations included within the ACC report. University Internal Audit performed this assessment.
- Enterprise Risk Management At the direction of the President, University Internal
  Audit collaborated with the Vice President for Finance and Chief Financial Officer
  and University Legal Counsel to discuss an overall enterprise risk management
  framework and to begin communicating with key stakeholders within senior
  management. These initial efforts culminated with the assignment to staff the
  newly established Compliance, Audit, and Risk Committee of the Board of Visitors.
  Additionally, the President informed the university community of University Internal
  Audit's responsibility for facilitating the university's Enterprise Risk Management
  efforts.
- <u>Sunapsis System</u> The Cranwell International Center, within Outreach and International Affairs, procured and implemented a system designed to manage international student and scholar information. The outcome of this system implementation will be improved customer service to the university's international student population, and to help ensure compliance with immigration laws and regulations. University Internal Audit participated as an ex-officio member of the implementation team.

#### Ongoing:

• <u>Club Sports</u> – Sport clubs are administered by the Virginia Tech Department of Recreational Sports. Each club is comprised of students, who organize, fund, and promote their clubs with the ultimate goal of competing against other colleges and universities on both a regional and national level. University Internal Audit has started to identify and evaluate policies and practices that address the safety of students participating in these sports clubs. Part of this review will include a benchmarking study of other universities' safety-related practices.

- Marketing Study Abroad Program While performing an advisory review at the Steger Center for International Scholarship (see below), in coordination with University Legal Counsel, University Internal Audit visited Lugano, Switzerland as a first step in performing a control review of the study abroad program managed by a Marketing faculty member within the Pamplin College of Business.
- <u>Steger Center for International Scholarship</u> The Steger Center for International Scholarship, located in Riva San Vitale, Switzerland, is the university's European campus center and base for operations and support of its programs in the region. University Internal Audit visited the center and began a review of its operations from both a financial and legal standpoint.
- Virginia Tech Carilion School of Medicine The Virginia Tech Carilion School of Medicine represents a unique, public-private partnership between a top-tier research university and a major health care institution. The school has obtained its full accreditation from the Southern Association of Colleges and Schools Commission on Colleges and the Liaison Committee on Medical Education. University Internal Audit continues to perform a multi-year review to validate that adequate controls have been implemented in preparation for the transition of the school's operations to within Virginia Tech through service as an ex-officio member of the transition team.

## **Management Corrective Actions (MCAs)**

University Internal Audit conducts follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations. Each audit recommendation and its associated MCA is given a rating of high, medium, or low priority by the auditors and management; however, if a central administration or university-wide MCA is identified, no rating is typically attached. This judgment is made in a local context, and items identified as high do not necessarily convey material deficiencies or risks beyond the operating environment in which they were found. A primary objective of this classification is to drive a greater sense of urgency in completing the corrective action and completion of audit follow-up. The Compliance, Audit, and Risk Committee (formally the Finance and Audit Committee) receives the higher priority recommendations and associated MCAs. However, University Internal Audit and management closely monitor all outstanding recommendations to ensure they are adequately addressed by the responsible parties.

Of the 93 MCAs generated during audits issued in fiscal year 2016-17, University Internal Audit categorized eight as high priority (9%). High-priority MCAs would include those that are systemic or have a broad impact; have contributed to a significant investigation finding; are reportable conditions under professional literature; create health or safety concerns; involve senior officials; create exposures to fines, penalties, or refunds; or are otherwise judged as significant control issues. Open MCAs at fiscal year-end have been outstanding an average of 142 days and are on track for completion. Audits for fiscal year 2016-17 resulted in recommendations with ratings of high, medium, or low MCAs as follows:

# Exhibit 4 Inventory of MCAs

Beginning # of MCAs	46
MCAs added	93
MCAs closed	<u>97</u>
Current open inventory of MCAs	42

Note: The open inventory above includes 18 open MCAs from the reports presented to the Compliance, Audit, and Risk Committee at the September 10, 2017 meeting. Additionally, 26 of the 42 open MCAs are categorized as either low-priority recommendations, recommendations resulting from advisory service reviews, or observations with university-wide impact or for central administration identified during audits that are excluded from status reports of previously issued recommendations shared with the Compliance, Audit, and Risk Committee.

#### **Cost Containment and Revenue Enhancement Recommendations**

University Internal Audit emphasized the identification of cost containment and revenue enhancement strategies in the performance of audit activities. University Internal Audit issued the following recommendations to management to assist with cost containment or revenue enhancement strategies:

- Construction Management University Design and Construction (UDC) management prepared and provided budget templates for each General Fund capital construction project and this served as supporting documentation for the funding request to the Commonwealth of Virginia. During the review, it became apparent that while this had been the understood standard process, fully substantiated cost projections were not provided during the 2015 capital funding request which encompassed 16 capital projects. As a result, Capital Assets and Financial Management compiled project budgets using the Bureau of Capital Outlay Management (BCOM) cost database. An analysis showed UDC-provided estimates were on average 21 percent higher than the BCOM framework estimates and ultimately 17 percent higher than the cost estimates submitted to Commonwealth.
- Geosciences Geosciences did not always process service center billings timely, as 12 of 29 (41%) invoices from their four service centers were not billed timely. The 12 untimely bills were processed between 2 and 428 days late, averaging 106 days overdue. Excluding two bills processed more than 400 days after the work was completed, the remaining 10 bills still averaged 43 days late. Additionally, external clients had not paid 14 of 29 (48%) bills timely, defined as within 30 days of billing per Office of University Bursar's Accounts Receivable Procedures. These untimely paid bills totaled approximately \$24,700 and ranged from 2 to 88 days late. Payment receipt for 5 of the 14 had not been obtained at the time of testing.
- <u>Physics</u> There was no reconciliation process in place to ensure that royalty income of \$96,124 recorded during the review period by Physics was complete and accurate. Four laboratory manuals, developed by department faculty, were

published and sold to university students for use during their course work. Physics received royalty payments from a publishing company for the sales of these manuals. During the review period, Physics recorded \$96,124 of revenue from these royalty payments; however, the revenue received was not reconciled to the number of book sales, nor to the terms of the agreement to ensure accuracy.

• Travel and Employee Reimbursements – Of the travel reimbursements sampled, 18 of 300 (6%) were not reimbursed in accordance with Controller's Office procedures. Type of errors noted included reimbursements for full per diem M&IE, despite conference provided meals; reimbursements for lodging expenses in excess of the per diem amount without proper cost justification; reimbursement for airfare for an earlier departure date than required for business and documentation for cost comparison was not obtained at the time of the reimbursement; and two reimbursement for per diem amounts for dates that did not correspond with business-related travel.

#### **Recurring Audit Recommendations**

The same or similar recommendations noted below were identified in multiple audit reports issued in fiscal year 2016-17. The data in Exhibit 5 will be shared with leadership in the appropriate administrative departments so that they can establish education and/or monitoring programs that will reduce the recurrence of these issues in future years.

Exhibit 5
Recurring Audit Recommendations

Recommendations	Occurrences	Audits
IT: Security	16	Emergency Preparedness IT: General Controls (2) IT: Network Security (4) IT: Printers and Networked Devices (4) IT: Surplus Property (4) High Performance Computing
Documentation and Communication of Policies and Procedures	10	Athletics NCAA - Recruiting Departmental Scholarships Emergency Preparedness High Performance Computing IT: Network Security (2) IT: Project Management (2) IT: Surplus Property University Scholarships and Financial Aid
Health and Safety	4	Emergency Preparedness Geosciences Mining and Minerals Engineering VP of Outreach and International Affairs
Sponsored Project Administration	3	Geosciences Mining and Minerals Engineering Physics

#### Results of Surveys for Evaluating University Internal Audit Services

Each audit and compliance review management contact is emailed a link to an online survey requesting their assistance in evaluating the quality of audit services provided by University Internal Audit. Feedback from the surveys is used to enhance the overall quality of university audits. The survey responses are grouped into three categories focused on the following areas:

Audit Team	Demonstrated technica	l proficiency, appro-	ached audit with objective
/ totall   Collin	2011101101114104 1001111104	. p. o o.o o j , app. o	

and professional manner, and conclusions and opinions were logical;

Discussed the preliminary audit objectives, scope, and timing of the Audit Performance audit, management concerns and suggestions were solicited and considered in the audit, and disruption of daily activities was

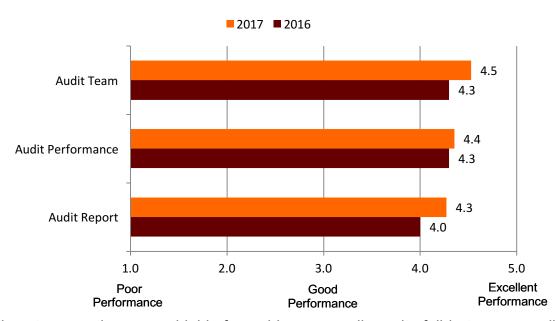
minimized as much as possible during the audit;

Written clearly and contained adequate explanations for the Audit Report

observations, and recommendations improved or added value to the

department's operation.

Exhibit 6 Results of FY 2016-17 Surveys for Evaluating University Internal Audit Services



Overall customer ratings were highly favorable as overall results fell between excellent and good performance. Attaining a cumulative average score of 4.4 on a 5-point scale exceeded University Internal Audit's goal of a 4.0 rating on survey feedback. Comments provided by clients showed appreciation of the audit process and the courtesy, professionalism, flexibility, and thoroughness demonstrated by the audit team.

#### Fraud Waste and Abuse

University Internal Audit conducts reviews of all state hotline and internal complaints alleging fraud, waste, and abuse. During fiscal year 2016-17, University Internal Audit received 32 cases, including 12 state hotline and 20 internal complaints. Seven cases

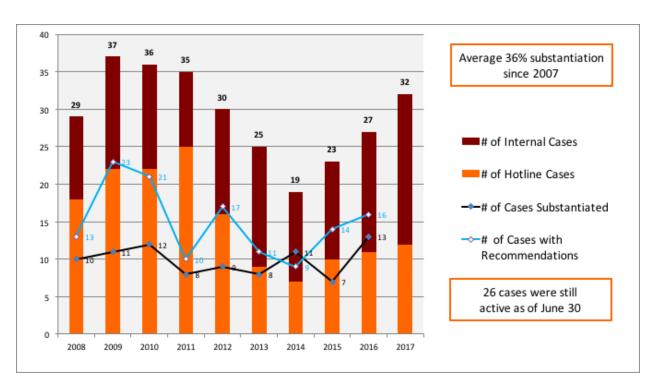
from fiscal year 2016-17 were closed, along with 12 cases from the prior fiscal year. For the 19 cases completed, 3 of the 9 (33%) state hotline cases were substantiated and 7 of 10 (70%) internally reported cases were substantiated. Since 2006-07, approximately 54 percent of internally reported fraud, waste, and abuse allegations have been substantiated, and 20 percent of state hotline cases have historically been substantiated, for a combined weighted average of 36 percent.

University Internal Audit makes recommendations of improvements related to business practices, communication, and management that improve the overall operating environment of the university. Over the previous 10 years, University Internal Audit made recommendations in 52 percent of fraud, waste, and/or abuse cases.

The number of reported cases rose this year, consistent with levels last experienced prior to 2011-12. Since fiscal year 2007-08, over 70 percent of the allegations investigated by University Internal Audit fall within five general categories: leave or time abuse, improper use of university resources, abuse of authority, misfeasance and waste, or theft or embezzlement.

Exhibit 7 on the following page displays the number of fraud, waste, and abuse reviews performed for hotline and internal complaints for fiscal years 2007-08 through 2016-17, the total number of cases, the number of substantiated cases, and the number of cases with recommendations for management.

Exhibit 7
Fraud, Waste, and Abuse
Historical Case Volume Summary by Fiscal Year



#### **Quality Assurance and Improvement Program**

A comprehensive Quality Assurance and Improvement Program of the university's internal audit function is maintained in accordance with requirements set forth by the Institute of Internal Auditors' (IIA) International Standards for the Professional Practice of Internal Auditing (Standards). This program includes ongoing internal assessments, periodic self-assessments, and an independent external assessment that should be conducted at a minimum of every five years.

An external assessment was completed during fiscal year 2015-16. The internal audit function received the highest rating possible of "generally conforms." Some of the conclusions highlighted in the report were that University Internal Audit is "viewed as trusted, valued, professional, candid, and collaborative." Additionally, highlighted as a key strength of the function was the reporting structure that includes functional reporting to the Board of Visitors and administrative reporting to the President.

The final report of the review team's results was presented at the August 2016 meeting of the Finance and Audit Committee. The next independent external assessment will be due in 2021. A formalized self-assessment will be conducted during fiscal year 2018-19.

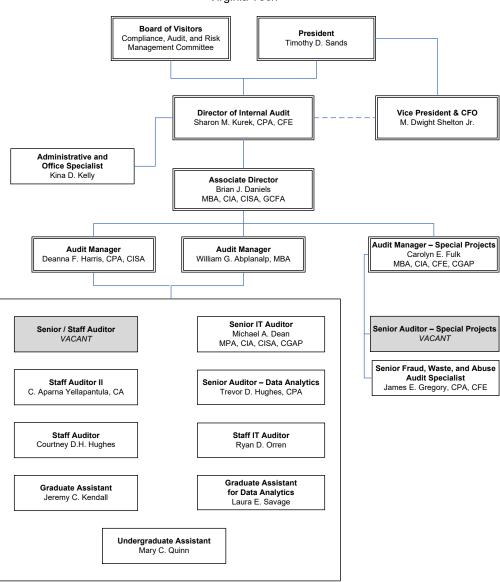
#### Staffing

University Internal Audit entered fiscal year 2016-17 staffed with a Director, Associate Director, an Audit Manager, an Audit Quality and Operations Manager, nine auditors, a part-time wage Senior Fraud Specialist, an Administrative and Office Specialist, two graduate assistants, and an undergraduate student wage worker. Exhibit 8 on the following page shows University Internal Audit's organizational chart as of July 2017.

#### **Exhibit 8 University Internal Audit Organizational Chart**

#### **UNIVERSITY INTERNAL AUDIT**

Virginia Tech



#### Credential Legend:

CPA – Certified Public Accountant CIA – Certified Internal Auditor

CISA - Certified Information Systems Auditor

CFE – Certified Fraud Examiner GCFA – GIAC Forensic Analyst

CGAP - Certified Government Auditing Professional

CA – Chartered Accountant
MBA – Master's of Business Administration

MPA – Master's of Public Administration

Organizational Structure July 2017

Sharon M. Kurek served as the Association of College and University Auditors (ACUA) Vice President and as a liaison to the ACUA Professional Education Committee. She remained a member of the ACUA Faculty Program, which is a resource to other associations or universities looking for talented speakers on topics such as risk, internal controls, auditing, compliance, and fraud.

Brian J. Daniels, Associate Director, continues to join with peer institutions through the Virginia Alliance for Secure Computing and Networking (VASCAN) group in an effort to plan and organize the annual fall conference aimed at improving information security in the higher education arena within the commonwealth. Mr. Daniels served on the ACUA Membership Committee, and was an ACUA Management Firm Audit Coordinator. Additionally, Mr. Daniels collaborated with peers from other institutions of higher education nationally while participating on an external quality assessment team for Oregon State University.

William G. Abplanalp, Audit Manager, participated in the university's intensive year-long Management Academy. The Management Academy is designed to develop the university's leaders and provide multiple approaches to career enhancement and development. The program also provides a structured method for assessing and developing leadership competency. This includes a personalized awareness-building and goal-setting program that complements several other educational activities.

University Internal Audit leadership continued to participate actively within the College and University Auditors of Virginia (CUAV) organization, attending meetings with peer chief audit executives through the CUAV group to discuss best practices or issues. The Director is a member of the CUAV Legislative Committee, including proactive involvement in the state legislative process with respect to laws and regulations pertinent to higher education internal audit and effective communication thereof to stakeholders.

To enhance employee capabilities in the identification of their personal strengths, the strengths of their colleagues, and how they work together as a team, the department hosted a staff development day in December 2016. The Clifton StrengthsFinder and Myers-Briggs Type Indicator personality inventory tools were completed by each staff member and a facilitator from University Organizational and Professional Development led a half-day session to discuss the results.

Inclusion and diversity within the workplace continues to be stressed. Leadership developed department-level inclusion and diversity goals and is also working to meet the established goals set by the Office of the Vice President for Finance. These include ensuring employee participation in an inclusion and diversity training activity. As of fiscal year-end, all employees had attended a diversity-related training session. A staff member was appointed as our diversity leader to raise awareness and stay abreast of diversity issues and happenings. This person is our department representative at campus-wide diversity meetings and training sessions, and reports periodically at staff meetings.

University Internal Audit staff has more than 200 years of combined professional experience in accounting, auditing, and IT and over 50 years of service to Virginia Tech. The staff offers an extensive background with expertise in such functional areas as IT; fraud and forensics; environmental, health, and safety; NCAA bylaws; financial aid; research regulations; and general financial, compliance, and operational auditing. Exhibit 9 shows the certifications and advanced degrees held by University Internal Audit staff at yearend.

Exhibit 9 Certification and Advanced Degrees held by University Internal Audit

	Certification and Advanced Degrees				
	Professional Certifications				
4	Certified Public Accountants (CPA)				
3	Certified Fraud Examiners (CFE)				
3	Certified Information Systems Auditor (CISA)				
3	Certified Internal Auditor (CIA)				
2	Certified Government Auditing Professional (CGAP)				
1	Certified Forensics Analyst (GCFA)				
1	Project Management Professional (PMP)				
	Advanced Degrees				
3	Master of Business Administration (MBA)				
1	Master of Public Affairs (MPA)				

University Internal Audit ensures each staff member annually receives 40 hours of continuing professional education (CPEs) to meet professional certification requirements. On average this fiscal year, staff members completed 56 hours of CPEs. This average excludes the Director's CPEs, who has earned over 360 CPEs from participating in the Virginia Tech Professional MBA Program.

General training topics included auditing practices and techniques, fraud detection techniques, data analytics, and regulatory items, such as Title IX and Payment Card Industry Standards.

#### Resources

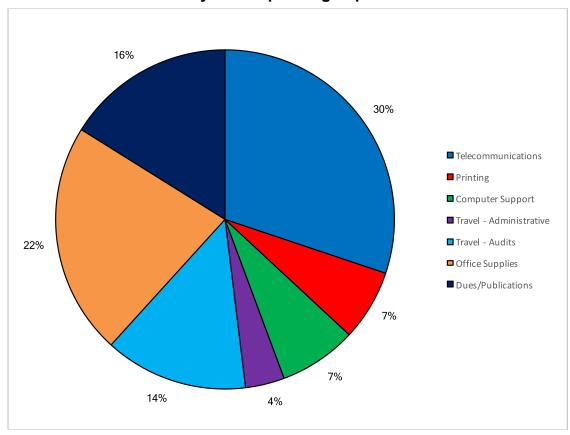
Exhibit 10 on the following page compares University Internal Audit's expenditures from fiscal year 2015-16 with expenditures for fiscal year 2016-17. The expenditures for salaries and benefits increased mostly due to hiring more experienced staff members, lack of turnover in higher level positions, and adding a full-time position (Senior Auditor – Data Analytics). Audit software expenses in fiscal year 2016-17 increased by approximately \$28,000 with the strategic commitment to the expansion of several computer-assisted audit tools and techniques, coupled with the increase in existing software license fees. Additionally, during fiscal year 2016-17, there were some outstanding expenses for the external quality assessment that occurred the prior fiscal year. The remaining expenses have now been paid in full.

Exhibit 10
Analysis of Expenditures

	FY2016	FY2017
Salaries and Benefits	\$ 1,248,350	\$ 1,553,925
External Quality Assessment	\$ 39,739	\$ 9,202
Operating Expenses	\$ 35,572	\$ 33,817
Training	\$ 33,663	\$ 38,312
Personnel Expenses	\$ 18,435	\$ 986
Audit Software	\$ 17,410	\$ 45,664
Equipment	\$ 12,574	\$ 9,340
Total	\$1,405,743	\$1,691,246

Exhibit 11 shows an analysis of operating expenses. Approximately 66 percent of operating expenses resulted from basic costs to support the department including telecommunications, computer support, office supplies, and printing. Similarly, membership dues and publication expenses will remain an ongoing cost as leadership encourages and sponsors professional certification and organizational participation.

Exhibit 11
Analysis of Operating Expenses







# **University Internal Audit**

**Annual Update** 



### Mission Statement

- Provide independent, objective assurance and advisory services designed to add value and improve the university's operations
- Help university departments accomplish their objectives by bringing a systematic, disciplined approach to identify opportunities for improvement





### State of Control Environment

- Internal Audit Program
  - Significant element of the university's overall control structure
  - Positive influence on the control environment
  - Assist management and the BOV in the discharge of their fiduciary responsibilities





### State of Control Environment

- No material control weaknesses were identified; however, a number of areas requiring improvement were noted
- Work was not limited by management
- Independence/objectivity was not impaired





### State of Control Environment

- Management accepts their responsibility for internal control and is supportive of audit efforts
- Management generally accepts audit recommendations and responds by developing action plans to address concerns





# Exh. 1: FY 2016-17 Completion of Audit Plan

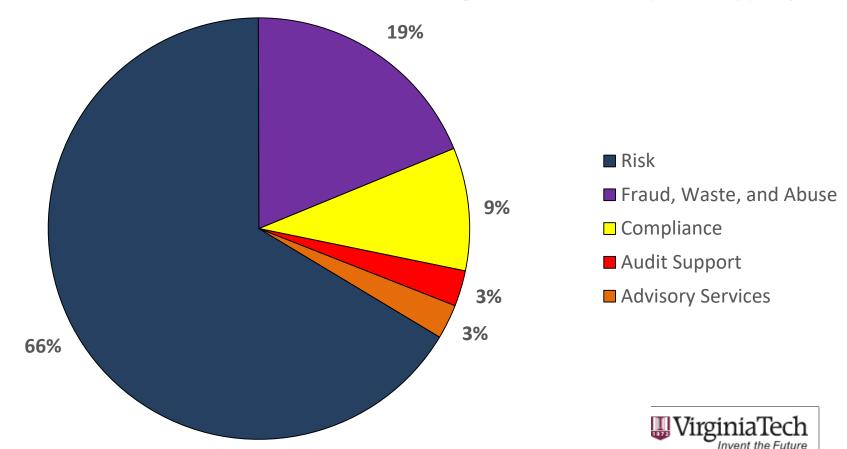
Audits	
Total # of Audits Planned	35
Total # of Supplemental Audits	4
Total # of Carry Forwards	3
Total # of Planned Audits Canceled and/or Deferred	7
Total <b>Audits</b> in Plan as Amended	35
Total Audits Completed	30
Audits - Percentage Complete	86%
Note: Includes Compliance and Advisory Reviews	

WirginiaTech
Invent the Future



### Exh. 2: Distribution of Direct Audit Hours

(Excludes Indirect Hours for Administration, Training, Leave, and Computer Support)





### Management Corrective Actions (MCAs)

- Each audit recommendation and its associated MCA is rated high, medium, or low priority
- A primary objective of this classification is to drive a greater sense of urgency in completing the corrective action and completion of audit follow-up
- The Compliance, Audit, and Risk Management Committee receives the higher priority recommendations and associated MCAs





## Exh. 4: Inventory of MCAs

Beginning # of MCAs	46
MCAs added	93
MCAs closed	<u>97</u>
Current open inventory of MCAs	42





# Recommendations for Cost Containment & Revenue Enhancement

- Project Budgeting
- Service Center Billing
- Royalty Reconciliation
- Employee Reimbursements





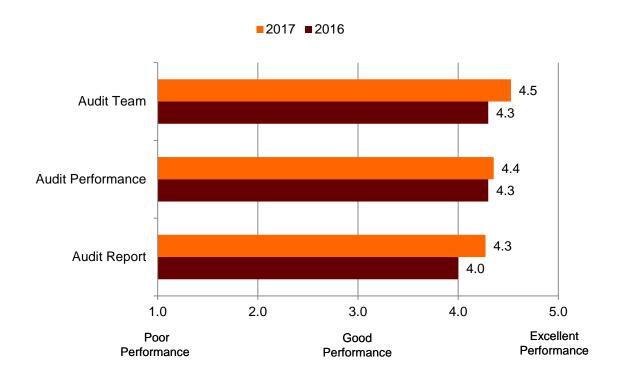
# Exh. 5: Recurring Audit Issues

Recommendation	Occurrences
IT: Security	16
Documentation and Communication of Policies and Procedures	10
Health and Safety	4
Sponsored Project Administration	3





# Exh. 6: Survey Results







### **Survey Comments**

- Comments from respondents
  - Overall Appreciated the audit process, and the courtesy, professionalism, and thoroughness demonstrated by the audit team





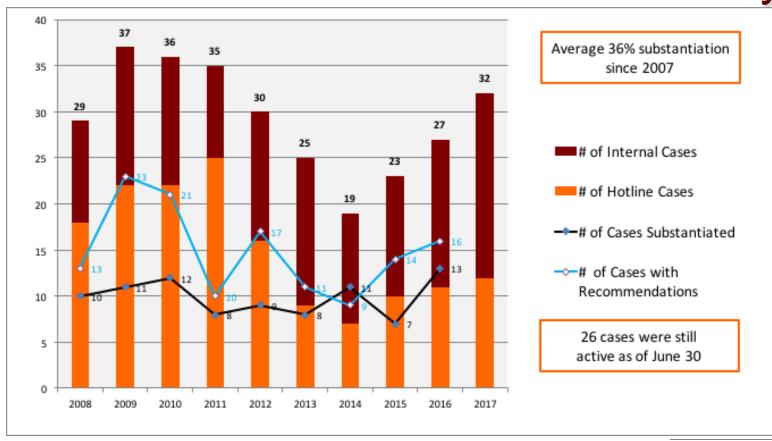
### Fraud, Waste, and Abuse (FWA)

- Received 32 cases in FY 2016-17
- Closed 7 from FY 2016-17
- Closed 12 from prior years
- For the 19 completed:
  - 3 of 9 (33%) hotline cases were substantiated
  - 7 of 10 (70%) internally reported cases were substantiated





## Exh. 7: FWA Case Volume Summary







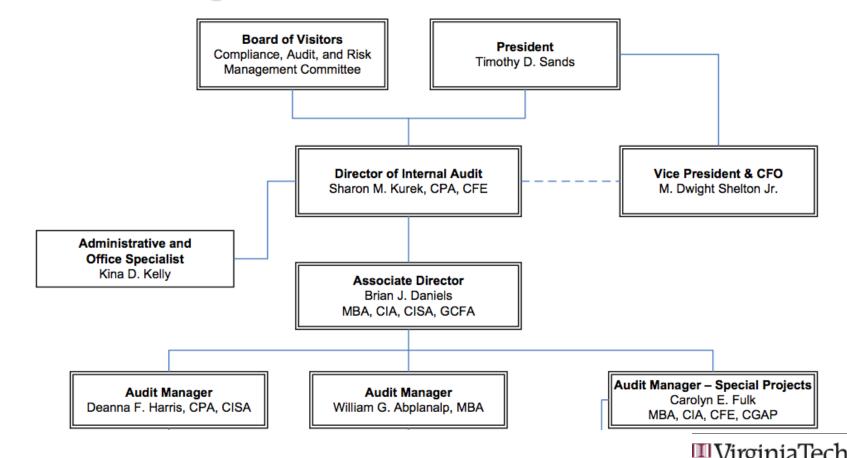
### Fraud, Waste, and Abuse (FWA)

- 70% of allegations fall within five general categories:
  - Leave or time abuse
  - Improper use of university resources
  - Abuse of authority
  - Misfeasance and waste
  - Theft or embezzlement





# Exh. 8: Organizational Chart



Invent the Future



### Internal Audit Staff Experience

- Combined 200 years of professional experience in accounting, auditing, and information technology
- Combined 50 years of service to Virginia Tech





### Exh. 9: Staff Education

### **Certification and Advanced Degrees Professional Certifications** 4 Certified Public Accountants (CPA) 3 Certified Fraud Examiners (CFE) 3 Certified Information Systems Auditor (CISA) 3 Certified Internal Auditor (CIA) 2 Certified Government Auditing Professional (CGAP) Certified Forensics Analyst (GCFA) 1 Project Management Professional (PMP) **Advanced Degrees** 3 Master of Business Administration (MBA) 1 Master of Public Affairs (MPA)





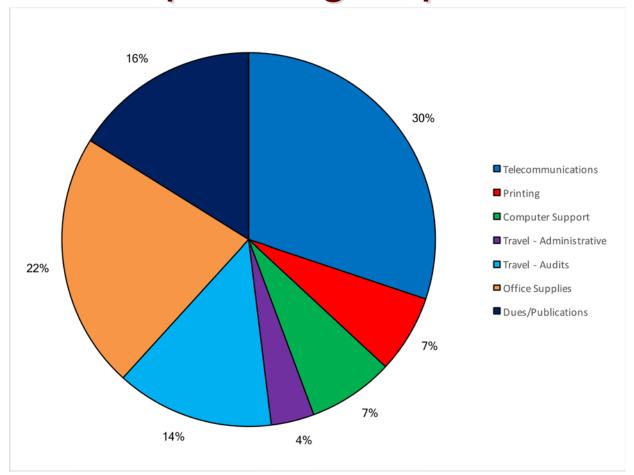
## Exh. 10: Analysis of Expenditures

	FY2016	FY2017
Salaries and Benefits	\$ 1,248,350	\$ 1,553,925
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Audit Software	\$ 17,410	\$ 45,664
Equipment	\$ 12,574	\$ 9,340
Total	\$1,405,743	\$1,691,246





# Exh. 11: Operating Expenses





# Review and Approval of the Fiscal Year 2017-18 Internal Audit Plan COMPLIANCE, AUDIT, AND RISK MANAGEMENT COMMITTEE September 10, 2017

University Internal Audit presents the Fiscal Year 2017-18 Internal Audit Plan to the Compliance, Audit, and Risk Management Committee for final review and approval. An annual risk assessment was conducted to identify the entities that should receive audit attention in fiscal year 2017-18 and a core audit plan was developed.

For fiscal year 2017-18, approximately 30 audit projects and six management advisory services are proposed, with 74 percent of University Internal Audit's available resources committed to the completion of planned projects. A description of each project is provided within the audit plan. University Internal Audit's goal will be to complete 85 percent of the audit plan. The internal audit plan may be modified based on the external audit environment or changes in regulations, management, or resources.

#### **RECOMMENDATION:**

That the Fiscal Year 2017-18 Internal Audit Plan be approved by the Compliance, Audit, and Risk Management Committee.

September 10, 2017

### Virginia Tech

**University Internal Audit** 

Fiscal Year 2017-18 Audit Plan September 10, 2017

#### **OVERVIEW**

University Internal Audit conducts risk-based assurance engagements, compliance reviews, management advisory services, and investigations. The risk-based assurance engagement is an objective examination of evidence to provide an independent assessment 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 University Internal Audit every five years to perform tests of compliance with major university business policies at a minimum. The nature and scope of management advisory service activities, developed through agreement with the client, add value and improve the university's governance, risk management, and control processes without the internal auditor assuming management responsibility.

#### **RISK ASSESSMENT PROCESS**

University Internal Audit leadership conducted an annual risk assessment to identify the entities that should receive audit attention in fiscal year 2017-18. 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, University Internal Audit reviewed financial data, including 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.

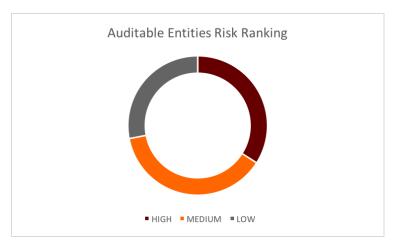
Factors Factor Factors Factors Factors Factors Factors Factors Factors Factor Factors Factor Facto
Quality and Stability of Control Environment
Business Exposure (Materiality and Liquidity of Operational Resources)
Public and Political Sensitivity
Compliance Requirements
Information Technology and Management Reporting

Elements considered within these factors included:

- Management's awareness of internal controls;
- 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 chart depicts the results of the risk assessment classifications. The risk assessment results were consistent with previous risk assessments conducted by University Internal Audit.



#### INFORMATION TECHNOLOGY RISK ASSESSMENT

University Internal Audit has also created a university-wide information technology (IT) risk-based audit plan mapped to the ISO 27002 standard, a best practice for developing and maintaining enterprise-wide IT security also references by university policies. University Internal Audit consulted with key IT personnel to ensure that audit coverage is maximized and properly targeted. The assessment of IT and business operations at the university identified four high-level risk domains intended to encapsulate the vast majority of the systems and computing environments within the university as follows:

- Student Systems;
- Finance and Administrative Systems;
- Human Resources Systems; and
- Research Systems.

The IT audit approach includes a variety of topical audits to gain a better understanding of the university-wide environment instead of narrowly focusing on the performance of individual departments. This approach also allows University Internal Audit to maintain current knowledge of the IT security and operating conditions in a dynamic industry through the constant evaluation and reassessment of planned audit engagements.

#### **CORE AUDIT PLAN**

University Internal Audit has identified certain critical areas for inclusion in the core audit plan to ensure that adequate coverage is provided over a reasonable time. To obtain additional insight and validate the plan, one-on-one discussions were conducted with senior leadership to identify reputation factors, regulatory changes, organization shifts, new initiatives, and deployment of new systems or technology tools.

The critical areas for core audit plan inclusion are:

- Academic Units
- Auxiliary Enterprises and Athletics
- Campus Safety and Security
- Enrollment Services
- Facilities and Operations
- Financial Management

- Human Resources
- Information Technology
- Off-Campus Locations
- Research
- Student Services

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.

#### **FISCAL YEAR 2017-18 AUDIT PLAN**

The audit plan focuses on delivering value to Virginia Tech with an emphasis on the following risk areas: strategic, operational, financial, compliance, and IT. If new topics emerge during the audit plan period that require more immediate attention, reconfiguration of the plan can be undertaken to accommodate these changes. University Internal Audit's goal is to complete 85 percent of the audit plan. As each audit is undertaken, risks will be re-evaluated to ensure proper audit coverage with consideration of confidentiality, integrity, and availability. Annual expenditures and revenues referenced below reflect fiscal year 2015-16 data unless otherwise noted.

#### **Risk-Based Assurance**

<b>Planned Engagement</b>	Overview	Risk Area
Biochemistry	Biochemistry is the branch of the life sciences devoted to the identification and analysis of the structure, function, and mechanisms of action of the molecules of life. The B.S. program is one of the largest undergraduate programs in the U.S., and is accredited by the American Society of Biochemistry and Molecular Biology. Total expenditures were approximately \$8 million, including approximately \$4 million in research. Biochemistry has not previously received a dedicated review.	Operational – Academic
Biocomplexity Institute of Virginia Tech	The Biocomplexity Institute of Virginia Tech (formerly the Virginia Bioinformatics Institute) broadly integrates research disciplines, ranging from molecular science to policy analysis, to address pressing challenges to human health, habitat, and well-being. The complexity and scale of research at the Biocomplexity Institute of Virginia Tech demands coordination between experts in many different fields including mathematics, biology, physics, computer science, statistics, psychology, and more. Total expenditures exceeded \$27 million, while research expenditures were approximately \$13 million. The last targeted review was in 2010.	Operational – Research
Biological Systems Engineering	Biological Systems Engineering (BSE) is the engineering discipline that applies concepts of biology, chemistry, and physics along with engineering and design principles to solve problems in biological systems. The mission of BSE is to develop and	Operational – Academic

Planned Engagement	Overview	Risk Area
	disseminate engineering knowledge and practices that protect natural resources and improve sustainable production, processing, and utilization of biological materials. Total expenditures were approximately \$9 million, including research in excess of \$4 million. BSE has not previously received a dedicated review.	
Biomedical Engineering and Mechanics	In August of 2014, the Virginia Tech College of Engineering announced the merger of Engineering Science and Mechanics with Biomedical Engineering into a new department to be known as Biomedical Engineering and Mechanics (BEAM). BEAM is a unique multidisciplinary interface between fundamental mechanics, biomedical science, and real-world applications to enhance the quality of life. Total expenditures were approximately \$17 million (representing approximately 65 percent growth over a 7 year period) and research expenditures totaled more than \$6 million. The newly formed unit nor either of the two component units have previously received a dedicated review.	Operational – Academic
Chemistry	Courses in the Department of Chemistry provide the chemical foundation for all Virginia Tech science and engineering students and broaden their understanding about the structure and properties of matter. The undergraduate and graduate degree programs aim to prepare society's future chemists and scientists. The department continues to pursue multi-disciplinary research within and beyond the university, find innovative ways to instruct students, forge partnerships with industry and government, and establish a reputation as one of the world's highest ranking chemistry departments. Total expenditures were approximately \$16.9 million, including approximately \$8 million in research. The department last received a targeted review in 2009.	Operational – Academic
Endowed Professorship Utilization	Endowed chairs, professorships, and fellowships are established by a donor who provides an endowment to support the salary and/or operating funds of the professor. Funding levels determine whether the endowed position is a chair, professorship, or fellowship. Each college has formal procedures for the nomination and appointment to endowed chairs, professorships, and fellowships, which include review by a college honorifics committee or promotion and tenure committee. There are approximately 180 active endowed professorships across the university.	Strategic – Academic
Fire Safety Compliance	The university is subject to mandatory compliance with the Virginia Statewide Fire Prevention Code and has policies relating to misuse of fire equipment, arson, disregard of fire alarm signals, and tampering with fire alarm and smoke detection equipment. The Virginia State Fire Marshal's Office conducts inspections of new construction as well as annual inspections of residence halls. A targeted topical review of this particular nature has not been conducted previously.	Operational – Campus Safety and Security
Global Activities	The university's emphasis on efforts to further develop its global presence presents distinct opportunities and challenges. Global operations can pose significant risks related to immigration compliance, economic and tax implications, fraud and loss of funds, life safety, transportation and evacuation, and reputational concerns, among others. Previously issued presidential	Strategic – Off-Campus Locations

<b>Planned Engagement</b>	Overview	Risk Area
	memoranda and university policies require completion of requisite forms and reports as well as notification of the appropriate offices in advance of global activities, particularly when students are involved.	
Human Resources: Benefits *	Human Resources administers the commonwealth benefits program and provides benefit management and guidance for approximately 7,500 faculty and staff. The benefits program is an integral part of the university's employee compensation package and includes health insurance, leave, legal resources, retirement plans through the Virginia Retirement System, tuition assistance, and workers compensation. This function was last reviewed in 2011.	Financial – Human Resources
Hume Center	The mission of the Ted and Karyn Hume Center for National Security and Technology (Hume Center) is to cultivate the next generation of national security leaders by developing and executing curricular, extracurricular, and research opportunities to engage students. Jointly operating in the National Capital Region and the Blacksburg campuses, Hume Center research activities principally focus on cybersecurity, resilience, and autonomy challenges faced by the national security and homeland security communities. While not officially established in its current format until 2010, organizational oversight of the Hume Center has transitioned several times since inception. Research expenditures totaled approximately \$6.6 million. Elements of the Hume Center's activity have been previously reviewed; however, there has not yet been a focused audit.	Operational – Research
Insurance and Risk Management	The Insurance and Risk Management Office, reporting to the Controller's Office, handles all insurance matters, including claims, for the university. In addition, the office provides risk analysis for various university activities and management of the Student Medical Insurance program, covering both undergraduate and graduate students.	Operational – Financial Management
International Research, Education, and Development	The Office of International Research, Education, and Development (OIRED) supports the university's international mission by leading projects that raise the standard of living in developing countries. As part of the university's Outreach and International Affairs division, OIRED provides access to the full range of expertise available at Virginia Tech and through project partners around the world. Total expenditures were approximately \$7.6 million, including research expenditures of \$6.5 million. OIRED was included in a broader review of International Affairs in 2013.	Operational – Research
Recreational Sports	Recreational Sports is a department within the Division of Student Affairs that works to enhance the quality of life for the university community by encouraging healthy lifestyles, social interactions, and leadership skills in a fun, active, competitive, and educational environment. Recreational Sports provides opportunities for students, faculty, and staff to engage in physical activities to create healthy lifestyle habits and provides opportunities for youth in the community to start living an active life. Other programs include intramural sports, sport clubs, and aquatics. Total expenditures were approximately \$7 million and revenue was approximately \$10.4 million. This activity was last reviewed in 2011.	Operational – Student Services

<b>Planned Engagement</b>	Overview	Risk Area
Research: Animal	All personnel who are involved in the use of animals for either	Compliance -
Care and Use *	teaching or research at Virginia Tech have a responsibility for	Research
	appropriate animal care and use. Further, each individual is	
	accountable by law to conform to the basic regulations and policies	
	governing animal use at the university. All teaching uses as well	
	as any research involving vertebrate animal species (excluding	
	human subjects), regardless of funding source, are under the	
	purview of the Virginia Tech Institutional Animal Care and Use	
	Committee (IACUC), a federally mandated committee. This	
	activity was last reviewed in 2011.	
Cabaal of Dublic and		Operational
School of Public and	The School of Public and International Affairs (SPIA), operating	Operational –
International Affairs	within the College of Architecture and Urban Studies, offers	Academic
	degree programs in the Center for Public Administration and	
	Policy, Government and International Affairs, and Urban Affairs	
	and Planning. Research initiatives are carried out by the	
	Metropolitan Institute in the National Capital Region, and the	
	Institute for Policy and Governance at the Blacksburg campus.	
	Total expenditures were approximately \$9.2 million while revenue	
	was just over \$2.2 million. SPIA has not previously received a	
	dedicated review.	
Services for Students	Services for Students with Disabilities (SSD) exists to assist the	Compliance -
with Disabilities	Division of Student Affairs and the university with advancing their	Student
	missions and with protecting students' civil rights under the	Services
	Americans with Disabilities Act. SSD establishes clear guidelines	00111000
	and procedures, creates collaborative partnerships, and provides	
	progressive services to promote student learning, personal	
	growth, and development of life skills. SSD endeavors to create a	
	campus climate in which students with disabilities experience full	
	access and inclusion in curricular and co-curricular opportunities	
	in the academic community. SSD has not previously received a	
= 1	dedicated review.	
Telecommunications	As a sub-unit of the Division of Information Technology and	Operational –
Operations	reporting to the Executive Director of Network Infrastructure and	Auxiliaries
	Services, the auxiliary component of Communications Network	Enterprises
	Services (CNS) exists to provide leading edge	
	telecommunications services in support of the instructional,	
	research, and outreach missions of Virginia Tech. CNS delivers	
	voice, data, and video services to all segments of the university	
	community. As an auxiliary, this unit operates in a self-funded	
	manner, and revenues and expenditures were \$20.3 and \$20.2	
	million respectively. This activity was last reviewed in 2009.	
University Registrar	The Office of the University Registrar (Registrar) provides many	Compliance –
	services, including academic records maintenance for more than	Enrollment
	33,000 current students across 250 undergraduate and graduate	Services
	degree programs. Other areas of responsibility include data	20111003
	stewardship; data integrity; ensuring compliance with all agency,	
	state, and federal regulations; and development of semester	
	course offerings. The last dedicated review of this office was in	
11.	2012.	
University	The Office of University Scholarships and Financial Aid (USFA)	Compliance –
Scholarships and	supports the university's student access, enrollment, and retention	Enrollment
Financial Aid	goals by providing the financial means to encourage economic,	Services
	social, cultural, and academic diversity in the student body. USFA	
	provided or monitored approximately \$446 million in student	

<b>Planned Engagement</b>	Overview	Risk Area		
	financial assistance in fiscal year 2015-16. A complete audit of the various activities within USFA is performed over a four-year period.			
Virginia Cooperative Extension – Central District	Virginia Cooperative Extension (VCE) is an educational outreach program of Virginia's land-grant universities: Virginia Tech and Virginia State University. VCE – Central District is made up of approximately 25 county and city offices and had \$3.1 million in expenditures and \$1 million in revenue which was almost entirely in the form of cash receipts. A review focused specifically on the Central District has not been conducted before; however, other districts have been reviewed previously.	Operational – Off-Campus Locations		
* Entity receives an annual audit on different components of their operation.				

**Information Technology Assurance** 

IT: Employee Access Lifecycle  From first-hire date to separation, university employees receive credentials that provide access to a number of information systems, networks, and other critical IT resources. System and network administrators, data stewards, and other central support staff must manage those credentials throughout the term of employment, which may include changes in the assignment of job duties, transfers between departments, and ultimately, separation from university employment. This audit will evaluate the assignment, modification, and removal of user credentials for university IT resources. Employee access has been reviewed in audits for specific IT resources; however, this will be the first broadly-focused audit of the employee access life cycle.  IT: Mobile Device  Security  The use of mobile devices is now ubiquitous across the university's various business units. Smart phones and tablets are frequently used to access university data and systems includes sensitive data in the form of attachments. Security configurations and requirements vary greatly across the industry. This audit will focus on the policies and procedures surrounding mobile device security from both the department and central administrative perspectives. Mobile device security was last audited in 2013.  IT: Third-Party Access to University Data  IT: Third-Party Access to University Data  IT: Third-Party Access to University Data  The university has procured entire systems and services through outsourcing agreements to host and process institutional data. Examples include an outsourced e-commerce system for procuring goods or services and systems and services through outsourcing agreements to host and process institutional data. Examples include an outsourced e-commerce system for procuring goods or services and systems intended to meet requirements for meeting federal immigration requirements. In addition to those high-visibility centrally purchased systems, there may be departmental systems outside of the university environ	Planned Engagement		Diek Aree
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		significant risks when not properly secured. A large percentage of	

<b>Planned Engagement</b>	Overview	Risk Area
	the university's servers operate on the Windows platform. Focus	
	will be on Windows Server security across the university, in	
	various administrative, academic, and research departments.	
	Windows Server security was last audited in 2014.	

#### **University Policy Compliance Reviews**

University 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.

<b>Planned Engagement</b>	Overview	Risk Area
College of Engineering	The College of Engineering (COE) offers 14 undergraduate majors, 7 minors, and 17 graduate degree programs. COE had \$204.3 million in expenditures and \$91.1 million in sponsored research. The last compliance audit of this area was in 2013.	Operational
College of Liberal Arts and Human Sciences	The College of Liberal Arts and Human Sciences (CLAHS) offers 29 undergraduate majors, 53 minors, and 32 graduate degree programs. CLAHS had \$75.1 million in expenditures and \$6.8 million in sponsored research. The last compliance audit of this area was in 2013.	Operational
Department of Athletics	The Department of Athletics (Athletics), with 22 varsity sports at the NCAA Division I level, monitors more than 550 student-athletes each academic year. Athletics had operating revenues of approximately \$83.8 million and total operating expenses of approximately \$84.6 million. University Internal Audit conducts a complete audit of Athletics over a five-year period. This audit will be a limited compliance review of university policies and procedures. The last review of this nature was completed in 2013.	Operational
Vice President for Advancement	The Vice President for Advancement is responsible for securing resources that will enhance the academic quality of the institution, promoting public understanding of and support for Virginia Tech, enhancing the perception and knowledge of various publics of the university's programs and accomplishments, and creating a positive public impression of the university and its faculty, students, and programs. Offices include University Relations, University Development, and Alumni Relations. The last compliance audit of this area was in 2011 (University Development and University Relations) and 2015 (Alumni Relations).	Operational
Vice President for Research and Innovation	The Office of the Vice President for Research and Innovation is responsible for supporting and promoting Virginia Tech faculty members, staff, and student research, scholarship, and creative activity and supporting the university community and its missions by fostering quality research and scholarship. Areas such as research compliance, animal care, sponsored programs, as well as the research institutes report through this division. The last compliance audit of this area was in 2012.	Operational
Virginia–Maryland College of Veterinary Medicine	The Virginia–Maryland College of Veterinary Medicine consists of three academic programs and four departments. The college is a leading biomedical teaching and research center and the in-state veterinary college for residents of Virginia and Maryland. Locations include the main campus in Blacksburg; the Marion	Operational

<b>Planned Engagement</b>	Overview	Risk Area
	duPont Scott Equine Medical Center in Leesburg; and the Gudelsky Veterinary Center in College Park, Maryland. The college had \$55.6 million in expenditures and \$23.1 million in sponsored research. The last compliance audit of this area was in 2013.	

**Management Advisory Services** 

Planned Engagement	Overview	Risk Area
Facilities and Administrative Charge Utilization	Facilities and Administrative (F&A) charges, commonly referred to as indirect costs or overhead, are a complex component of sponsored programs. Indirect charges are simply costs that cannot practically, or in a cost-effective manner, be directly tied to a single project. Often used illustrations of F&A costs are electricity, water, sewer, general equipment/building depreciation, and administrative support. Additionally, administrative support costs, which include salaries and benefits for departmental, college, and university personnel involved in the central administration of the institution, are included. The Controller's Office negotiates F&A and fringe benefit rates with the university's cognizant federal agency. Approved rates must be accepted by other agencies, unless specific program regulations restrict the recovery of indirect costs. Understanding these costs is imperative when calculating research metrics in support of national rankings, sponsor relations, and regulatory compliance.	Strategic – Research
Fair Labor Standards Act Practices	The Fair Labor Standards Act (FLSA) is a federal law that establishes minimum wage, distinguishes between covered (non-exempt) and excluded (exempt) employees, overtime threshold (40 hours in a week), overtime pay, record keeping requirements, and youth employment standards for employees in the private sector and in federal, state, and local governments. The university has established university policy 4320, Guidelines for the Fair Labor Standards Act, to help ensure compliance. Due to the university's size, operational complexity, and decentralized nature, the approach to managing employee overtime has evolved with different practices to meet the needs of various units. This review aims to understand the overtime landscape and benchmark current methodology with peer institutions to identify best practices.	Compliance – Human Resources
Government Relations	The Office of Government Relations is the primary liaison between the university community and elected officials and government entities at the state and federal levels. It monitors legislative issues and works with other colleges and universities in support of higher education. The office is responsible for advising the President on government policy and proposed legislation, working with the President to effectively communicate with elected leaders and our campus community, and in developing institutional positions. This review is intended to benchmark with peers to compare organizational structure and to examine differing internal and external outreach processes in an effort to maximize government relations effectiveness.	Strategic
School of Plant and Environmental Sciences	The School of Plant and Environmental Sciences will be a national and international leader for improving human well-being and quality of life through learning, discovery, and engagement in plant	Operational – Academic

<b>Planned Engagement</b>	Overview	Risk Area
	and environmental sciences. The school will integrate three existing departments that share certain mission elements: Crop and Soil Environmental Sciences; Horticulture; and Plant Pathology, Physiology, and Weed Science. These units already share cross-cutting interdisciplinary research, and will be further connected through undergraduate curricula and linked graduate programs, as well as through statewide research, extension, and outreach activities. The school will initially consist of 86 affiliated faculty, 64 staff, and over 100 graduate students, and will have over \$8 million in annual research expenditures. This review is intended to help ensure an optimal control structure for the operations of the new school as it continues to develop and emerge.	
Title IX Program Policies and Procedures	Virginia Tech receives federal financial assistance in many forms, including research grants from federal agencies. Failing to comply with Title IX or other federal civil rights requirements can result in the termination of all or part of a university's federal funding. Educational institutions are required to provide women and men in all disciplines comparable resources, support, and promotional opportunities. Title IX requires that males and females receive fair and equal treatment in all areas of education, including athletics. Other areas that fall within the scope of Title IX include recruitment, admissions, course offerings and access, scholarships and financial aid, sexual harassment, assault, and violence.	Compliance
Youth Protection Activities	The university is committed to the safety and welfare of its students, employees, and visitors through the establishment of practices that support a safe and secure environment in all buildings and grounds owned, controlled, or leased by Virginia Tech, including satellite locations, as well as promoting safety through policies and programs. Administrators, employees, students, volunteers, and others working with minors (children under the age of 18) have a responsibility to promote their protection.	Operational – Campus Safety and Security

**Special Projects and Annual Audit Activities** 

Activity	Overview
Special Projects	Investigate fraud, waste, and abuse allegations.
	Conduct follow-up audit procedures to ensure that management is implementing controls as described within their responses to audit report recommendations. Assist management with year-end inventory counts for financial statement verifications.
	Manage and serve as the liaison for all external audit services including contracted and regulatory-imposed audits.

## **AUDIT RESOURCES**

The audit plan for fiscal year 2017-18 is based on professional staffing of 13 full-time equivalents (FTEs). Staffing will be augmented by the continuation of the student internship program in which three Virginia Tech students are employed. Approximately 74 percent of University Internal Audit's available resources are committed to the completion of planned audit projects, management advisory reviews, and investigations. The annual audit plan is designed to provide appropriate coverage utilizing a variety of audit methodologies including audits of individual units, functional and process audits, university-wide reviews, and information system projects. University Internal Audit conducts follow-up audit procedures throughout the year to ensure that management is implementing controls as described within their responses to audit report recommendations.

### Audit resources are allocated as follows:

- 54 percent of the University Internal Audit's available resources are committed to the completion of planned audit projects and follow-up audit procedures.
- 11 percent to accommodate requests from management and consultations with university departments.
- 9 percent to conduct investigations into fraud, waste, and abuse allegations.
- 12 percent for employee professional development, internal quality improvement projects, and other internal administrative functions.
- 14 percent for compensated absences such as annual, sick, and holiday leave.

## Acceptance of Reports Issued by University Internal Audit

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

## **September 10, 2017**

## **Background**

This report provides a summary of audit ratings issued this period (of those excluded from the consent agenda), and the full rating system definitions. With the submission of this report, University Internal Audit has completed all but one of the audit projects on the Fiscal Year 2016-17 Internal Audit Plan. The remaining project is underway and will be presented at the November Board of Visitors meeting.

## **Ratings Issued This Period**

High Performance Computing	Improvements are Recommended
riigiri eriormance companing	Improvements are recommended

## **Summary of Audit Ratings**

University 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 Compliance, Audit, and Risk Committee.

September 10, 2017



# Enterprise Risk Management (ERM)

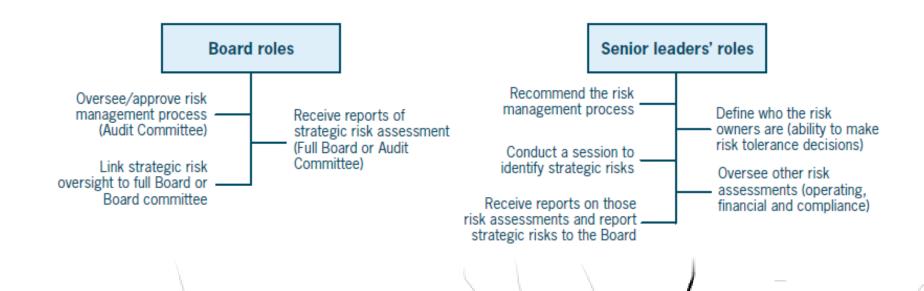
# Risk Management

- VT is committed to operating ethically and efficiently, including doing everything we can to foresee, manage, and mitigate potential risks before they occur
- Traditionally, risks have been identified and managed individually or transactionally
  - VT has been reviewing risks across multiple facets in some areas:
    - President's Leadership Team
    - Safety and Security Policy Group
    - Ad Hoc Growth Committee
- This can, at times, create a "silo" approach to risk management that may create a lack of coordination that could fail to identify strategic and reputational risks
- Risk management, as an essential part of a strong control environment, helps ensure that risk appetite aligns with management's decisions and an organization's strategy

# What is Enterprise Risk Management (ERM?)

**ERM Definition:** a <u>process</u>, effected by an entity's board of directors, management and other personnel, applied in <u>strategy setting</u> and across the enterprise, designed to <u>identify potential events</u> that may affect the entity, and <u>manage risk</u> to be within its risk appetite, to provide <u>reasonable assurance</u> regarding the achievement of entity objectives.

Source: COSO/Treadway Commission

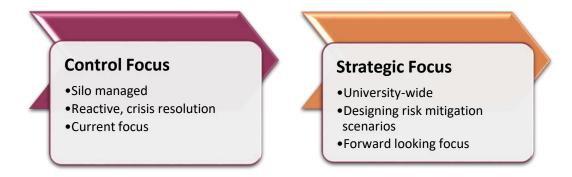


Source: Baker Tilly

# Primary Drivers for Enterprise Risk Management Programs



# ERM Program Benefits – Optimizing Balance Between Value Creation and Value Protection



## By Developing a Common Language to Drive the Risk Culture:



# **ERM Leading Practices - Achieving Objectives**

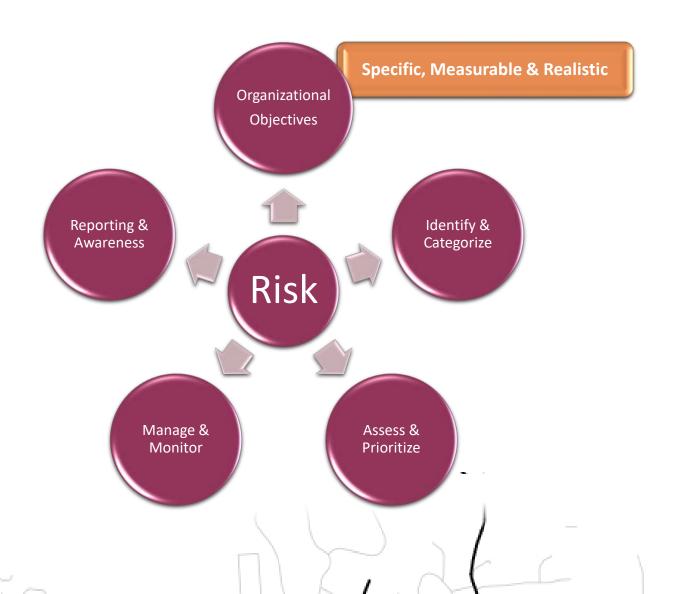
1. Review strategy or strategic objectives developed in annual planning 2. Identify those assets (crown jewels) that are institution-specific and must be protected

4. Use the results of these considerations (1-3) to develop institutional strategic risks and consider impact to the strategic plan.

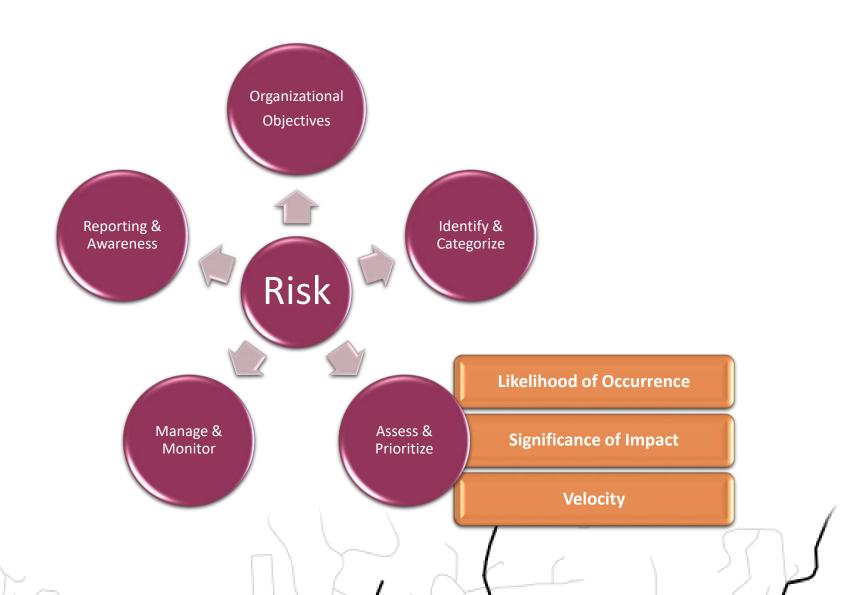
3. Engage senior leaders (risk owners) in this process consistent with the level of concern and issues they deal with daily

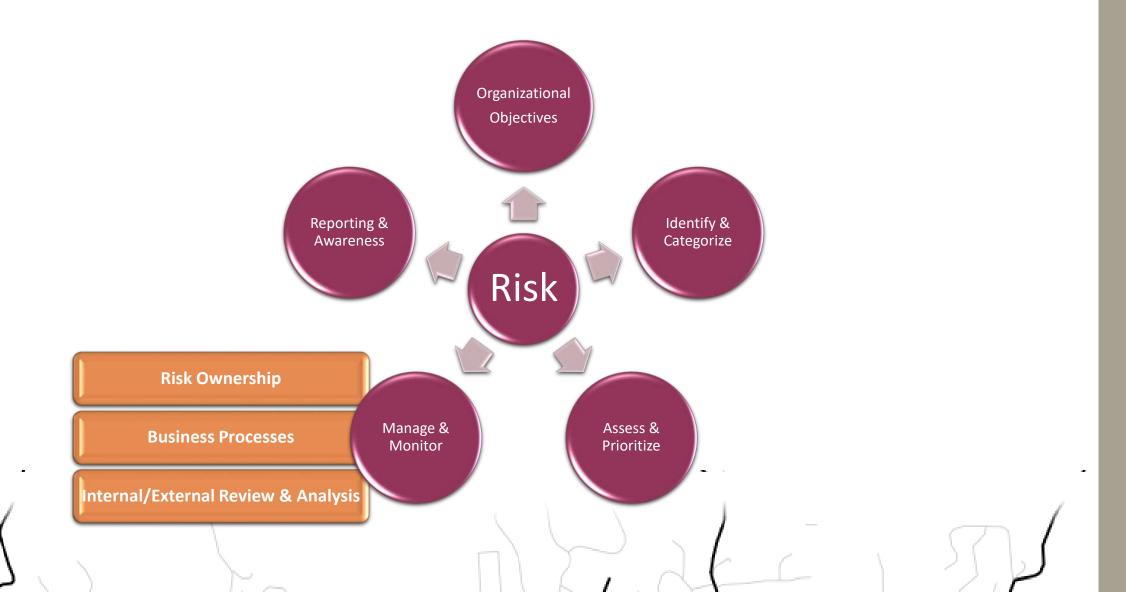
Source: Baker Tilly













## **Lessons Learned – Implementing an Effective ERM Process**

University Attempts to Be "Comprehensive" Lead to Unrealistic Results

Pitfalls of Average University Risk Register

## **University Risk Register (Illustrative)**

- 1. Sustainability of high-price/high-discount pricing model
- 2. Inadequate controls over cash receipts
- 3. Inability to properly manage academic records
- 4. Research misconduct
- 5. Declining public perception of value of liberal arts degree
- 6. Laboratory safety lapses
- 7. Misappropriation of research grant costs
- 8. Unauthorized modification of data
- 9. Sustainability of student indebtedness levels
- 10. Inability to meet retention targets
- 11. Improper use of motor vehicles by students
- 12. Vandalism to university property
- 13. Failure to meet institutional enrollment targets
- 14. HIPAA compliance
- 15. Inability to meet liquidity targets due to market fluctuations

.....

- 300. Improper receipt/recording of gifts
- 301. Failure to comply with faculty hiring processes
- 302. Inappropriate use of university logo or insignia
- 303. Lack of compliance with smoking regulations

# Lessons Learned – Implementing an Effective ERM Process

Risk Category

### Sample Risks

## **Board Engagement**

Systemic & Existential Risks (>5%)

- Sustainability of high-price/high-discount pricing model
- Declining public perception of value of liberal arts degree
- Sustainability of student indebtedness levels

**High**: Board wants to be actively engaged in identification and assessment of these risks

Institutional Risks (20%-30%)

- Failure to meet institutional enrollment targets
- · Failure to meet retention targets
- Inability to meet liquidity targets due to market fluctuations
- · Research misconduct

Medium: Board wants periodic updates to ensure proper assessment of risks and progress on risk treatment plans

Unit-Level Risks (65%-75%)

- HIPAA compliance
- Laboratory safety lapses
- Misappropriation of research grant costs
- · Unauthorized modification of data
- Improper use of motor vehicles by students
- Vandalism to university property
- Improper receipt/recording of gifts

**Low:** Board wants to know management is managing these risks

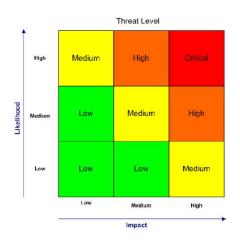
Source: Meshreky, M. (2012) University Business Executive Roundtable: A Practical Approach to Institutional Risk Management – Getting Risk Right in an Era of Constrained Administrative Resources. Education Advisory Board

# **Lessons Learned – Implementing an Effective ERM Process**

	<ul> <li>Sustainability of high- price/high-discount pricing model</li> </ul>		
Risk Type	External, uncontrollable; impacts all of higher education		
Measurability	Low—Difficult to measure     of estimate likelihood		
Risk Assessment Approach	<ul><li>Risk environment scenarios</li><li>Mental models</li></ul>		
Risk Treatment Objective	Reduce impact should risk occur		
Risk Treatment Methods	<ul><li>Scenario analysis</li><li>Contingency planning</li></ul>		
Board Involvement	High –Board wants to be actively engaged in discussion	Medium—Board prefers periodic updates by senior management	Low—Board wants to know senior management has a risk management process in place

Source: Meshreky, M. (2012) University Business Executive Roundtable: A Practical Approach to Institutional Risk Management – Getting Risk Right in an Era of Constrained Administrative Resources. Education Advisory Board

# **Examples of Heat Maps**



Risk = Likelihood x Impact

- Economic, Social or Political Changes Research Integrity and Compliance

- IT Infrastructure and Security Health, Safety, and Security
- Campus Emergency or Unexpected Event
- Facilities and Space
- Development and Alumni Support
- Student Affairs
- Data Integrity
- Global and Extended Campus Activities
- Funding Research & Cost Sharing
- Enrollment Management
- Strategic Organization Vision

### Legend:

Risk level unchanged compared to prior year assessment Risk increased compared to prior year assessment

Risk decreased compared to prior year assessment

### Key Risk Areas Depicted by Likelihood of Occurrence and Significance

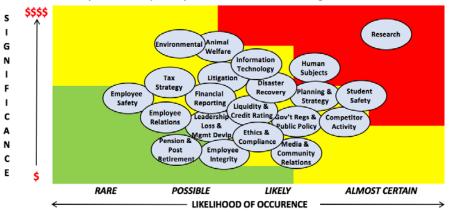
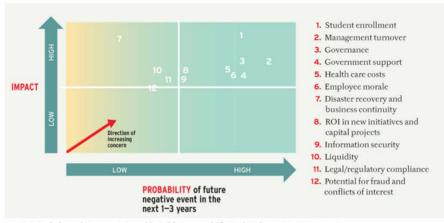


FIGURE 1. SAMPLE HEAT MAP OF A STATE SYSTEM



Source: Janice M. Abraham, Risk Management: An Accountability Guide for University and College Boards (Washington, D.C.: AGB Press, 2013)

# **ERM Project Phases**

## Phase 1:

Set the foundation to build, embed, and sustain an ERM process.

- Designate an ERM leader
- Develop project planning and timeline
- Design the ERM framework
- Create a cross-functional risk committee

## Phase 2:

Implement risk identification, evaluation, and take action in priority areas.

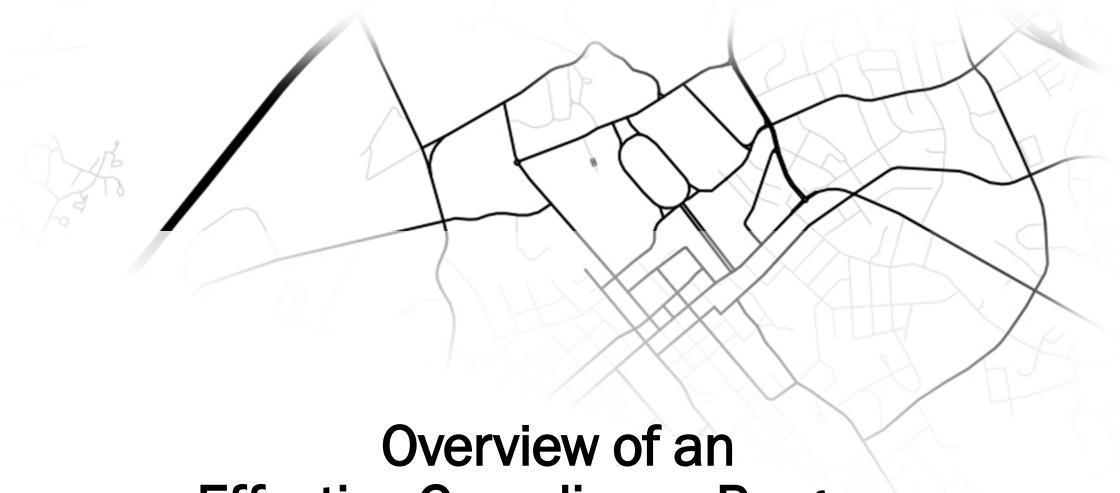
- Develop common language (shared vocabulary)
- Develop a risk portfolio
- Assess, validate, and prioritize risks
- Assign ownership and take action

## Phase 3:

Sustain the ERM program

- Assess results
- Review and align risk treatment
- Report to senior management and board
- Develop an institution-wide system for communicating

Source: Meshreky, M. (2012) University Business Executive Roundtable: A Practical Approach to Institutional Risk Management – Getting Risk Right in an Era of Constrained Administrative Resources, Education Advisory Board

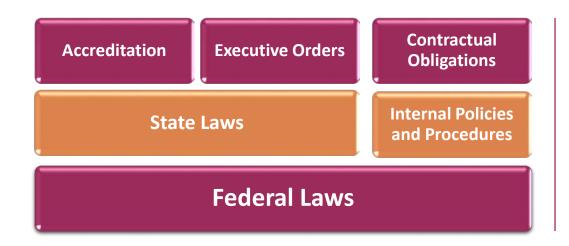


# **Effective Compliance Program**

# What is Compliance in Higher Education?

A comprehensive program that helps institutions and their employees:

- Conduct operations and activities ethically; with the highest level of integrity
- Comply with legal and regulatory requirements.
- Achieve accountability and transparency in all institutional operations.



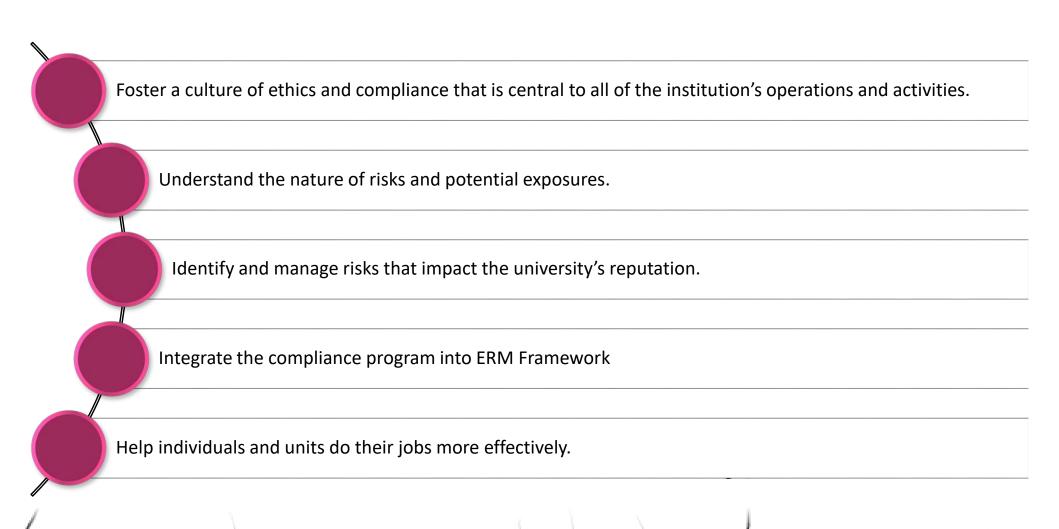
In higher education,
institutions must follow, or
"comply" with many laws
and rules. These compliance
obligations are growing
exponentially.

Compliance is a *risk* that should be evaluated and responded to using a framework similar to a broader ERM structure.

# Consequences of Non-compliance – What are the Stakes?

Civil and administrative fines and penalties Criminal penalties and imprisonment of culpable individuals Suspension or debarment from participation in government programs Individual liability imposed on board members Costs of responding to investigations and legal actions Increased cost of credit Reputational harm Financial impact

# Compliance Program Benefits – A Coordinated Effort



# 8 Elements of an Effective Compliance Program

High-level personnel exercising oversight

Written policies and procedures

Training and Education

Lines of Communication

Well publicized disciplinary guidelines

Internal compliance monitoring

Response to detected offenses

Perform periodic compliance risk assessments

# **Common Higher Education Compliance Areas**

- Access/Disability Services
- Accreditation
- Athletics
- Conflicts of Interest
- Discrimination / Harassment
- Donors and Gifts
- Emergency Preparedness
- Environmental Health & Safety
- Export Control
- FERPA / Education Records
- Financial Aid

- Fiscal Management
- Global Operations
- HIPAA Privacy and Security
- Human / Animal Subjects
- Human Resources / Equal Opportunity
- Immigration
- Intellectual Property / Technology Licensing
- Research Administration
- Safety / Security
- Scientific Misconduct
- Tax Compliance

# **Value of Institutional Compliance**



# **Creating a University Compliance Plan**

## Develop the compliance structure and framework

- Establish compliance champion
- Establish a compliance committee
- Develop compliance listing of relevant regulatory areas
- Identify stakeholders working responsibility for compliance

## Improve Compliance Coordination

- Provide a centralized compliance resource
- Create campus-wide guidance, information, and promote efficiencies
- Improve communication on compliance issues and provide clarity

Source: Baker Tilly

# **Compliance Facilitation Role**



# **Compliance Committee Primary Responsibilities**



# **Compliance Risk Assessment Example**

## **UTK Compliance Residual Risk Heat Map**

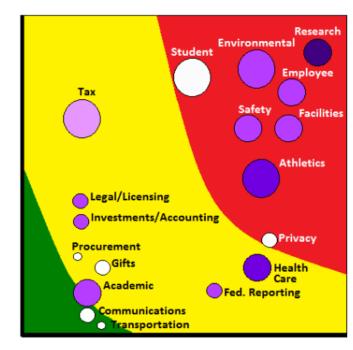
This represents the risk scored by the compliance officers in light of the controls that are in place.

The highest scoring risks for the area were used for the plotting.



Financial

**Impact** 



Low oo O High

Reputational Impact

Low Legal Sanctions Impact

Low Operational Impact High

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### **Committee Minutes**

# FINANCE AND RESOURCE MANAGEMENT COMMITTEE Duck Pond Room, The Inn at Virginia Tech September 11, 2017

## Finance Closed Session

**Board Members Present:** Ms. Greta Harris, Ms. Anna James, Mr. Dennis Treacy, Mr. Horacio Valeiras

**VPI & SU Staff:** Ms. Kay Heidbreder, Dr. Timothy Sands, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr.

- Motion for Closed Session: Motion to begin 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.

## Finance Open Session

**Board Members Present:** Ms. Greta Harris, Ms. Anna James, Ms. Tish Long, Mr. Robert Mills, Ms. Debbie Petrine, Mr. Robert Sebek – staff representative, Mr. Dennis Treacy, Mr. Horacio Valeiras

**VPI & SU Staff:** Mr. Bob Broyden, Mr. Jim Buckwalter, Ms. D'Elia Chandler, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Dr. Guru Ghosh, Mr. David Guerin, Dr. Luisa Havens, Ms. Angela Hayes, Ms. Kay Heidbreder, Mr. Jim Hillman, Mr. Tim Hodge, Dr. Roop Mahajan, Dr. Theresa Mayer, Dr. Steven McNight, Ms. Nancy Meacham, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Terri Mitchell, Mr. Charlie Phlegar, Dr. Menah Pratt-Clark, Dr. Scot Ransbottom, Ms. Lisa Royal, Mr. Charlie Ruble, Dr. Tim Sands, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Dr. Angela Simmons, Dr. Ken Smith, Mr. John Talerico, Mr. Kirk Wehner, Dr. Lisa Wilkes

1. Motion to Reconvene in Open Session: Motion to begin open session.

## 2. **Opening Remarks**

- 3. **Consent Agenda:** The Committee considered for approval the items listed on the Consent Agenda.
  - a. Approval of Items Discussed in Closed Session
  - b. Approval of Minutes of the June 5, 2017 Meeting
- \* c. Approval of Resolution to Revise Policy on Commemorative Tributes: The university updated the policy to add the Vice Provost for Inclusion and Diversity to the Commemorative Tributes Committee.

The Committee approved the items listed on the Consent Agenda and recommended the resolution to Revise the Policy on Commemorative Tributes to the full Board for approval.

- 4. **Update on Advancement:** The Committee received a report from University Advancement on the fundraising efforts including a comparison of results since the launch of the new Advancement model. The three broad areas that comprise Advancement are Philanthropy, Branding, and Engagement. Total new gifts and commitments for fiscal year 2017 were approximately \$162.3 million, an increase of 61.6 percent and total cash was nearly \$125 million, an increase of 23.2 percent. Annual Giving was approximately \$22.5 million with more than 28,500 donors contributing to the Annual Fund. The Committee has set a goal of 100 percent Board participation in the annual fund for the coming year.
- 5. Review and Acceptance of the Implementation of Recommendations from the JLARC Study on Higher Education: The Committee received a report on the implementation of JLARC recommendations to be addressed by the Board of Visitors. The university has implemented all eight recommendations proposed in the 2017 Appropriations Act. This report focused on the results of the Span of Control Study conducted by the consultant and university action plans to address related recommendations. The Span of Control study, conducted by Sibson Consulting, reported that industry standards establish an overall average span of control between 3.5 and 4.5 employees per supervisor. Virginia Tech's average of 3.7 employees per supervisor for the non-academic units, puts Virginia Tech within industry standards. The report provided recommendations for improvements in organizational structure. Virginia Tech is in the process of implementing several

key recommendations and analyzing the remaining recommendations for implementation.

The Committee accepted the report on the implementation of JLARC recommendations from the JLARC Study on Higher Education.

- 6. Update on the Virginia Tech India Research and Education Forum: At the March 2016 Board meeting, the Committee reviewed and approved an affiliation agreement for the Virginia Tech India Research and Education Forum (VTIREF). In response to the Committee's request, this presentation provided an update on the progress of the VTIREF activities since its formation in 2016. The Committee asked for a progress report on the financial aspects of the VTIREF next year.
- 7. Review and Acceptance of the Update on Virginia Tech Applied Research Corporation: The Committee reviewed and approved a resolution during its November 2016 meeting authorizing the university to forgive and discharge a loan to the Virginia Tech Applied Research Corporation (VT-ARC) in the amount of \$2 million. The resolution required the VT-ARC to develop a business plan to strengthen its financial and operational activities going forward. This report provided an update on the status of the VT-ARC business plan efforts since the November 2016 meeting. Management has determined that the VT-ARC business plan is prepared in an appropriate manner and is reasonable. Thus, the university plans to discharge the loan, consistent with the November 2016 resolution.

The Committee accepted the report on the Update on the Virginia Tech – Applied Research Corporation.

- 8. Fall 2017 Enrollment Status and Review of Estimated Financial Impact: The Committee received a presentation on the estimated financial impact of Fall 2017 enrollment. Virginia Tech will experience a positive enrollment variance in Fall 2017. The university plans to allocate a portion of the funds towards the instructional costs and will recognize the revenue increase in base revenues in next year's budget.
- \* 9. Approval of Year-to-Date Financial Performance Report (July 1, 2016 June 30, 2017): The Committee reviewed for approval the Year-to-Date Financial Performance Report for July 1, 2016 June 30, 2017. The university successfully closed its fiscal year in accordance with guidance and requirements of the Commonwealth. The auxiliary enterprises achieved the annual revenue budget,

while expenditures were lower than projected due to the timing of operating expenditures and projects that were initiated but incomplete at year-end.

The Committee recommended the Year-to-Date Financial Performance Report to the full Board for approval.

\* 10. Approval of Virginia Tech Carilion Research Institute Biosciences Addition 9(d) Financing Resolution: The Committee reviewed for approval a financing resolution for the Virginia Tech Carilion Research Institute Biosciences Addition through the State's 9(d) Virginia College Building Authority pooled bond program. The Virginia Tech Carilion Research Institute Biosciences Addition has been authorized by the state to be financed for up to \$23.793 million plus amounts needed to fund issuance costs, reserve funds, and other financing expenses.

The Committee recommended the Virginia Tech Carilion Research Institute Biosciences Addition 9(d) Financing Resolution to the full Board for approval.

- 11. Virginia Tech Carilion School of Medicine Integration Financial Aspects:
  The Board of Visitors received an overview on the progress of integration of
  Virginia Tech Carilion School of Medicine (VTCSOM) at the Academic, Research,
  and Student Affairs Committee. This agenda item provided an opportunity for
  management to address any further questions on the financial aspects of the
  VTCSOM Integration.
- 12. Other Business: The Committee discussed other topics including topics for future committee agendas. The Committee asked management to start discussions on tuition and fee in preparation for the final tuition and fee resolution at the March, 2017 meeting.

#### Joint Open Session with the Buildings and Grounds Committee

**Board Members Present:** Ms. Greta Harris, Mr. C.T. Hill, Ms. Anna James, Ms. Tish Long, Mr. Robert Mills, Ms. Debbie Petrine, Mr. Mike Quillen, Dr. Hans Robinson-faculty representative, Mr. Wayne Robinson, Mr. Dennis Treacy, Mr. Horacio Valeiras

**VPI & SU Staff:** Mr. Mac Babb, Mr. Bob Broyden, Mr. Jim Buckwalter, Ms. D'Elia Chandler, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Mr. Kevin Foust, Dr. Lance Franklin, Dr. Mike Friedlander, Mr. Mark Guess, Dr. Lee Hawthorne, Mr. Jim Hillman, Mr. Tim Hodge, Dr. Chris Kiwus, Dr. Theresa Mayer, Ms. Robin McCoy, Ms.

Sarah McCoy, Dr. Steven McNight, Ms. Nancy Meacham, Mr. Ken Miller, Mr. Grant Morris, Mr. Mike Mulhare, Mr. Mark Owczarski, Mr. Charlie Phlegar, Dr. Menah Pratt-Clark, Dr. Scot Ransbottom, Ms. Lisa Royal, Mr. Charlie Ruble, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Ms. Kayla Smith, Dr. Ken Smith, Mr. Jason Soileau, Mr. John Talerico, Mr. Dwyn Taylor, Mr. Jon Clark Teglas, Dr. Sherwood Wilson, Mr. Chris Wise

- 1. **Consent Agenda:** The Committee considered the following item listed on the Consent Agenda.
  - d. Update on the 2018-2024 Capital Outlay Plan: At its April 2017 meeting, the Committees approved the university's list of potential projects for inclusion in the 2018-2024 Capital Outlay Plan and authorized the university to develop and submit a final plan to the state in accordance with future guidance from the state and based on the projects in the approved list. The university proceeded accordingly and met the state's July 2017 deadline for submission of the plan. Based on the instructions received from the state and consistent with the Board approved Six-Year Capital Outlay Plan, the university submitted a list of projects requesting some portion of General Fund resources in their budget. This report provided the list of projects ranked in priority order submitted to the state, the state capital budget review and approval process, and the list of Nongeneral Fund Projects included in the Six-Year Capital Outlay Plan for 2018-2024.

The Committees approved the Consent Agenda, which included a report on the Update of the 2018-2024 Capital Outlay Plan.

\* 2. Approval of Resolution for Capital Lease for Applied Projects Building in the Corporate Research Center: The Committees reviewed a resolution for the university to enter into a capital lease with the Virginia Tech Foundation for the Applied Projects Building in the Corporate Research Center. The planned building is approximately 45,000 gross square feet of office, laboratory, and applied projects research space to support research and experiential learning programs in the areas of economic, homeland, and national security for a total project cost of \$8.4 million.

The Committees recommended the Resolution for a Capital Lease for the Applied Projects Building in the Corporate Research Center to the full Board for approval.

\* 3. Approval of Resolution for Capital Lease for Virginia Tech Transportation Institute Intern Park Facility: The Committees reviewed a resolution for the

university to enter into a capital lease with Virginia Tech Foundation for the Virginia Tech Transportation Institute (VTTI) Intern Park Facility. The project is an element of the larger \$78.4 million Intelligent Infrastructure and Human-Centered Communities initiative approved by the Board at the April, 2017 meeting. The Intern Park is designed as an interdisciplinary advanced-learning facility and includes flexible studio space and multiple garage and shop facilities equipped with state-of-the-art tooling with a total project cost of \$2.5 million.

The Committees recommended the Resolution for a Capital Lease for the Virginia Tech Transportation Institute Intern Park Facility to the full Board for approval.

\* 4. Approval of Resolution for Dietrick Renovation and Plaza Improvements: The Committees reviewed a resolution for Dietrick Hall first floor renovation and plaza improvements. The project includes inserting a modern food service venue and adding 200 indoor seats to the building and making improvements to the outdoor plaza to create additional outdoor seating for dining customers, serve as informal gathering spaces for the campus community, and support special event activities. The total project costs for the building renovations and plaza improvements is \$7 million.

The Committees recommended the Resolution for the Dietrick Renovation and Plaza Improvements to the full Board for approval.

There being no further business, the meeting adjourned at 11:30 a.m.

\*Requires full Board approval.

#### **UNIVERSITY ADVANCEMENT UPDATE**

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

August, 2017

The Office of University Advancement is an integrated component of the university's revenue model and active partner in achieving the vision and carrying out the mission of Virginia Tech. Since the inception of the Advancement Model in 2015, the Advancement division has been focused on generating a greater level of philanthropic revenues along with a cohesive integration of university development, university relations, and alumni relations to enhance engagement, increase participation, and expand communication among our collective audiences.

This report summarizes the fundraising effort and a comparison of results since the launch of the Advancement model. It also provides high-level information on key achievements within the division, preliminary plans for the upcoming campaign, and the top priorities and strategic focus of Advancement for fiscal year 2018.

#### **FUNDRAISING UPDATE**

#### **New Gifts and Commitments**

With a critical emphasis on engagement and participation over the past two years, we acknowledge another historical year of philanthropy.

- Total New Gifts and Commitments (NG&C) for fiscal year 2017 is nearly \$162.3 million, a \$61.9 million or 61.6 percent increase over the last fiscal year. Attachment I displays the breakdown of the new gifts and commitments by Gift Type for fiscal year 2017.
- The private gift income (Cash) total is just over \$125 million, over \$23.6 million or 23.2 percent more than last fiscal year. Attachment II displays the monthly comparison of private gift income (cash) for fiscal year 2017.

#### FUNDRAISING IMPACT OF THE ADVANCEMENT MODEL

A review of our fundraising results since the inception of the Advancement model (with 2 years of available data) demonstrate an upward trend. The expanded concentration of engagement and increased participation, coupled with the university's broad vision and ambitious goals indicate the right formula for success. Attachment III displays the comparison of University Advancement Fundraising Totals across fiscal year 2015-2017.

#### **ANNUAL GIVING**

With our focus on growing participation and reinstating programs such as the 1872 Society, nearly \$22.5 million was raised this past fiscal year, resulting in a 49 percent increase in dollars and a 14 percent increase in donors with more than 28,500 donors giving to the Annual Fund.

Presentation Date: September 11, 2017

Attachment IV shows the Annual Fund growth in donors from fiscal year 2016 to 2017.

Attachment V shows the Annual Fund revenue growth from fiscal year 2016 to 2017.

#### ADVANCEMENT HIGHLIGHTS

Significant progress has been made with the creation of more synergies due to the integration of university development, university relations, and alumni relations to create University Advancement. Each area has worked together for some significant collaborations including:

- The roll-out of the Beyond Boundaries Matching Scholarship program;
- The opening of our Advancement Office in Arlington to enhance advancement efforts and broaden our reach in the Northern Virginia/DC area;
- Strengthening our Young Alumni engagement strategies and programming;
- Testing Crowdfunding opportunities to reach our younger markets;
- Promoting 100 percent annual fund participation among our volunteer/advisory boards;
- The launch of our new Blackbaud database in July 2017, creating more sophisticated and cohesive technology to support what we do.

#### **BUSINESS ENGAGEMENT CENTER**

Through a partnership of University Advancement and the Office of Vice President for Research and Innovation, the university's Business Engagement Center has recently opened to support our connections and the experiences of our corporate and foundation partners. The recently hired Executive Director and team will serve as points of contact to manage relationships and to leverage and optimize current and future opportunities for the benefit of Virginia Tech.

#### **CAMPAIGN PLAN**

Planning is underway for the university's next capital campaign. The campaign period began in July 2017 (quiet phase) and is scheduled to end in June 2027, incorporating the university's sesquicentennial celebration. The campaign plan and goal, along with the university, college, and unit priorities are being finalized.

#### FISCAL YEAR 2018 ADVANCEMENT PRIORITIES AND STRATEGIC FOCUS

The Advancement Division has created its top priorities and determined our strategic focus for the current fiscal year. We will focus on implementing the next phases of our Young Alumni Program, increasing participation, the brand refresh and rollout, supporting inclusion and diversity efforts, and achieving our fundraising goals for the year.

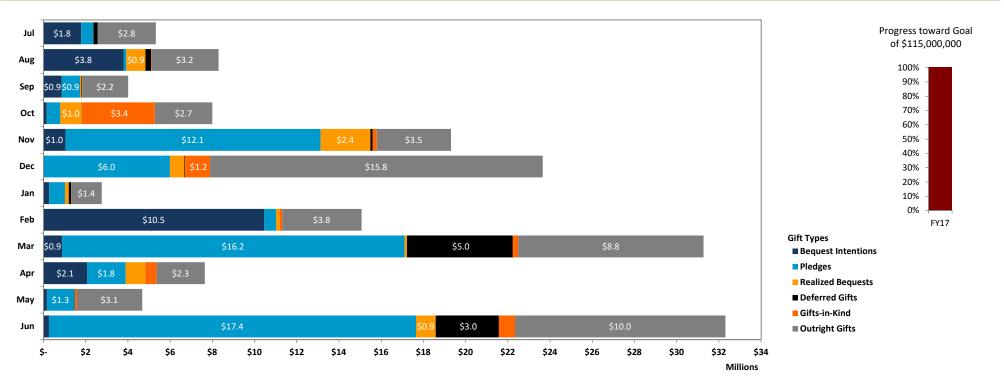
Presentation Date: September 11, 2017

#### Virginia Tech

# FY17 Monthly Comparison of New Gifts and Commitments For the period July 1, 2016 - June 30, 2017

	New Gifts and Commitment Totals																
Gift Type	Jul	Aug	Sep		Oct	Nov	Dec	Jan		Feb	Mar	Apr	•	May	Jun	Gra	nd Total
<b>Bequest Intentions</b>	\$ 1,778	,794 \$ 3,78	87,503 \$	850,187	\$ 148,200	\$ 1,033,250	\$ 1	\$	260,504	\$ 10,456,000	\$ 870,781	\$	2,060,040	\$ 153,105	\$ 256,403	\$	21,654,768
Pledges	\$ 57	,482 \$ 13	30,771 \$	873,923	\$ 641,347	\$ 12,089,991	\$ 5,983,143	\$	752,381	\$ 552,454	\$ 16,236,162	\$	1,827,310	\$ 1,315,047	\$ 17,392,101	\$	58,370,112
Realized Bequests	\$	,571 \$ 90	09,793 \$	64,573	\$ 1,026,078	\$ 2,365,532	\$ 694,672	\$	180,804	\$ 180,909	\$ 114,396	\$	929,481	\$ 272	\$ 926,664	\$	7,401,744
Deferred Gifts	\$ 20	,963 \$ 26	65,050 \$	30,000	\$ 17,894	\$ 100,000	\$ 26,651	\$	110,000	\$ -	\$ 5,008,546	\$	-	\$ 15,000	\$ 3,000,012	\$	8,778,115
Gifts-in-Kind	\$	- \$ 1	15,935 \$	11,667	\$ 3,438,607	\$ 199,997	\$ 1,183,274	\$	8,400	\$ 121,167	\$ 263,505	\$	537,029	\$ 97,500	\$ 760,767	\$	6,637,849
Outright Gifts	\$ 2,75	,531 \$ 3,17	79,469 \$	2,178,523	\$ 2,723,312	\$ 3,515,487	\$ 15,763,388	\$	1,441,514	\$ 3,755,785	\$ 8,774,438	\$	2,287,219	\$ 3,090,025	\$ 9,975,201	\$	59,435,892
FY 16-17 Total	\$ 5,319	,340 \$ 8,28	88,520 \$	4,008,874	\$ 7,995,438	\$ 19,304,257	\$ 23,651,129	\$	2,753,603	\$ 15,066,315	\$ 31,267,830	\$	7,641,080	\$ 4,670,948	\$ 32,311,148	\$	162,278,480
FY 15-16 Total	\$ 4,33	,211 \$ 8,54	46,811 \$	4,133,321	\$ 3,715,794	\$ 4,830,593	\$ 26,531,325	\$	4,125,469	\$ 3,190,459	\$ 6,040,443	\$	4,909,278	\$ 7,569,004	\$ 22,494,134	\$	100,419,843
Difference	\$ 98	,129 \$ (25	58,291) \$	(124,448)	\$ 4,279,644	\$ 14,473,664	\$ (2,880,196)	) \$ (	(1,371,866)	\$ 11,875,856	\$ 25,227,387	\$	2,731,802	\$ (2,898,056)	\$ 9,817,013	\$	61,858,637

#### NG&C Bar - by Gift Type



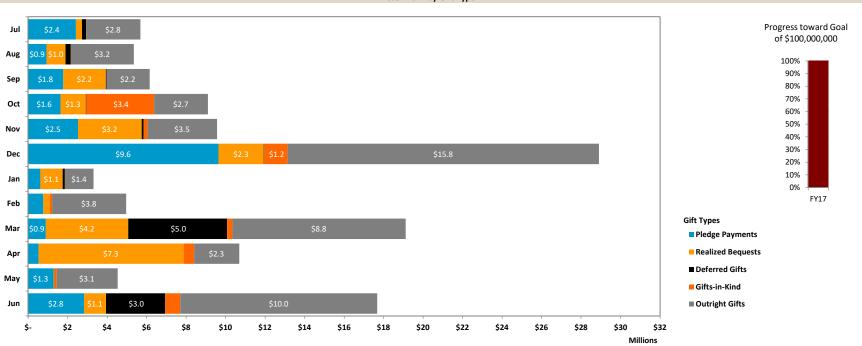
#### Virginia Tech

## FY17 PRIVATE GIFT INCOME (CASH)

### For the Period July 1, 2016 - June 30, 2017

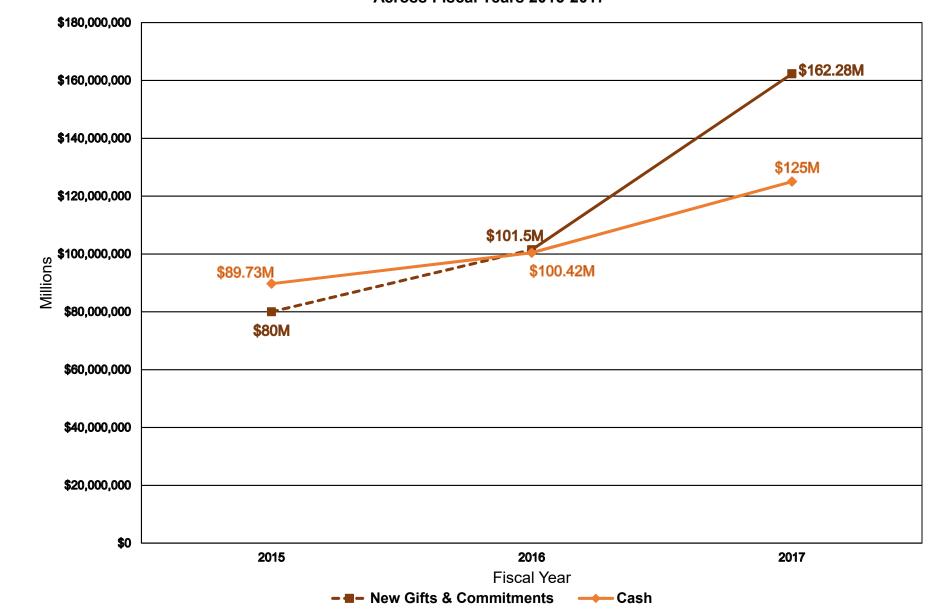
						Cash To	otals						
Gift Type	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	<b>Grand Total</b>
Pledge Payments	\$ 2,416,68	2 \$ 926,72	2 \$ 1,771,438	\$ 1,640,822	\$ 2,523,868	\$ 9,636,155	\$ 619,431	\$ 764,013	\$ 893,999	\$ 527,692	\$ 1,276,539	\$ 2,827,219	\$ 25,824,579
Realized Bequests	\$ 308,84	4 \$ 959,79	3 \$ 2,157,239	\$ 1,279,859	\$ 3,221,517	\$ 2,291,020	\$ 1,125,712	\$ 320,151	\$ 4,172,628	\$ 7,338,739	\$ 50,272	\$ 1,112,828	\$ \$ 24,338,601
Deferred Gifts	\$ 204,96	3 \$ 265,05	0 \$ 30,000	\$ 17,894	\$ 100,000	\$ 26,651	. \$ 110,000	) \$ -	\$ 5,008,546	\$ -	\$ 15,000	\$ 3,000,012	\$ 8,778,115
Gifts-in-Kind	\$	- \$ 15,93	5 \$ 11,667	\$ 3,438,607	\$ 199,997	\$ 1,183,274	\$ 8,400	\$ 121,167	\$ 263,505	\$ 537,029	\$ 97,500	\$ 760,767	\$ 6,637,849
Outright Gifts	\$ 2,751,53	1 \$ 3,179,46	9 \$ 2,178,523	\$ \$ 2,723,312	\$ 3,515,487	\$ 15,763,388	\$ \$ 1,441,514	\$ 3,755,785	\$ 8,774,438	\$ 2,287,219	\$ 3,090,025	\$ 9,975,201	. \$ 59,435,892
FY 16-17 Total	\$ 5,682,01	.9 \$ 5,346,96	8 \$ 6,148,867	\$ 9,100,494	\$ 9,560,869	\$ 28,900,488	\$ 3,305,057	\$ 4,961,116	\$ 19,113,117	\$ 10,690,679	\$ 4,529,335	\$ 17,676,027	\$ 125,015,035
FY 15-16 Total Difference	\$ 3,884,97 \$ 1,797,04		, ,,	, , ,	,,	\$ \$ 34,528,724 5 \$ (5,628,236	, ,,	\$ 2,586,835 \$ \$ 2,374,281	, - , -	,- ,	\$ 5,548,797 \$ (1,019,462	, , ,-	, . ,

#### Cash Bar - by Gift Type

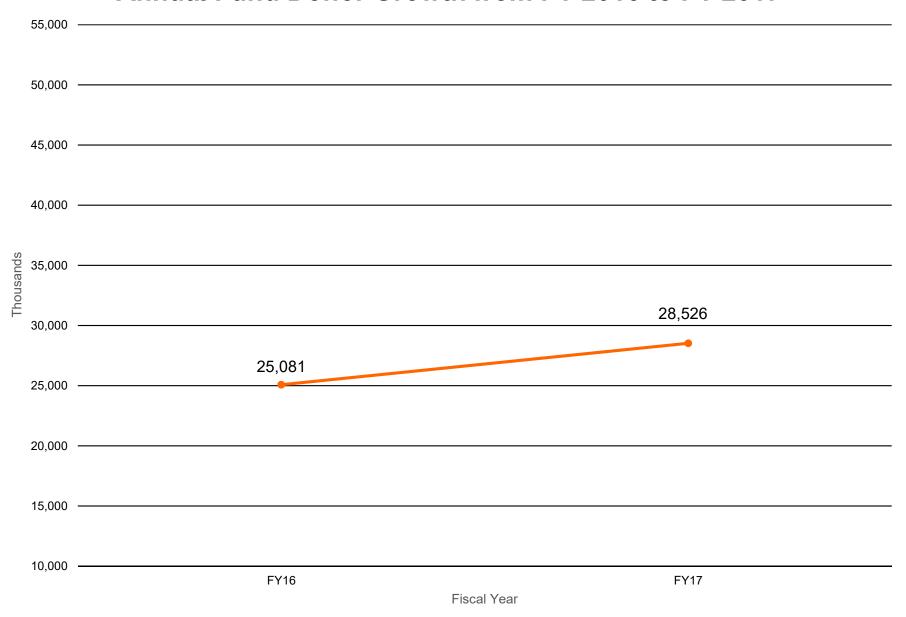


Source: Office of University Development, Virginia Tech
Prepared: July 15, 2017

## Comparison of University Advancement Fundraising Totals Across Fiscal Years 2015-2017



### **Annual Fund Donor Growth from FY 2016 to FY 2017**



### **Annual Fund Revenue Growth from FY 2016 to FY 2017**



### Review and Acceptance of the Final Report on JLARC Recommendations to be Addressed by the Board of Visitors

#### FINANCE AND RESOURCE MANAGEMENT COMMITTEE

August 11, 2017

This report provides an update on the implementation status of the recommendations issued by the Joint Legislative Audit and Review Commission (JLARC) to be addressed by the Board of Visitors. The recommendations were issued pursuant to a study conducted by JLARC on cost efficiency of public higher education institutions in Virginia.

#### **Background**

The 2012 General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) to conduct a study on cost efficiency of public higher education institutions in Virginia and to identify opportunities to reduce the cost of public higher education in Virginia. The House Joint resolution that directed JLARC to conduct the study identified 14 areas to consider in its study including both academic and non-academic factors that affect the cost of higher education operations. JLARC conducted the study over a period of two years and completed it in November, 2014 issuing a total of five reports during the course of the study. JLARC issued a total of 32 recommendations and seven policy options in the five reports.

The General Assembly took the JLARC recommendations under consideration during its 2014 session. The 2015 Appropriation Act passed by the General Assembly included language recommending implementation of a subset of the JLARC recommendations. The Appropriation Act included seven items which the General Assembly believed should be addressed by the Boards of Visitors of Virginia higher education institutions, to the extent practicable. The 2017 Appropriation Act passed by the General Assembly included an additional JLARC recommendation for a total of eight recommendations to be addressed by the Boards of Visitors.

Attachment A provides the language included in the 2017 Appropriation Act regarding JLARC recommendations.

#### Status of Institutional Actions on the Recommendations

The university has fully implemented the eight recommendations proposed by the General Assembly for the Board's consideration. Over the past two years, the university provided periodic updates to the Committee on the implementation status of the recommendations. *Attachment B* provides a summary of the JLARC recommendations and institutional implementation actions for four of the eight recommendations reported to the Committee at prior meetings. This report provides information on the implementation of the final four JLARC recommendations.

1

The following table provides a summary of the implementation status of all recommendations and respective Board meetings where implementation plans and results were reported to the Board.

Recommendation Numbers	Recommendation Category	Status
1	Display of tuition and fee including mandatory fees on university website and student invoices	Fully Implemented Reported : November 2015
2	Feasibility and Impact of raising additional revenue through campus recreation and fitness enterprises	Fully Implemented Reported : November 2015
3, 4, 5	Review of organizational structure including analysis of span of control	Fully Implemented
6, 7	Standardization of Purchases of commonly procured goods and use of institution-wide contracts	Fully Implemented Reported: August 2016
8	Participate in national faculty teaching load assessments by discipline and faculty type	Fully Implemented

### Review of organizational structure including analysis of span of control

Status: Fully Implemented

- 3. <u>Recommendation</u>: Direct staff to perform a comprehensive review of the institution's organizational structure, including an analysis of spans of control and a review of staff activities and workload, and identify opportunities to streamline the organizational structure. Boards should further direct staff to implement the recommendations of the review to streamline their organizational structures where possible;
  - Virginia Tech established a cross-functional team comprised of Human Resources, IT, and Finance personnel to evaluate the current status of organizational structure, data availability, collection, and assessment, and review of existing span of control studies, etc.
    - The university completed the first phase of the project to populate the university's centralized Enterprise Resource Planning (ERP) system with the required data elements in order to create a consistent platform for conducting the span of control study. University departments reviewed the data sets for their respective areas for validation purposes to ensure data integrity for conducting the study. Completion of this work enabled the university to undertake the organizational structure study.

The university engaged the consulting firm of Sibson Consulting who specialize in providing Human Resources consulting services to higher education institutions to implement the second phase of the project. The second phase included conducting an analysis of the current organizational structure to include layers and spans of control for the administrative and academic support functions, benchmarking of the structure and staffing practices against best practices, and developing practical recommendations for improvements in the organizational structure to meet departmental and institutional goals. Based on the results of the assessment, the recommended course of action and an implementation plan that meets the intent of this recommendation has been developed and is outlined in the attached report received from Sibson Consulting in August 2017.

The university will present a summary of the results and recommendations provided by Sibson Consulting at the Committee meeting.

If the Board is interested in detailed information on the Span of Control study, *Attachment C* provides the Organizational Staffing Analysis for each of the areas reviewed and related findings from Sibson Consulting.

- 4. Require periodic reports on average and median spans of control and the number of supervisors with six or fewer direct reports;
  - The university will provide a periodic report to the Board as part of the overall monitoring of the university's continued commitment to implement the action plans developed in response to the JLARC study.
- 5. Direct staff to revise human resource policies to eliminate unnecessary supervisory positions by developing standards that establish and promote broader spans of control. The new policies and standards should (i) set an overall target span of control for the institution, (ii) set a minimum number of direct reports per supervisor, with guidelines for exceptions, (iii) define the circumstances that necessitate the use of a supervisory position, (iv) prohibit the establishment of supervisory positions for the purpose of recruiting or retaining employees, and (v) establish a periodic review of departments where spans of control are unusually narrow;
  - As part of the consulting engagement, Sibson Consulting provided the quantitative analysis tool used in the Span of Control study, which will allow the university to analyze and to review the results at the departmental level. The university management will use the department level information to identify the areas to focus and explore opportunities where the organization structure can be altered for potential cost savings.
  - Over the next year, as part of the Human Resources Transformation Project, the university will communicate the adopted spans and layers metric as outlined in the report from Sibson Consulting (a span of control should not typically exceed 2 to 3 times the number of management layers), develop monitoring tools for senior management areas to utilize, and provide periodic briefings to executive management. Additionally, Human Resources

practices will be reviewed over the next year and revised to reflect the spans and layers standard adopted.

• The university has developed action plans to implement the JLARC recommendations. Attachment D provides information on the Virginia Tech Management Action Plan.

Overall, the consultant's concluded that the spans of control for the areas reviewed are reasonable; however, opportunities for improvement exist with potential for cost savings.

#### Participation in national faculty teaching load assessments by discipline and faculty type

Status: Fully Implemented

- 8. <u>Recommendation:</u> Participate in national faculty teaching load assessments by discipline and faculty type.
  - Virginia Tech currently participates in the University of Delaware's National Study of Instructional Costs and Productivity (Delaware Study). The Study is a benchmarking project among four-year colleges and universities and is designed for comparative analysis of faculty teaching loads, direct instructional cost, and separately budgeted scholarly activity, within academic disciplines.

#### Reporting to the Board of Visitors

Two of the eight JLARC recommendations proposed the Board of Visitors to consider:

- requiring periodic reports on average and median spans of control and the number of supervisors with six or fewer direct reports
- directing institutional staff to provide an annual report on all institutional purchases, including small purchases, that are exceptions to the institutional policies for standardizing purchases

As stated above, the university will provide a periodic report to the Board as part of the overall monitoring of the university's continued commitment to implement the action plans developed in response to the JLARC study.

Virginia Tech currently provides scorecard metrics on multiple academic and administrative measures to the Board of Visitors that aligns with the university strategic plan.

**RECOMMENDATION**: That the Report on Implementation of JLARC Recommendations to be addressed by the Board of Visitors be accepted by the Finance and Resource Management Committee.

September 11, 2017

#### Excerpt from 2017 Virginia Acts of Assembly

#### § 4-9.04 IMPLEMENT JLARC RECOMMENDATIONS

- a. The Boards of Visitors at each Virginia public four-year higher education institution, to the extent practicable, shall:
- 1. require their institutions to clearly list the amount of the athletic fee on their website's tuition and fees information page. The page should include a link to the State Council of Higher Education for Virginia's tuition and fee information. The boards should consider requiring institutions to list the major components of all mandatory fees, including the portion attributable to athletics, on a separate page attached to student invoices;
- 2. assess the feasibility and impact of raising additional revenue through campus recreation and fitness enterprises to reduce reliance on mandatory student fees. The assessments should address the feasibility and impact of raising additional revenue through charging for specialized programs and services, expanding membership, and/or charging all users of recreation facilities:
- 3. direct staff to perform a comprehensive review of the institution's organizational structure, including an analysis of spans of control and a review of staff activities and workload, and identify opportunities to streamline the organizational structure. Boards should further direct staff to implement the recommendations of the review to streamline their organizational structures where possible;
- 4. require periodic reports on average and median spans of control and the number of supervisors with six or fewer direct reports;
- 5. direct staff to revise human resource policies to eliminate unnecessary supervisory positions by developing standards that establish and promote broader spans of control. The new policies and standards should (i) set an overall target span of control for the institution, (ii) set a minimum number of direct reports per supervisor, with guidelines for exceptions, (iii) define the circumstances that necessitate the use of a supervisory position, (iv) prohibit the establishment of supervisory positions for the purpose of recruiting or retaining employees, and (v) establish a periodic review of departments where spans of control are unusually narrow; and,
- 6. direct institution staff to set and enforce policies to maximize standardization of purchases of commonly procured goods, including use of institution-wide contracts;
- 7. consider directing institution staff to provide an annual report on all institutional purchases, including small purchases, that are exceptions to the institutional policies for standardizing purchases;
- 8. participate in national faculty teaching load assessments by discipline and faculty type.
- b. The State Council on Higher Education for Virginia, to the extent practicable, shall:
- 1. convene a working group of institution financial officers, with input from the Department of Accounts, the Department of Planning and Budget, and the Auditor of Public Accounts, to create a standard way of calculating and publishing mandatory non-E&G fees, including for intercollegiate athletics;
- 2. update the state's Chart of Accounts for higher education in order to improve comparability and transparency of mandatory non-E&G fees, with input from the Department of Accounts, the Department of Planning and Budget, the Auditor of Public Accounts, and institutional staff. This process should be coordinated with the standardization of tuition and fee reporting;
- 3. convene a working group of institutional staff to develop instructional and research space guidelines that adequately measure current use of space and plans for future use of space at Virginia's public higher education institutions;
- 4. coordinate a committee of institutional representatives, such as the previously authorized Learning Technology Advisory Committee. In addition to the objectives set out in the Appropriation Act for the Learning Technology Advisory Committee, the committee should identify instructional technology initiatives and best practices for directly or indirectly lowering institutions' instructional expenditures per student while maintaining or enhancing student learning;
- 5. include factors such as discipline, faculty rank, cost of living, and regional comparisons in developing faculty salary goals;
- 6. identify instructional technology best practices that directly or indirectly lower student cost while maintaining or enhancing learning.
- c. Notwithstanding the provisions of § 23-9.14:1 § 23.1-1304, the State Council of Higher Education for Virginia shall annually train boards of visitors members on the types of information members should request from institutions to inform decision making, such as performance measures, benchmarking data, the impact of financial decisions on student costs, and past and projected cost trends. Boards of Visitors members serving on finance and facilities subcommittees should, at a minimum, participate in the training within their first year of membership on the subcommittee. SCHEV should obtain assistance in developing or delivering the training from relevant agencies such as the Department of General Services and past or present

finance officers at Virginia's public four-year institutions, as appropriate.

- d. The Department of Planning and Budget shall revise the formula used to make allocation recommendations for the state's maintenance reserve funding to account for higher maintenance needs resulting from poor facility condition, aging of facilities, and differences in facility use. Beginning with fiscal year 2016, the Department of Planning and Budget shall submit these recommendations to the Governor and General Assembly no later than November 1 of each year.
- e. The Six-Year Capital Outlay Plan Advisory Committee, the Department of Planning and Budget, and others as appropriate shall use the results of the prioritization process established by the State Council of Higher Education for Virginia in determining which capital projects should receive funding.
- f. Beginning with fiscal year 2016, the Auditor of Public Accounts shall include in its audit plan for each public institution of higher education a review of progress in implementing the JLARC recommendations contained in paragraph § 4-9.04 a.

## Summary of Institutional Actions on the JLARC Recommendations to be Addressed by the Board of Visitors

#### FINANCE AND RESOURCE MANAGEMENT COMMITTEE

#### **August 11, 2017**

Virginia Tech has fully implemented the eight recommendations proposed by the General Assembly for the Board's consideration. The university has reported on the implementation status of four of the eight recommendations at prior meetings. A brief summary of the implementation actions reported to the Committee at prior meetings is provided below:

- 1. <u>Recommendation</u>: Require their institutions to clearly list the amount of the athletic fee on their website's tuition and fees information page. The page should include a link to the State Council of Higher Education for Virginia's tuition and fee information. The boards should consider requiring institutions to list the major components of all mandatory fees, including the portion attributable to athletics, on a separate page attached to student invoices;
  - Virginia Tech currently complies with JLARC's recommendation to list all comprehensive fee components on the website and student invoices, including athletic fee, and was recognized by JLARC as an example that other institutions could emulate.
  - Virginia Tech has reviewed and updated the description of Comprehensive Fee components on the institutional website to assure continuous improvement in clarity, detail, and information provided to students; the update process included participation and input from student representatives.
  - The university has developed a "Consumer Information" website (<a href="http://univrelations.unirel.vt.edu/datatest/statistics-overview.html">http://univrelations.unirel.vt.edu/datatest/statistics-overview.html</a>) that provides key information and statistics about Virginia Tech such as undergraduate tuition, student fees, graduation rates, retention, and postsecondary employment data. This website provides a link to the SCHEV's tuition and fee information.

Reported: November 9, 2015

 Recommendation: Assess the feasibility and impact of raising additional revenue through campus recreation and fitness enterprises to reduce reliance on mandatory student fees. The assessments should address the feasibility and impact of raising additional revenue through charging for specialized programs and services, expanding membership, and/or charging all users of recreation facilities; Virginia Tech conducted a comprehensive assessment of the feasibility and impact of raising additional revenue through campus recreation and fitness enterprises. The focus of the assessment was evaluating current program offerings and corresponding user charges, benchmarking university recreation and fitness programs and charges against peer universities, exploring additional programs for immediate implementation, and developing future revenue generation opportunities. The assessment yielded the following overall conclusions:

- Recreation Sports has previously established user charges for a number of specialized programs. These programs include intramural sports team entry fees, group exercises/fitness classes, personal training session, instructional swim lessons, instructional gymnastics, daily or weekly rental fees for all recreational facilities for summer camps and other internal and external groups, etc.
  - These fitness and recreation programs are comparable to the programs offered by other higher education institutions in Virginia.
  - The user charges for these specialized programs and services are reviewed by Recreational Sports auxiliary annually.
- Recreation Sports identified additional specialized programs in the current year as potential revenue generation opportunities for immediate implementation. These programs include instructional dance class, extension of employee membership to university fitness center to spouses of current employees, rental of turf fields to local groups during low utilization, youth programs (yoga, Zumba) etc.
- Recreation sports developed a list of future revenue generation opportunities. Examples of these opportunities include partnering with dining and residential life to package recreation and fitness programs for sports-related events such as high school sports teams, youth leagues, private/public school systems, professional sports teams, retiree and alumni membership programs, corporate memberships, massage therapy programs, alumni outreach events, naming opportunities for recreation fields etc.
  - The implementation of these programs will include an evaluation of the resource needs and demand for such programs. For example, hiring a dedicated staff member for marketing the recreation programs and facilities to larger groups, camps, competitions, etc. during off-season and low-use periods, renovation of existing facilities, additional personnel for field maintenance and other support services.

The university is very sensitive to mandatory fees and seeks to meet student expectations for recreation facilities and programs. The university continually looks for alternative revenue strategies to mitigate the impact of increased costs on student fees.

Reported: November 9, 2015

- 6. <u>Recommendation</u>: Direct institution staff to set and enforce policies to maximize standardization of purchases of commonly procured goods, including use of institution-wide contracts;
  - Virginia Tech engaged Stonebridge Ventures Inc. to conduct a comprehensive, independent assessment of the current state of standardized procurement and the use of institution-wide contracts at the university. The company has extensive experience in comprehensive strategic sourcing, non-salary cost reduction and strategic procurement planning engagements for university, healthcare and Fortune 500 clients. Stonebridge also brings an in-depth understanding and experience in the higher education procurement environment.
  - The scope of the engagement included:
    - Assessment of the current state of standardized procurement including analysis of percentage of university's expenditures "commonly procured" and the extent of standardization for procurement of such items
    - Evaluation of university's policies and practices for standardization against peer institutions and other industries
    - Additional opportunities for standardization supplier consolidation, cooperative purchasing, product and service standards, etc.
    - Potential strategies for balancing the competing procurement goals for increasing standardization while maintaining local and SWAM (Small, Women-Owned, and Minority) procurement goals.
  - Stonebridge Ventures Inc. completed the assessment and issued a final report in July, 2016. The report provides an analysis of the current spend at Virginia Tech, extent of standardization, use of cooperative contracts; university's practices in comparison to peer institutions; and, provides recommendations for additional opportunities for standardization including development of a strategic supplier relationship program.

An Executive Summary of the consultant's report is included in the August 29, 2016 meeting. The following section provides highlights of the overall conclusions in the report:

1. What percentage of VT's spend is commonly procured and of this amount how much has been standardized? Answer: Based on data analysis we conclude that approximately 27% of dollars or \$144M from a total of \$538M qualifies as commonly procured. Of the \$144M commonly procured spend, 59% is on negotiated contracts with 45% of this total on cooperative purchasing contracts of one type or another. VT manages 21% of the in-scope purchases on e-Procurement catalogs in HokieMart.

- 2. What further opportunities for standardization exist (supplier consolidation, cooperative purchasing, product and service standards and other)? Answer: there are incremental opportunities to improve supplier consolidation in selected spend categories. Individual travel reimbursements were not considered in-scope for this analysis, but may warrant further examination. There are 22,000+ suppliers with spend less than \$172,000 and VT will benefit from analyzing these purchases for consolidation and workload reduction opportunities. VT has opportunities to direct spend to strategic suppliers and can work to define greater levels of product standardization in selected contracts. Initiating a Strategic Supplier Relationship Management program for this purpose will pay dividends.
- 3. How should VT address and balance competing procurement objectives for increasing standardization while also maintaining local and SWAM goals? Answer: VT should engage in a dialog on these competing priorities and come to a policy resolution concerning them. Stonebridge does not believe that Swam or local suppliers should win business if they are significantly more expensive, provide inferior service or their quality standards are not high. In our experience, universities typically give weight to local or SWAM suppliers in competitive bid opportunities where multiple factors are considered beyond price. Procurement has an important role to identify the amount of cost savings foregone by selecting local or Swam suppliers. The Executive team should consider policy direction regarding how much cost savings or price gap is acceptable in order to pursue local and SWAM goals.
- 4. How does VT's approach to standardization compare and contrast with peers and entities outside of higher education? Answer: VT compares favorably with peers across levels 1, 2 and 3 of the Stonebridge Standardization Framework. A large percentage of spend is managed on contracts and a significant portion of those are cooperative contracts. Additionally, a large portion of spend and purchase orders flow through electronic catalogs which is the most efficient and standardized method to procure goods and services. VT can improve its level of directed spend and its level of standardized products within contracts as mentioned throughout this report. However, we consider these observations to be incremental and not major opportunity gaps.
- 5. What percentage of VT spend is on cooperative contracts? Are these contracts advantageous to VT and is there an opportunity to enhance this activity? Answer: Currently, 52% of contracted spend is from cooperative agreements. VT has a strong commitment to cooperative purchasing and is working closely with Virginia Higher Education Procurement Consortium (VHEPC) to increase this activity. Understanding that the VHEPC is early in its formation (started in April, 2014), Stonebridge strongly supports the potential of the VHEPC, and advises that

a strategic plan be drafted to guide the activity of the group. Reviewing the University of Texas Supply Chain Alliance strategic plan would be an excellent start.

The university has accepted the recommendations in the report and is developing a strategy to implement the recommendations to strengthen our strategic relationships and implement greater standardization when it is in the best interest of the university to do so.

Reported: August 29, 2016

7. Consider directing institution staff to provide an annual report on all institutional purchases, including small purchases, which are exceptions to the institutional policies for standardizing purchases.

Virginia Tech currently provides scorecard metrics on multiple academic and administrative measures. While the university recognizes the value in initial reporting of this information, the university will work with the Board members to evaluate if additional measures regarding exceptions to institutional policies relating to purchasing should be an ongoing reporting metric.

Reported: August 29, 2016

## Virginia Tech



## ORGANIZATIONAL STAFFING ANALYSIS

Findings and Recommendations, Executive Overview August 2017

\* Sibson Consulting

### **Overview**

- Virginia Tech has engaged Sibson Consulting to conduct an organizational staffing analysis across the seven senior management areas. The analysis has been completed for all employees, full-time and part-time, in order to develop a complete picture of staff levels and work structures. Wage positions were excluded from the analysis. The scope includes approximately 2,700 employees in roughly 1,700 positions.
- > The employee groupings for which a detailed assessment were conducted were:
  - Administration
  - Finance
  - Outreach & International Affairs
  - Provost
  - Information Technology
  - Advancement
  - Student Affairs
- Although throughout our analysis, we encountered many wage employees, our interpretations concentrated on full-time staff. We considered wage employees to be a way to introduce workforce flexibility into the system, expanding and contracting with environmental demands as budgets allow.

### **Introduction and Definitions**

- ➤ Sibson begins its examination of organizational structure by using a set of metrics that defines the height and breadth of the organization, known as spans and layers. These measures, in turn, inform further observations and conclusions pertaining to the structural features of the organization.
- Below are some key terms used in a spans and layers analysis:
  - **Level:** Proximity of a given employee to the top ranking employee through its managerial structure (e.g., the top ranking employee is at Level 1, those directly reporting to the top ranking employee are at Level 2, etc.).
  - Span: The number of direct reports for a given employee.
  - Layers: The number of levels that a given employee oversees (including the level of the individual).
  - Average Managerial Ratio: Average span of control for all employees in a managerial role. Lower managerial ratios indicate a more hierarchical structure, and could indicate an organization has too many layers of management. Conversely, higher spans of control indicate a flatter structure.

## **Guidelines to the Analyses**

### Sibson's Span to Layer Ratio Rule

- While there is no fixed structure that appropriately suits every organizational circumstance, Sibson has maintained that an organization at equilibrium, under most circumstances, should have managers whose spans of control are equal to or greater than the number of organizational layers that a given manager oversees.
- Additionally, a span of control should not typically exceed 2 to 3 times the number of management layers, though it is not uncommon to see higher spans of control within certain divisions.
- ➤ Our range is set, based on our experiences, to accommodate variations in the nature of work (e.g., routine or complex), structural factors (e.g., centralized or decentralized, and staff proficiencies (e.g., inexperienced or experienced). This approach may artificially curtail spans that legitimately fall outside the range, however, by placing bounds on a span of control, we are providing a marker that identifies spans that **may** be too narrow or too broad.
- > For example:
  - Routine work with formal procedures that can generally be performed by inexperienced employees will lead to wide spans, whereas.
  - Complex work requiring higher-skilled employees in geographically dispersed locations will benefit more from narrow spans.

## Guidelines to the Analyses continued

This rule has several virtues:

- > Flexibility: It provides a standard of evaluation without rigidly insisting that a given number of layers and spans will always yield greater efficiencies.
- ➤ **Reality:** It accommodates the real way that organizations are structured: work often becomes more specialized lower in the organization where the spans become narrower.
- ➤ Hierarchical Constraint: It serves both as a managerial goal and measure of success in that the rule encourages flatter, more nimble, structures: every effort to build vertical bureaucracies confronts the built-in constraint that the design will need to be simultaneously broadened and compressed.

### **How to Read the Exhibits**

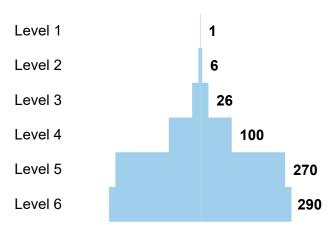
In order to familiarize you with the Exhibits in this report, we have constructed hypothetical Exhibits 1 and 2 as preparatory guides. The sample data provides explanations and definitions to assist when referring to the exhibits in each analysis.

#### Exhibit 1

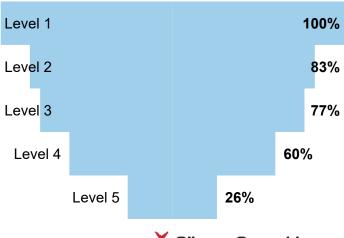
- Exhibit 1 tabulates basic demographic information for all employees and shows a comparison between headcounts and salaries for supervisors and those without supervisory responsibilities at each level within the organization.
- An individual's level is determined based on proximity to the top ranking executive in the division.

		Headcount		Headcount I	Percentages			
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors			
1	1	0	1	0%	100%			
2	6	1	5	17%	83%			
3	26	6	20	23%	77%			
4	100	40	60	40%	60%			
5	270	199	71.	74%	26%			
6	290	290	0	100%	0%			
Total	693	536	157	77%	23%			
	Top ranking executive		to the top rai	oloyees who reponking executive, ory responsibilitie	one has			

#### **Headcount Pyramid by Level**



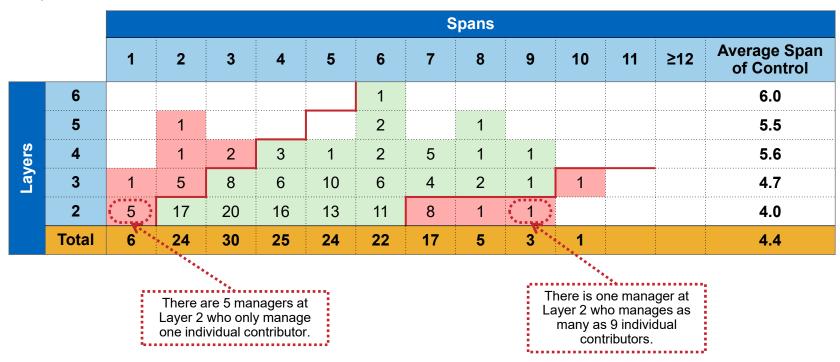
#### **Percent Supervisors by Level**



### How to Read the Exhibits continued

#### Exhibit 2

➤ The staircases in *Exhibit 2* divides the area in 2: the green shaded area in between the staircases represents spans that tend to be appropriate for the given layers of management, and the red shaded area outside represents spans that are too small or too large. Our working definition of "too large" in this report is more than 3 times the recommended minimum number of direct reports.



#### **General Rule of Thumb:**

Spans of control should be equal to, or greater than, the layers of management, e.g., if a manager oversees 3 layers (including the manager), he or she should have at least 3 direct reports.

- A. Administration
- B. Finance
- C. Outreach & International Affairs
- D. Provost
- **E.** Information Technology
- F. Advancement
- **G.** Student Affairs

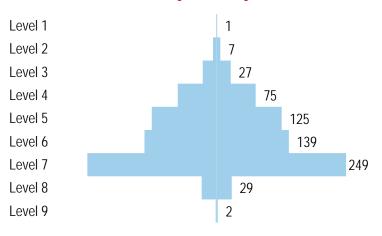


## Administration

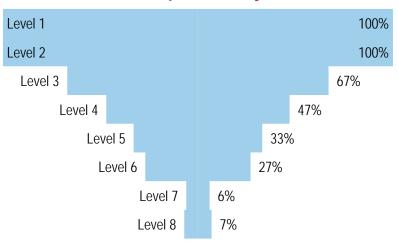
#### **Exhibit A1**

		Headcount		Headcount I	Percentages
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors
1	1	0	1	0%	100%
2	7	0	7	0%	100%
3	27	9	18	33%	67%
4	75	40	35	53%	47%
5	125	84	41	67%	33%
6	139	102	37	73%	27%
7	249	235	14	94%	6%
8	29	27	2	93%	7%
9	2	2	0	100%	0%
Total	654	499	155	76%	24%

#### **Headcount Pyramid by Level**



#### **Percent Supervisors by Level**



## Administration

### **Exhibit A2**

		Spans																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Average Span of Control
	9							1											7.0
	8				1														4.0
	7							1		1									8.0
S	6		1	1	1		1												3.8
ayeı	5		1	2			1				1								4.8
ت	4		3	1	2	1	1	1				1							4.6
	3	6	4	5	6	5	4	1	1	2	1								4.1
	2	29	14	11	12	8	7	2	4		2	2	1	2	1	1		1	4.0
	Total	35	23	20	22	14	14	6	5	3	4	3	1	2	1	1		1	4.2

### Administration

### **Observations of the Structure**

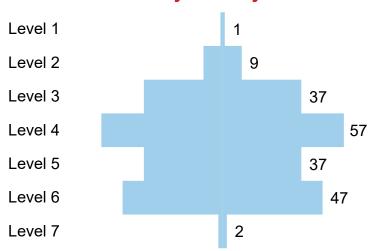
- Most aspects of the organizational structure for Administration look reasonable
- Administration consists of 654 employees, arranged in nine layers, of which 155 have supervisory positions
- The average span of control across supervisors is 4.2, which is the highest of the groups analyzed in this report, indicating a flatter structure
  - Specifically, 11% (17) of supervisors have spans of control that exceed Sibson's span-tolayer ratio rule. However, these supervisors oversee employees in lower skilled jobs with routine work, such as housekeeping and other facilities operations positions, and can therefore can support wider spans
  - Additionally, this explains the large spike to the average span of control specifically at level six

## **Finance**

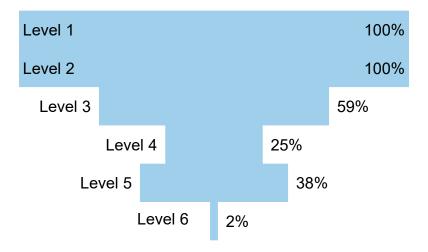
#### **Exhibit B1**

		Headcount		Headcount Percentages			
Level	All	Non Supervisors			Supervisors		
1	1	0	1	0%	100%		
2	9	0	9	0%	100%		
3	37	15	22	41%	59%		
4	57	43	14	75%	25%		
5	37	23	14	62%	38%		
6	47	46	1	98%	2%		
7	2	2	0	100%	0%		
Total	190	129	61	68%	32%		

### **Headcount Pyramid by Level**



### **Percent Supervisors by Level**



## Finance

### **Exhibit B2**

		Spans Spans													
		1	2	3	4	5	6	7	8	9	Average Span of Control				
	7									1	9.0				
	6							1			7.0				
ģ	5						1				6.0				
ayers	4			4	1		1				3.7				
ت	3		3	4	4	2					3.4				
	2	15	8	6	4	3	1	1	1		2.6				
	Total	15	11	14	9	5	3	2	1	1	3.1				

### Finance

#### Observations of the Structure

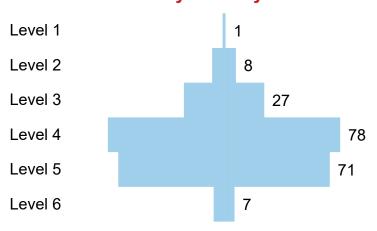
- > The Finance senior management area consists of 190 employees, arranged in seven layers, of which 61 (or 32%) have supervisory positions
- > The average span of control across supervisors is 3.1, which is the lowest of the groups analyzed in this report, indicating a more hierarchical structure
- Overall, most aspects of the organizational structure look respectable, with a few individual outliers for which further commentary is provided below
  - 36% (22 out of 61) of supervisors have spans of control less than their respective layers of oversight (i.e., a span to layers ratio less than one). This is largely due to many supervisors (15) having only one direct report
    - Three of these supervisors currently manage additional non-salaried employees not shown on data, and another three have vacant positions reporting to them
    - Six of these managers with too few direct reports were identified as working in distinct areas on small teams where the supervisor serves more as a senior contributor to his/her direct report
  - The average span of control for those with four layers of oversight is only 3.7. This is primarily due to managers with complex roles and highly varied tasks
- > Additionally, there were two supervisors noted whose span of control exceeds Sibson's span-tolayer ratio rule. However, these employees, both Accounts Payable Supervisors, oversee employees in jobs with routine or similar work, and can therefore can support wider spans

## Outreach & International Affairs

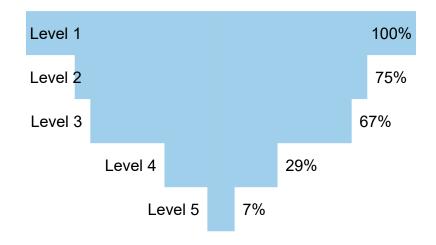
#### **Exhibit C1**

		Headcount		Headcount Percentages			
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors		
1	1	0	1	0%	100%		
2	8	2	6	25%	75%		
3	27	9	18	33%	67%		
4	78	55	23	71%	29%		
5	71	66	5	93%	7%		
6	7	7	0	100%	0%		
Total	192	139	53	72%	28%		

### **Headcount Pyramid by Level**



### **Percent Supervisors by Level**



## Outreach & International Affairs

#### **Exhibit C2**

		Spans Spans													
		1	2	3	4	5	6	7	8	9	10	11	12	13	Average Span of Control
	6								1						8.0
	5					1		1							6.0
ers	4		1		1				2		·				5.5
Lay	3	2	1	6	1	1		1	1					1	4.2
	2	14	6	3	1	3	3	1			4	1			2.8
	Total	16	8	9	3	5	3	3	4			1		1	3.6

## Outreach & International Affairs continued

#### Observations of the Structure

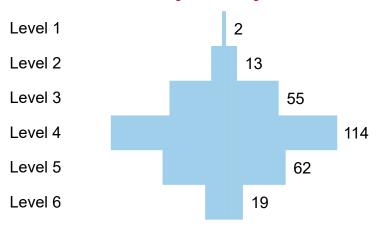
- Outreach and International Affairs consists of 192 employees, arranged in six layers, of which 53 have supervisory positions
- > The average span of control across supervisors is 3.6, which borders on indicating a more hierarchical structure than expected
  - Specifically, 36% (19 out of 53) of supervisors have spans of control less than their respective layers of oversight (i.e., a span to layers ratio less than one), many of whom have only one direct report. However, although the data only indicated one direct report, in many cases, those supervisors also manage additional non-VT employees employed by Benchmark-Inn at Virginia Tech. In other instances, supervisors were identified as working on small teams where the supervisor serves more as a senior contributor to his/her direct report, such as the small HR team for the campus hotel
- Additionally, there were a few employees noted whose span of control exceeds Sibson's spanto-layer ratio rule. However, these supervisors oversee employees in jobs with routine or similar work

## **Provost**

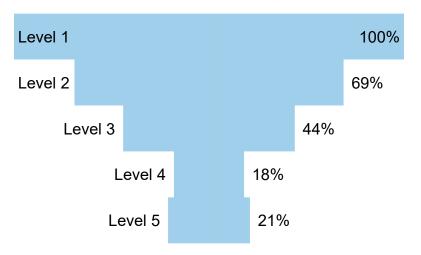
#### **Exhibit D1**

		Headcount		Headcount Percentages					
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors				
1	2	0	2	0%	100%				
2	13	4	9	31%	69%				
3	55	31	24	56%	44%				
4	114	93	21	82%	18%				
5	62	49	13	79%	21%				
6	19	19	0	100%	0%				
Total	265	196	69	74%	26%				

#### **Headcount Pyramid by Level**



#### **Percent Supervisors by Level**



## **Provost**

#### **Exhibit D2**

		Spans Spans															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Average Span of Control
	6										1						10.0
	5						1	3									6.8
ers	4			1	1	1	1	1	1	1							6.0
Lay	3		3	5	4		2								:		3.5
	2	15	14	5	2		2	2	1	1			1			1	3.1
	Total	15	17	11	7	1	6	6	2	2	1		1			1	3.8

#### **Provost**

#### Observations of the Structure

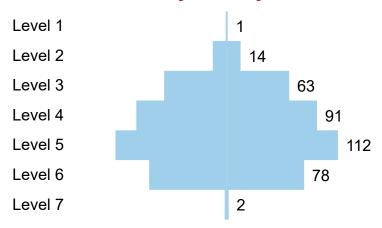
- The average span of control across supervisors is 3.8, which is average among senior management areas studied
- > The Provost senior management area consists of 265 employees, arranged in six layers, of which 69 have supervisory positions
- Overall, most aspects of the organizational structure look respectable, with a few individual outliers for which further commentary is provided below
  - 28% (19 out of 69) of supervisors have spans of control less than their respective layers of oversight (i.e., a span to layers ratio less than one). This is largely due to many supervisors (15) having only one direct report
  - These supervisors were mostly identified as generally working in distinct areas on small teams where the supervisor serves more as a senior contributor to his/her direct report. In other instances, the supervisor with too few direct reports was noted as having more of a specialist role in a complex area
- Additionally, there were some employees noted whose span of control exceeds Sibson's spanto-layer ratio rule. However, these supervisors oversee entry level employees in jobs with routine or similar work, such as application processors, academic advisors, registrars and instructors, and can therefore can support wider spans

## Information Technology

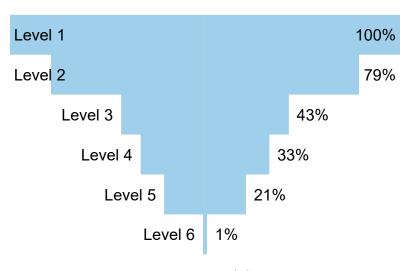
#### **Exhibit E1**

		Headcount		Headcount Percentages				
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors			
1	1	0	1	0%	100%			
2	14	3	11	21%	79%			
3	63	36	27	57%	43%			
4	91	61	30	67%	33%			
5	112	89	23	79%	21%			
6	78	77	1	99%	1%			
7	2	2	0	100%	0%			
Total	361	268	93	74%	26%			

#### **Headcount Pyramid by Level**



#### **Percent Supervisors by Level**



## Information Technology

#### **Exhibit E2**

			Spans Spans													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	Average Span of Control
	7														1	14.0
	6				1											4.0
ဖွာ	5					1	1					1	1		1	9.6
ayer	4	1		3		1	1									3.5
Ľ	3	4	3	2	8	1	1		2	1						3.8
	2	7	21	13	6	4		3	3		-		1			3.3
	Total	12	24	18	15	7	3	3	5	1		1	2		2	3.9

## Information Technology

#### Observations of the Structure

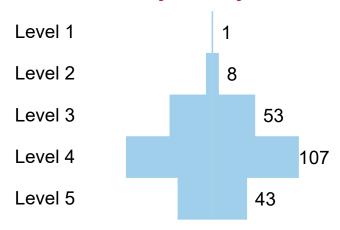
- Information Technology consists of 361 employees, arranged in seven layers, of which 93 have supervisory positions. Although technically arranged in seven layers, the lowest level of contributors consists of only two employees, suggesting there is at least one reporting tree that may be too hierarchical
- > The average span of control across supervisors is 3.9, which is among the highest of all groups analyzed in this report, indicating a flatter organizational structure than most other senior management areas at VT
- Overall, most aspects of the organizational structure look respectable, with a few individual outliers for which further commentary is provided below.
  - 20% (19 out of 93) of supervisors have spans of control less than their respective layers of oversight (i.e., a span to layers ratio less than one)
  - In some instances, this was due to the complex structure of leading multiple disciplines within one area, each with small teams where the supervisor serves more as a senior contributor to his/her direct report
- A few other supervisors were singled out for having possibly too few direct reports, however, after further analysis, those supervisors were identified as serving in roles that are either currently in transition to having more direct reports or have broader responsibilities.

## Advancement

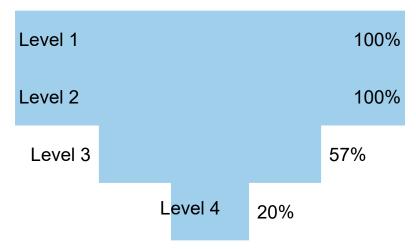
#### **Exhibit F1**

		Headcou	nt	Headcount Percentages						
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors					
1	1	0	1	0%	100%					
2	8	0	8	0%	100%					
3	53	23	30	43%	57%					
4	107	86	21	80%	20%					
5	43	43	0	100%	0%					
Total	212	152	60	72%	28%					

#### **Headcount Pyramid by Level**



#### **Percent Supervisors by Level**



## Advancement

#### **Exhibit F2**

		Spans														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	Average Span Of Control
	5								1							8.0
ဟ	4					1	1							1	1	9.5
ayers	3	4	1	3	1	4	2	:								3.6
ت	2	17	9	4	3	:	:		2							2.7
	Total	21	10	7	4	6	8	1	3					1	1	3.5

#### Advancement

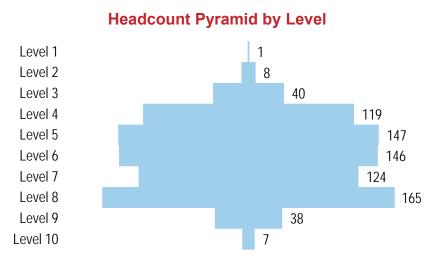
#### **Observations of the Structure**

- Most aspects of the organizational structure for Advancement look reasonable.
- Advancement consists of 212 employees, arranged in five layers, of which 60 have supervisory positions.
- > The average span of control across supervisors is 3.5, which borders on indicating a more hierarchical structure than expected.
- > 37% (22 out of 60) of supervisors have spans of control less than their respective layers of oversight (i.e., a span to layers ratio less than one), almost all of whom have only one direct report.
  - These supervisors were mostly identified as generally working on small teams within University Development where the supervisor serves more as a senior contributor to his/her direct report
  - Additionally, those in University Relations who work as a small team in geographically dispersed locations (not in Blacksburg), are expected to have more narrow spans of control
- > The supervisors whose spans of control exceeded Sibson's span-to-layer ratio rule, are seasoned managers whose primary focus is to be a leader / manager.

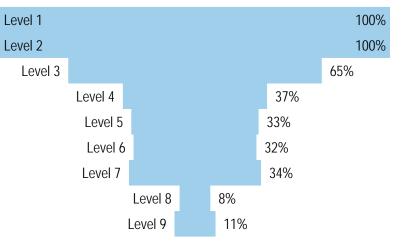
## Student Affairs

#### **Exhibit G1**

		Headcount		Headcount I	Percentages
Level	All	Non Supervisors	Supervisors	Non Supervisors	Supervisors
1	1	0	1	0%	100%
2	8	0	8	0%	100%
3	40	14	26	35%	65%
4	119	75	44	63%	37%
5	147	99	48	67%	33%
6	146	100	46	68%	32%
7	124	82	42	66%	34%
8	165	152	13	92%	8%
9	38	34	4	89%	11%
10	7	7	0	100%	0%
Total	795	563	232	71%	29%







## Student Affairs

#### **Exhibit G2**

											Sp	ans							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Average Span of Control
	10								1										8.0
	9										1								10.0
	8								1										8.0
	7	1				1													3.0
2	6						1	1	3						1				8.5
	5	2	4	1	2	3	1												3.2
	4		6	5	8	6	1	2			1							1	4.5
	3	15	15	11	6	3	3			1			1						2.8
	2	38	37	17	6	9	4	4	2		3			1			2		3.0
	Total	56	62	34	22	22	10	7	7	1	5		1	1	1		2	1	3.4

#### Student Affairs

#### **Observations of the Structure**

- On average, most aspects of the organizational structure look respectable.
- Student Affairs consists of 795 employees, arranged in ten layers, of which 232 have supervisory positions. Based on the size of the senior management area and our experiences, we would initially expected six to seven management layers.
- The average span of control across supervisors is 3.4, which is among the lowest of all groups. analyzed in this report, also indicating a more hierarchical structure.
- > 40% (92 out of 232) of supervisors have spans of control less than their respective layers of oversight (i.e., a span to layers ratio less than one). This is largely due to many supervisors (56) having only one direct report.
  - Those with only two or three layers of oversight can be either relatively new supervisors on a growing team, or generally work on small teams where the supervisor serves more as a senior contributor to his/her direct report
  - There were also a few senior employees with only one direct report, however, those were specific to Military Affairs (which is common for military structure), and Dining Services operations where a designed hierarchical chain of command is in place based on being an operator of health permitted areas in the Commonwealth, processing customer transactions, ordering, production and service of goods.
  - Others who fall below Sibson's spans to layers ratio have additional wage employees and/or oversee many student employees

#### Student Affairs

#### **Observations of the Structure** (continued)

- > A few other supervisors were singled out for having possibly too few direct reports, however, after further analysis, those supervisors were identified as serving in roles that are either currently in transition to having more direct reports or include more responsibilities than that of managing his/her direct reports.
- > The fourteen supervisors whose spans of control exceeded Sibson's span-to-layer ratio rule, were limited to lower skilled jobs, such as housekeeping and residential life coordinators, where the work is routine and wider spans are expected.

## **Conclusions**

- 1. Final Observations
- 2. Final Analysis



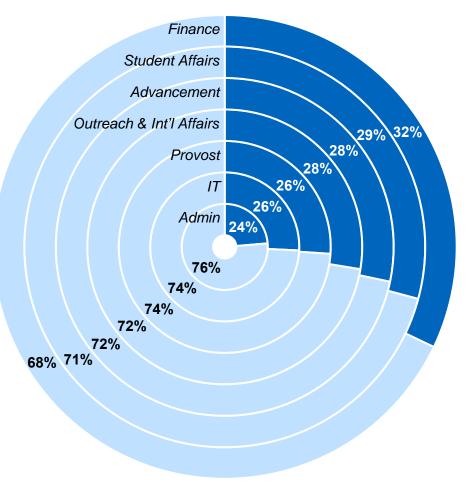
#### Final Observations

#### **Observations of the Senior Management Area Structures**

- Most aspects of the organizational structures look respectable.
- With an average span of 3.1, Finance's organizational structure is the most hierarchical. 61 of its 190 employees (or 32%) have supervisory roles.
- Conversely, with an average span of 4.2, Administration's organizational structure is the flattest. Less than one quarter of its employees manage others.

Senior Management Area	Average Span of Control
Finance	3.1
Student Affairs	3.4
Advancement	3.5
Outreach & Int'l Affairs	3.6
Provost	3.8
IT	3.9
Administration	4.2
Total	3.7

#### **Percent with Supervisory Responsibilities**



#### Final Observations

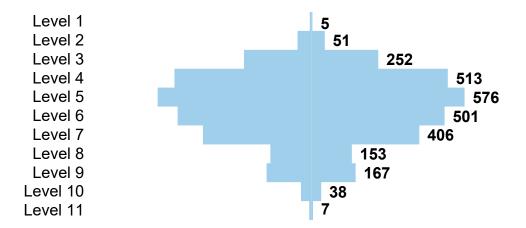
#### **Observations of the Senior Management Area Structures** (continued)

- Industry standards typically indicate an overall average of between 3.5 and 4.5 employees per supervisor, which puts Virginia Tech's overall average of 3.7 within industry standards.
- With the exception of Finance and Student Affairs, all analyzed areas are within industry standards in aggregate, with individual outliers noted in earlier sections of this report, where applicable.
  - Although Student Affairs makes the most use of "wage" employees (who were not considered in the quantitative analyses), arranged in ten layers, this area still seemed excessively hierarchical based on its overall size (795 full time employees)
  - 40% of supervisors in Student Affairs were identified as having too few direct reports, largely driven by 56 managers (primarily at lower levels) who have only one direct report
  - In Finance, the low average span of 3.1 was primarily due to managers at higher levels with too few direct reports. These managers were indicated to have complex roles with highly varied tasks, which may benefit from narrower spans of control. However, we recommend a closer look at these managers to see if they can each oversee additional direct reports

## Final Observations

#### **Observations of the Senior Management Area Structures** (continued)

- Overall, there were as many as 170 managers (or 23% of managers) who supervise only one direct report. As a percentage of total managers, this was most often observed in Advancement and Outreach & International Affairs. We recommend revisiting those supervisors with only one direct report to determine whether they are truly supervisory roles or if they should move to more of a senior individual contributor role.
  - In five of the areas studied, these relationships also unnecessarily create an additional level (and sometimes two) of management, as shown by the overall headcount pyramid below. The number of employees typically increases lower in the organization creating a pyramidlike structure
  - The decreases for Virginia Tech shown at levels 8 and 9 can be explained by some areas beginning at lower levels, but the sharp decreases at levels 10 and 11 may be unnecessary and are likely caused by managers with too few direct reports



## Final Analysis

#### **Final Analysis**

- > For those instances where spans of control were too narrow, we modeled some "what-if" scenarios to illustrate the impact of potential reconfigurations.
  - Although many of the 170 managers with only one direct report also oversee "wage" employees, we can assume that about half of the one-on-one relationships are inefficient. A more efficient structure might be obtained if these relationships were split and half of the managers were to take on responsibility for oversight and performance evaluations of the other managers' direct reports, allowing the remaining managers to focus on their role as a senior contributor
  - The net effect would be more proficient talent as well as a decrease in aggregate payroll spend, since fewer employees would receive a premium for their supervisory roles, while adding a second direct report to an employee who already manages others would not warrant as high an increase in compensation
  - Since these 170 employees are, on average, at level 5, we assume that the premium paid for supervisory responsibilities is about 23%
- We do not consider our formulation above to be literal. Rather, we view it as a proxy for what savings might be achievable through prudent redesign over time by conceiving of more efficient ways to operate and elevating the gross capabilities of the workforce. We view our analysis as an indicator of the possible.

# Spans and Layers

Virginia Tech Management Action Plan September 1, 2017

## JLARC Recommendation #3

Direct staff to perform a comprehensive review of the institution's organizational structure, including an analysis of spans of control and a review of staff activities and workload, and identify opportunities to streamline the organizational structure.

Boards should further direct staff to implement the recommendations of the review to streamline their organizational structures where possible.

- Over the last year, the university has completed the following:
  - Sibson Consulting completed review in August 2017
  - Reviewed spans and layers for full-time employees in seven administrative and academic support functions
  - Developed recommendations for improvements to the organizational structure
  - Provided recommendations to each senior manager
  - Adopted industry standard for application to university

The span of control should not typically exceed 2 to 3 times the number of management layers.

## JLARC Recommendation #4

Require periodic reports on average and median spans of control and the number of supervisors with six or fewer direct reports.

- Reporting and monitoring of spans and layers will be incorporated as part of HR Transformation Project and implementation of HR Business Partners across senior management areas.
- The university will provide the Board with a periodic report on the spans and layers.

## JLARC Recommendation #5

Direct staff to revise human resource policies to eliminate unnecessary supervisory positions by developing standards that establish and promote broader spans of control.

- As part of HR Transformation Project, Human Resources will:
  - Develop monitoring tools for senior management areas
  - Review HR practices and revise guidelines to reflect the adopted spans and layers standard





## Virginia Tech, India Update

Dr. Guru Ghosh

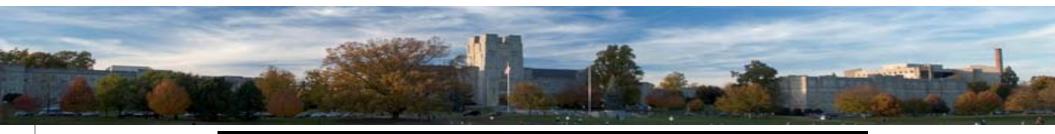
Outreach & International Affairs

Dr. Roop Mahajan

College of Engineering

BOV, Finance and Resource Management Committee September 11, 2017





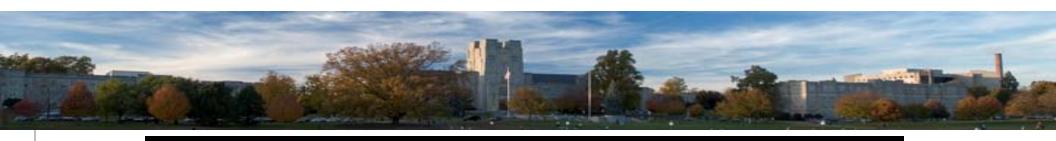
























## Virginia Tech India—Update

- □ Progress on all fronts
  - Education
  - Research
  - Industry Partnerships
  - Infrastructure
- ☐ Sustainable & bright future ahead





#### Personnel

- ☐ Ms. Priya Goutham hired as Deputy Director
  - Track record of accomplishments in educational start-ups and entrepreneurship
- ☐ Prof. S. Ekkad added as lead faculty on jet propulsion
  - Dr. Niharika Gurram, Oxford, to join VT India, Jan. 2019, as Research Scientist
  - Dr. Jaideep Pandit, Research Scientist, ME, VT to act as mentor
  - VT India: Five regular employees, two affiliate research scientists + six faculty affiliates from VT Blacksburg





#### **Education**

- ☐ Train the trainers faculty development
- □ Postgraduate Programs (non-credit) in areas of national interest and demand
  - Business Analytics
  - Energy Engineering
  - Aerospace Engineering
- ☐ Short courses for professionals
  - Additive Manufacturing
  - Data Analytics
  - Innovation and Management of Technology





## **Education**

## ■ Academic and Industrial Partners

NMIMS	NMIMS -	<b>5</b> 0.	Bennett		стѕ		
	Mumbai Punjab Agricultural University - PAU	BENETT DAVISORY	University IIIT Bangalore	IBM	IBM	Mahi an Mahi	nd
						<b>D</b>	D





## **Upcoming projects at a glance**



#### Faculty Development Program for Indian Universities

- Dec. 2017 Mumbai, Chennai
- June 2018 VT, USA



#### Postgraduate Program – Business Intelligence and Analytics

- Jan. 2018 (Chennai)
- June 2018 (Bangalore, Hyderabad, Pune)



#### **Short Term Courses**

- Manufacturing companies Dec 2017
- IT companies Jan 2018





#### Research

#### ■ Multifunctional and 2-D Materials

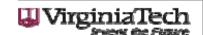
- Graphene coatings and foams
- Advanced multifunctional materials

## ☐ Sustainable Energy and Water

- Energy-efficient gas turbines
- Cost-effective, low-speed wind energy harvester
- Graphene for water purification

## □ Aerospace Engineering

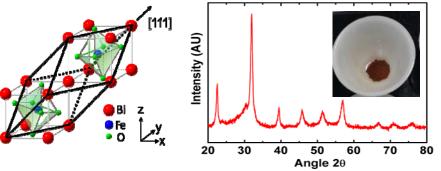
- A Drag Sail Type Horizontal Axis Wind Turbine
- Composite Design of a Multipurpose FAR 23 Aircraft
- Fatigue and Fracture of a Critical Load Aero Structure





### Engineering at the nanoscale ...

☐ Project 1 : BiFeO<sub>3</sub> nanoparticles for sensing applications –



□ BiFeO<sub>3</sub> nanoparticles of size < 20 nm have been synthesized for sensing application. Targeting to achieve < 10 nm before functional characterization</li>

#### □ Project 2 : Graphene for thermal management of electronic devices -

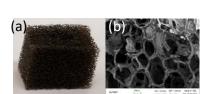
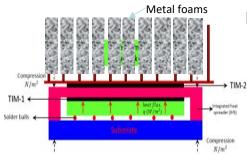


Fig. Free-standing graphene sponge
(a) optical image, (b) SEM image.



To utilize the giant thermal conductivity of graphene, we are developing the graphene based thermal management solutions for electronic devices



### **Outreach**

### **□** Industry

- Mahindra & Mahindra
  - An anchor partner in research and education
    - Precision agriculture
    - Tractor design: Mechanical Engineering and ICTAS
    - > Robotic arm for grape harvesting and tractor operator fatigue
- Rolls Royce, GE, and other jet engine companies

### ☐ Academic and research institutions

- TATA companies
- Vellore Institute of Technology
- IIT- Madras and IIT-Kharagpur
- Punjab Agriculture University





### **Finances**

### India Funding (FY 13 - FY18)

VT Central funding	\$1,566,444	91%		
Other funding: OIA and ICTAS	<u>\$ 155,195</u>	9%		

**Total funding** \$1,721,639

### **Startup Costs**

Equipment & operations \$ 998,292 Salaries \$ 205,380

Total expenditure \$1,203,672

**Balance** \$ 517,967





# **Projected net revenues**

Education (US \$)								
Details	Duration	2017-18	2018-19	2019-20				
Short Term Professional Courses	3-day to 2-week	25,000	150,000	200,000				
Postgraduate Programs	12-15 Months	75,000	200,000	250,000				
Total		100,000	350,000	450,000				
R&D (US \$)		-	100,000	250,000				
Total		100,000	450,000	700,000				







## Review and Acceptance of the Update on the Development of the Virginia Tech – Applied Research Corporation Business Plan

#### FINANCE AND RESOURCE MANAGEMENT COMMITTEE

August 7, 2017

#### **Background**

The Committee reviewed and approved a resolution during its November 2016 meeting authorizing the university to forgive and discharge a loan to the Virginia Tech - Applied Research Corporation (VT-ARC) in the amount of \$2 million. The resolution further required the VT-ARC to develop a business plan to define the financial and operational activities going forward. Attachment A, included herein, is the report and resolution approved by the Board at the November 2016 meeting. This report provides an update on the status of the VT-ARC business plan efforts since the November meeting.

#### Status of the VT-ARC Business Plan

The VT-ARC initiated work on the development of a comprehensive business plan in December 2016. The plan outline mirrors the university's business plan template which includes an assessment of traditional elements of mission, vision, and strategy; organizational structure, functions, and staffing requirements; core products, services, marketing strategy, and pricing strategy; detailed revenue and expense projections; and risk assessment and mitigation strategies.

VT-ARC leadership presented draft versions of the business plan to their Board in May 2017 and the Board called a special meeting in July 2017 for the sole purpose of reviewing the final draft of the plan. At the July meeting, the VT-ARC Board reviewed, discussed, and provided comments on the principle elements and the strategies of the business plan. Based on this input, VT-ARC leadership finalized the plan, and the Board approved it at its August meeting. It is the expectation of the VT-ARC Board that the business will continue its operations as a related corporation under an Affiliation Agreement with the university.

#### **Review of the VT-ARC Business Plan**

The VT-ARC was created to compliment the university's research offerings by providing an entity that could easily pursue extramural funding opportunities that are difficult to access at a publicly funded research university. In this role, VT-ARC can serve as a platform for the Virginia Tech research ecosystem to partner with new and more operationally oriented customers beyond the traditional federal R&D funding agencies. In addition, VT-ARC can accept certain legal and regulatory requirements frequently found in contracts for applied research provisions that make compliance difficult for the

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university, including choice of law, insurance requirements, indemnities and total time accounting. An organization focused on applied research and compliance with these types of provisions serves as an important compliment and to the research offerings provided by the university. Thus, the university views VT-ARC as an important asset to its research portfolio and believes that it will support Virginia Tech's research mission and long-term goals.

The plan projects that VT-ARC will be entirely self-supporting beginning in fiscal year 2018, inclusive of annual payments to retire an outstanding \$3 million loan to the Virginia Tech Foundation. This performance is based on the award of a significant financial contract in fiscal year 2017, additional opportunities presented from that contract, and renegotiation of terms to renew or extend existing multi-year contracts. The VT-ARC's plan to enhance opportunities to capture future contracts and sustain a self-supporting posture beyond fiscal year 2018 includes refocusing core functions and business development efforts to better align with customer needs, strengthening relationships between the VT-ARC and the university's research programs, and continued efforts to control fixed costs.

With the Committee's acceptance of this report informing the completion of the business plan in accordance with the November 2016 resolution, the university intends to move forward to forgive and discharge the outstanding \$2 million loan balance. Forgiving the loan will reduce VT-ARC's fixed costs, allowing for positive cash flows to streamline business development efforts in the shortest possible time, which is a top priority for the university.

**RECOMMENDATION**: That the Report on the Update of the Development of the Virginia Tech – Applied Research Corporation Business Plan be accepted by the Finance and Resource Management Committee.

## RESOLUTION FOR THE AUTHORITY TO FORGIVE AND DISCHARGE LOANS TO THE VIRGINIA TECH - APPLIED RESEARCH CORPORATION

#### FINANCE AND AUDIT COMMITTEE

#### **September 26, 2016**

The Committee received an update on the operations of the Virginia Tech-Applied Research Corporation (VT-ARC) during its August 2016 meeting. The Committee asked for periodic updates in the future as needed for the Committee to understand the evolving status of VT-ARC. This report provides additional information on VT-ARC's status. The report also includes a resolution for the proposed discharge of a loan from the university to VT-ARC.

#### **Background**

VT-ARC was created as a separately incorporated affiliated organization to pursue externally funded applied research opportunities that are not reasonable to be conducted within the university because of factors such as cost accounting requirements, business risk, and joint ventures. The focus of the efforts of VT-ARC has been in the National Capital Region, although some personnel and activities occur in Blacksburg.

#### **Operations and Activities**

VT-ARC began operations in 2011. The funding for the initial phase of the operations and the investment in equipment and specialized facilities improvements needed for the research programs was provided by the Virginia Tech Foundation (VTF).

As described to the Committee during its August 2016 meeting, VT-ARC has experienced mixed operating results since its initial operating activities. Several factors contributed to this situation, including: a) the federal budget and sequestration actions which dampened and delayed the ability to obtain federally funded contracts, b) the expenses necessary to attract and hire highly qualified, professional staff who have the talent to identify and secure contracts from government and industry, c) the identified need for secure space in the National Capital Region, and d) limited engagement of research faculty at Virginia Tech with VT-ARC.

#### **Status of Financing Activities**

Consistent with the initial business forecasts for VT-ARC, it was anticipated that the initial funding from the VTF would be sufficient as start-up funding and that the corporation would quickly gear up its business activities, resulting in incremental revenues at levels needed to generate revenues to become self-sufficient. However, VT-ARC's success in obtaining externally funded contracts was slower than originally anticipated, and over time additional

1

Presentation Date: November 7, 2016

investments for working capital have been needed. With the business development efforts both slower and at lower amounts than anticipated, the VTF also agreed to provide supplemental operational funding to provide additional time to transition out of the start-up environment.

While operating performance improved gradually, the university subsequently realized that additional support would be needed to support VT-ARC's ongoing working capital needs. In response, the university and the VTF jointly developed an additional \$4 million line of credit for VT-ARC, with each entity supporting \$2 million of the line of credit.

Under authorities granted by the Restructuring Act, the Board of Visitors authorized the university to loan VT-ARC up to \$2 million at the November 18, 2013 meeting. This loan was to provide the university's share of the line of credit for VT-ARC's working capital needs during an extended start-up phase. The university has loaned the full \$2 million to VT-ARC.

During fiscal year 2015, VT-ARC continued to obtain sponsored funding, but was unable to generate funding at levels sufficient to cover all operating costs and break even. The corporation continued to rely on draws from the line of credit from the university and the VTF to cover its operating cash flow shortfalls.

In the spring of 2015, the university assessed the operations of VT-ARC and asked the corporation to explore its business options, including a suspension of operations, the sale of all or certain assets, and continuation of current operations. VT-ARC's Board established a subcommittee to explore these options

During fiscal year 2016, as this subcommittee continued its work, VT-ARC continued full operations and relied on the remaining line of credit funding from the VTF to cover its operating cash flow requirements. The work of the VT-ARC subcommittee was completed in June of 2016. The subcommittee supported a proposal to restructure the relationship of the VT-ARC with the university's research programs and to continue operations in an effort to strengthen and grow the impact of VT-ARC on the university's research operations. The work of that subcommittee, and its recommendations, were reviewed with the Finance and Audit Committee of the Board of Visitors during its August 2016 meeting.

As a result, VT-ARC is continuing to operate as a related corporation during fiscal year 2017 and to comply with the requirements of their Affiliation Agreement with the university. The activities to restructure and reinvent VT-ARC are being led by the Vice President for Research and Innovation, working closely with the new CEO of VT-ARC. The university continues to believe that these efforts have a good chance of successfully positioning VT-ARC for long-term success, in support of Virginia Tech's research goals and mission.

#### Write-off of VT-ARC Note Receivable

As mentioned above, in November 2013, the Board of Visitors authorized the university to loan VT-ARC up to \$2 million to help fund its start-up operations, and the university has loaned the full amount authorized. While VT-ARC has been successful at obtaining sponsored projects, revenue and cash flow has not achieved the level sufficient to breakeven and to repay the loans and related interest expense to the university and the VTF.

As a part of the evaluation of VT-ARC's potential to make significant contributions to the future research initiatives of the university in the National Capital Region, the university recognized that it is very unlikely during the next several years that VT-ARC would be able to obtain sponsored projects to generate cash flow sufficient to repay the loans held by the university and the VTF.

As a result, the university is proposing to write-off the \$2 million note receivable from VT-ARC. In conjunction with the university's proposed action, in October 2016 the VTF wrote-off and discharged all amounts loaned to VT-ARC, with the exception of \$3 million.

The write-off and full discharge of the loans due from VT-ARC to the university and VTF are critical actions in VT-ARC's efforts to improve the financial viability of the organization. The forgiveness of debt by both the university and the VTF, with a portion of the VTF debt restructured to provide a realistic fixed repayment period, will assist VT-ARC to reduce the fixed costs which contributed to the ongoing operating cash flow deficits produced in prior years.

In order for VT-ARC to write-off the note payable to the university from their financial statements as of June 30, 2016, the university must formally discharge the debt owed by VT-ARC.

## RESOLUTION FOR THE AUTHORITY TO FORGIVE AND DISCHARGE LOANS TO THE VIRGINIA TECH -APPLIED RESEARCH CORPORATION

**WHEREAS**, the university's strategic plan envisions the expansion of the research enterprise and the development of innovative and cutting edge technology; and

**WHEREAS**, the university established the Virginia Tech - Applied Research Corporation (VT-ARC) as a university related corporation to access research opportunities not easily accomplished within the university structure and to leverage the basic and scholarly research performed within the university; and

**WHEREAS**, the university requested that the Virginia Tech Foundation (VTF) provide the initial capital for operations and specialized facilities improvement with the intent that such funds will be repaid from the future operations of VT-ARC; and

**WHEREAS**, the university partnered with the VTF to support VT-ARC through the provision of funding from nongeneral fund sources of \$2 million in loans to finance ongoing operations and to provide VT-ARC the opportunity to reach a sustainable level of external grants and contracts funding; and

**WHEREAS**, VT-ARC has been able to obtain some sponsored funding; however, it is not sufficient to cover operating costs and break-even; and

**WHEREAS**, based on the work of a committee formed to determine the future of VT-ARC, university management decided that VT-ARC should be restructured because of its potential to significantly contribute to the university's research programs and destination area priorities; and

**WHEREAS**, forgiveness of debt by both the university and the VTF, with a portion of the VTF debt restructured to provide a realistic fixed repayment period, is needed to significantly improve the financial viability of VT-ARC; and to reduce the fixed costs which contributed to ongoing operating cash flow deficits; and

**WHEREAS**, under section 23.1-1010 of Restructured Higher Education Financial and Administrative Operations Act of the Code of Virginia the Board of Visitors has the authority to authorize such transactions and also to forgive and fully discharge such loans;

**NOW, THEREFORE BE IT RESOLVED**, that the Board of Visitors authorizes, at the President's discretion, the negotiation and execution of the agreements to forgive and discharge the \$2 million loaned by the university to VT-ARC for start-up funding plus any accrued interest expense.

**BE IT FURTHER RESOLVED**, that the Board of Visitors requires the development of a business plan to guide the operations of the VT-ARC for 2016-17 and future years and to strengthen the financial and operational activities of the VT-ARC.

#### **RECOMMENDATION:**

That the resolution authorizing, at the President's discretion, the negotiation and execution of the agreements to forgive and discharge the \$2 million loaned to VT-ARC for start-up funding plus any accrued interest expense, be approved.



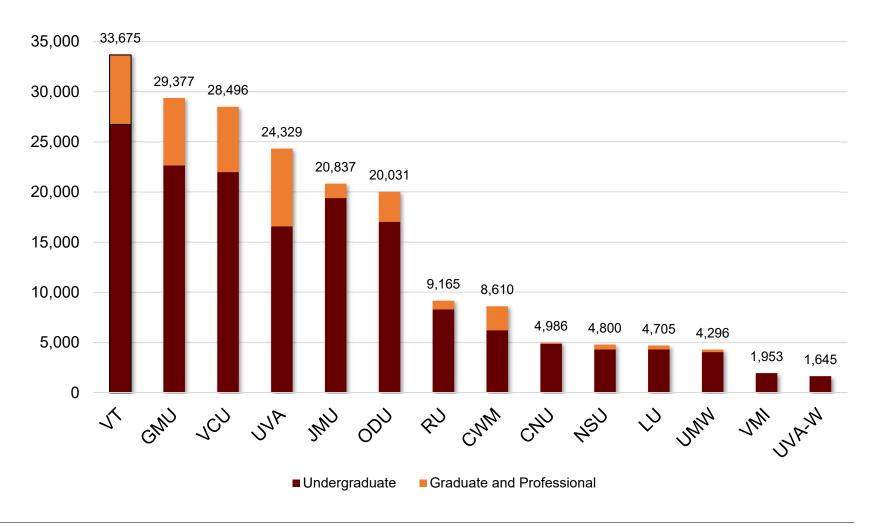
# Fall 2017 Enrollment – Financial Impact

Virginia Tech Board of Visitors Finance and Resource Management September 11, 2017



# Virginia Public Enrollment

Virginia Tech delivers more credit hours (FTE) than any other public four-year institution in the Commonwealth.

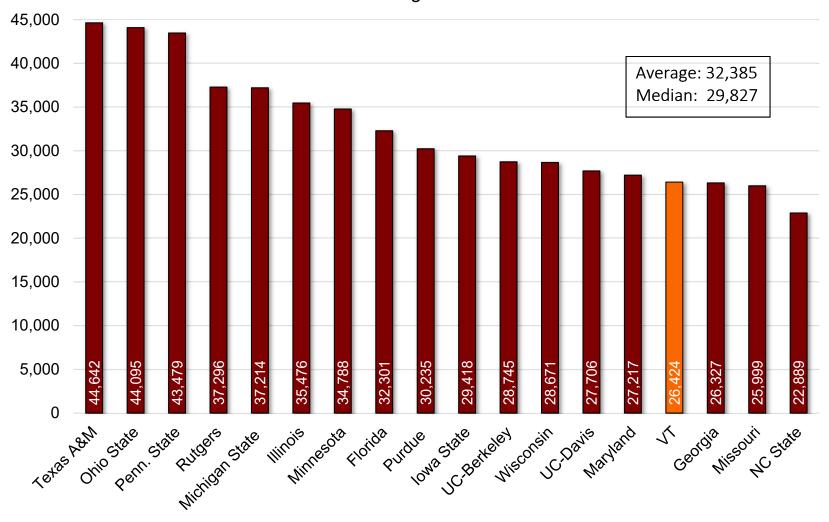


Source: SCHEV



# Public Land-grant Research Universities

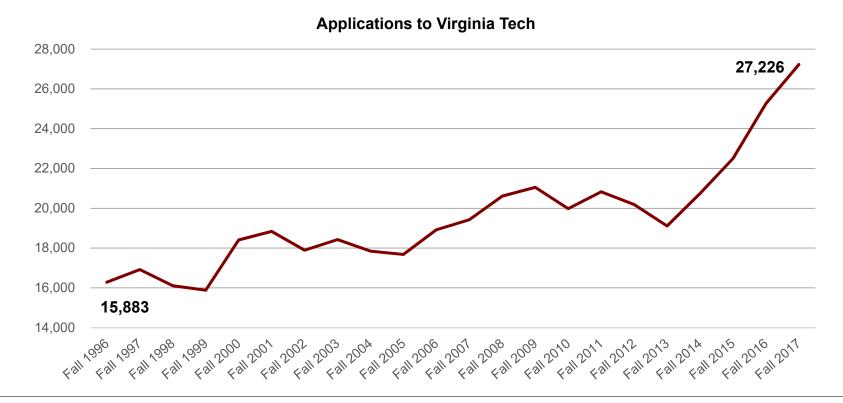
FY16 Undergraduate FTE





# Growing Demand for a Virginia Tech Education

- We are experiencing a significant increase in demand, and undergraduate applications reached a new high for Fall 2017 admission.
- Demand is broad-based and includes several areas where Virginia Tech is in a unique position to provide additional access to qualified students.





# **Enrollment Growth**

- Growing undergraduate enrollment will allow Virginia Tech to support the evolving funding model for higher education
  - Provide resources: In an environment of constrained tuition and General Fund resources, scale can support growing costs.
  - Expanding Access/Affordability: Additional enrollment allows for scaling of costs, reduced pressure on tuition increases, and generates net revenue to enhance financial aid and pathway programs for Virginia undergraduates.
  - Growing Research Activity: Additional faculty lead to increased research activities, resulting in economic activity for Virginia.
- Measured steps: assessment at each step before taking next.



# 6 Year Enrollment Plan (2B)

### Headcount On-Campus

	Actual	Projected							
Student Group	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022		
Entering Freshmen	5,872	6,265	6,265	6,265	6,265	6,265	6,265		
Continuing and Transfer Undergraduates	19,919	20,474	21,284	21,516	21,903	22,006	22,014		
Total Undergraduate	25,791	26,739	27,549	27,781	28,168	28,271	28,279		
Masters and Doctoral	6,890	7,199	7,473	7,724	7,949	8,181	8,453		
Veterinary Medicine	489	480	480	480	480	480	480		
School of Medicine	0	0	168	168	168	168	168		
Total Graduate	7,379	7,679	8,121	8,372	8,597	8,829	9,101		
Total Enrollment	33,170	34,418	35,670	36,153	36,765	37,100	37,380		

# WirginiaTech Annual Enrollment Timeline

- Summer: University monitors leading indicators
- Variability from week to week as students attend orientation and/or register for classes
- Estimate based on historical patterns
  - Patterns vary
    - Graduate lags undergraduate
    - Off-campus lags main campus
  - Patterns evolve
    - Current year lags prior by a week
    - Strong student continuation rates are strengthening
    - Decreasing time to graduation
- September 25, 2017: Census date
  - Final enrollment is known
  - In-state and Out-of-State determination
  - Total Student Financial Aid commitments understood



# Update – Fall 2017

- Measure revenue based on Census date at September 25
- Expect positive variance
- Current indications are
  - Strength in freshmen class
  - Strength in continuing undergraduates



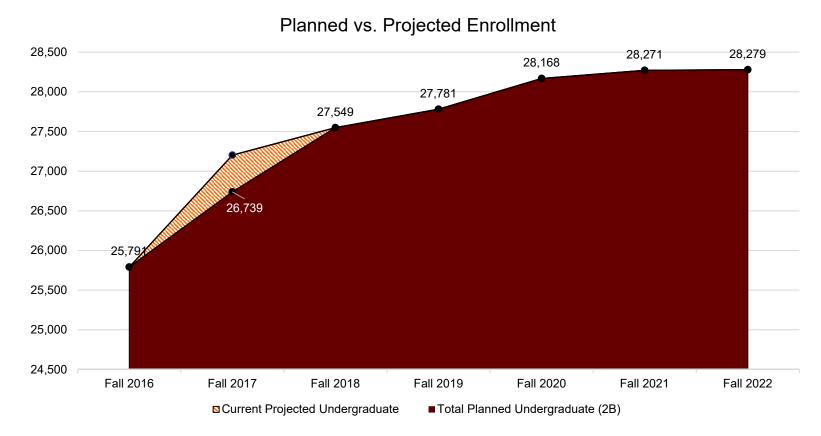
# **Actions**

- Hold as one-time, roll into base budget next year
- Increased cost of Student Financial Aid from additional number of students
- Additional instructional support will be allocation through PIBB beyond the original allocation after census.
- Advance plans for academic support services (e.g. advisors, Learning Systems, services for student's with disabilities) that were pending the identification of additional resources.
- Support student services (e.g. student counseling, student housing)



# **Update**

- Reverses trend of prior year
- The Fall 2017 undergraduate enrollment variance is within the multi-year plan, and represents a portion of the Fall 2018 enrollment goals.
- Revenue from this enrollment is an advance of 2018-19 resources.





# **Next Steps**

- Determine final variances after Census: September 25
  - On and Off-campus; undergraduate and graduate
- Recognize actual one-time variance, net of student financial aid
- Re-run PIBB model to generate additional support for college academic programs
- Consider need to recalibrate multiple-year enrollment plan
- Bring update back through the Quarterly Financial Performance Report



# **Discussion**

#### Update on the Capital Outlay Plan for 2018-2024

### JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

August 1, 2017

#### **Background:**

At its April 2017 meeting, the Board of Visitors reviewed a resolution requesting approval of the University's 2018-2024 Capital Outlay Plan (Plan) and authorization to submit an updated Capital Plan to the state, in accordance with future guidance from the state and based on the projects on the approved list. The resolution was approved, and the university has proceeded accordingly.

On June 5, 2017, the state issued instructions for the preparation and submission of the 2018-2024 Capital Outlay Plan. The deadline for submission of the Six-Year Capital Outlay Plan to the state was July 7, 2017, and the university prepared and submitted the plan by the due date. The state instructions required submission of only projects requesting some portion of General Fund resources in their budget.

Attachment A shows the list of projects with General Fund support submitted to the state with the listing ranked in priority order for state support. This project arrangement reflects the needs of the university, priorities of the state, and positions the university with options to respond to various funding abilities of the state in the future. The list of items is consistent with the list approved by the Board of Visitors at its April 2017 meeting, with a few minor adjustments for refined project costs and fund splits.

#### **State Capital Budget Review and Approval Process:**

The General Fund projects on Attachment A may be included by the state to update its capital outlay plan and to make funding decisions in the 2018 General Assembly.

The next steps for the state's 2018 budget session include at least five major phases as summarized below:

- 1) A state appointed Six-Year Capital Outlay Plan Advisory Committee (staffed by several central agencies and offices) will review all 2018-2024 capital plans submitted by agencies and institutions over the summer of 2017. This phase will include ongoing interactions between the state and the university to position its projects.
- 2) By November 1, 2017, the Advisory Committee will provide a set of recommendations to the Governor, Chairman of the Senate Finance Committee,

1

- and Chairman of House Appropriations Committee to update the state's capital outlay plan for the 2018-2024 period.
- 3) On December 18, 2017, the Governor is scheduled to present to the General Assembly a bill proposing the state's updated capital outlay plan and a budget bill including planning funds or full funding for high priority items in the plan.
- 4) The legislature may amend the proposed plan and the proposed funding program in the Executive Budget Bill during the 2018 General Assembly. Depending on the overall size of the capital program and the amount of General Fund support for its projects, the University may submit legislative amendments for projects. This phase includes ongoing interactions by the university until a budget bill is passed.
- 5) On July 1, 2018, the state's updated 2018-2024 plan, capital funding program, and list of projects for the 2018-2020 biennium becomes effective.

#### Early Indications of State Capital Funding for the 2018-2020 Biennium:

Preliminary signals from Six-Year Capital Outlay Plan Advisory Committee indicate modest capital funding expectations for the 2018-2020 biennium. The state funds nearly all of its capital program with external debt and actively manages debt to a five percent debt burden ratio as part of a strategy to preserve its AAA Credit Rating. The large capital funding program for the 2016-2018 biennia combined with revenue performance in fiscal year 2018 has consumed projected debt capacity through fiscal year 2019. The recovery of debt capacity may accelerate or subdue based on the pace of revenue growth.

The total dollar value of General Fund items listed in Attachment A exceeds projected resources likely to be allocated to Virginia Tech from the state during the planning period. Including a variety (large, small, new construction, renovation) of high priority needs in the listing ensures the university has some flexibility to adapt to various state capital funding programs that may emerge over the next nine months.

#### **Nongeneral Fund Projects and University Debt:**

The university Six-Year Capital Outlay Plan also includes projects with 100 percent nongeneral fund support and these are shown on a separate schedule (Attachment B) because they do not compete for General Fund resources. The state instructions for this submission specified not to submit any projects supported entirely with nongeneral fund resources. Under the university's Management Agreement for Capital Projects, the state has authorized the Board of Visitors to approve and implement projects supported 100 percent by nongeneral funds. Each project must be individually approved by the Board of Visitors. Under this authority, the university may bring resolutions to the Board to initiate projects from the Plan independent of the state budget process. When the university is prepared to initiate a project supported entirely with nongeneral funds, including a financing plan, the university submits a capital

project resolution to the Board for consideration. The list in Attachment B includes the high priority projects for which nongeneral fund resources are anticipated to be sufficient to start a project during the six-year period or for which a private fund raising campaign is a high priority.

Projects with nongeneral fund support, including portions of some gift campaigns, may use external debt to finance a portion of the budget. Each potential debt financing undergoes a financial feasibility assessment to ensure resources are sufficient to cover the full debt service term without unnecessary financial risk to the unit's operations. The positioning of debt is further analyzed to ensure the university does not exceed the parameters of the university debt policy and guidance from the Board of Visitors, which has consistently held the maximum allowable debt ratio (total annual debt service to total operating expenses) to below five percent. The university projects the debt ratio analysis six-years out and includes anticipated issuances for projects in the Plan in the analysis. This practice provides an important check to ensure the institution's debt obligations do not become a point of inflexibility in reaching the operational goals of the institution and to ensure the university is holding sufficient debt capacity for its highest priorities.

A brief narrative description of each project on Attachment A and Attachment B is shown on Attachment C.

#### Attachment A

#### General Fund Six-Year Capital Outlay Plan for 2018-2024

#### as of August 1, 2017

		Dollars in Thousands				
		General Fund		Nongeneral Fund		Total
Universit	y Division					
1	Undergraduate Instruction Science Laboratory	\$ 75,000	\$	-	\$	75,000
2	Global Business and Analytics Complex Data Analytics and Decision Sciences Building College of Business Building Global and International Programs Honors Program Space Living Learning Community Residence Halls	75,000 - - - - - 75,000		75,000 10,000 5,100 73,500 163,600		75,000 75,000 10,000 5,100 73,500 238,600
3	Randolph Hall Replacement	155,125		27,375		182,500
4	Corps Leadership and Military Sciences Building	29,900		20,000		49,900
5	Robeson Hall Renovation	44,600		-		44,600
6	Academic Support and Student Success Center	14,800		-		14,800
7	Renovate/Replace Brooks Center	6,750		-		6,750
8	Life, Health, Safety, Code Compliance Package Fire Alarms and Building Accessibility Library Code Compliance	5,500 5,500 11,000		- - -		5,500 5,500 11,000
	Total University Division Projects	\$ 412,175	\$	210,975	\$	623,150
Cooperat	ive Extension / Agriculture Experiment Station					
1	Global Systems Sciences Buildings	\$ 94,400	\$	-	\$	94,400
2	Animal Production and Livestock Facilities Phase II	24,300		-		24,300
3	Center Woods Complex Improvements	5,600				5,600
	Total CE/AES Division Projects	\$ 124,300	\$		\$	124,300
Gra	nd Total of General Fund Capital Plan for 2018-2024	\$ 536,475	\$	210,975	\$	747,450

#### Attachment B

# Nongeneral Fund Six-Year Capital Outlay Plan for 2018-2024 as of August 1, 2017

	Dollars in Thousands					
	General Fund		Nongeneral Fund			Total
Intelligent Infrastructure Complex	Φ.		•	45.000	Φ.	45.000
Hitt Hall	\$	-	\$	15,000	\$	15,000
Intelligent Infrastructure Building		-		10,000		10,000
Smart Dining Hall		-		25,000		25,000
Smart Design and Construction Complex (Plantation Rd)		-		7,500		7,500
Intern Hub (VTTI)		-		2,000		2,000
Rural Smart Track				10,000		10,000
		-		69,500		69,500
Health Sciences and Technology						
Comparative Oncology Center		-		12,375		12,375
Translational Medicine, Phase 1		-		21,000		21,000
		-		33,375		33,375
Creativity and Innovation District						
Academic Space		-		8,250		8,250
Innovation and Athletics Residential Programs, 500 beds		-		57,000		57,000
		-		65,250		65,250
Academic Quality						
Applied Projects Building (CRC)		-		8,400		8,400
Enterprise / High Performance Computing Data Center		-		5,500		5,500
Falls Church property acquisition		-		3,350		3,350
		-		17,250		17,250
Student Experience						
Student Wellness Services		-		55,000		55,000
Dietrick Hall Dining Renovation and Expansion		-		5,000		5,000
Food Processing Center and Warehouse		-		7,000		7,000
Residential Renovations of 1000 beds by 2024		-		55,000		55,000
Dietrick Plaza Improvements		-		2,000		2,000
Owens Hall Renewal		-		57,000		57,000
		-		181,000		181,000
Athletics Facility Improvements						
ACC Broadcasting studio expansion		_		4,000		4,000
Tennis Stadium Expansion		_		4,000		4,000
Cassell Coliseum Entrance Improvements		_		2,500		2,500
Athlete Nutrition Center, 250 seats		_		10,800		10,800
, ,, <u></u>		-		21,300		21,300
Building Envelope Renewals				37,750		37,750
Grand Total of Nongeneral Fund Capital Plan for 2018-2024	\$	_	\$	425,425	\$	425,425
GRAND TOTAL SIX-YEAR CAPITAL OUTLAY PLAN	\$ 536,	47 <u>5</u>	\$	636,400	\$	1,172,875

#### Attachment C

#### Project Descriptions for the 2018-2024 Capital Outlay Plan

## JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

August 1, 2017

#### General Fund Projects:

#### **University Division**

#### 1. Undergraduate Science Laboratory Building

This project is essential for accommodating the university's growing demand for STEM-H degrees. The proposed project envisions a new facility of 102,000 gross square feet of high quality instructional laboratories for basic and upper division sciences that will be located proximal to the new Classroom Building.

#### 2. Global Business and Analytics Complex

The overall project includes five major components. The Data Analytics and Decision Sciences Building calls for 100 percent state support and will be submitted as part of the state General Fund capital plan. Entirely nongeneral fund financing strategies have been developed for the remaining four components and include a new facility for the Pamplin College of Business, new living-learning community residence halls, a Global and International Affairs facility, and space for the Honors College. These components will be authorized under the University's restructuring authority.

#### 3. Randolph Hall Replacement

Randolph Hall was constructed in 1952 with an addition in 1959, and no major renovations since the construction was completed. The project envisions razing and replacing the entire 166,000 gross square foot existing building in phases and constructing a new building of approximately 284,000 gross square feet at the same site.

#### 4. Corps Leadership and Military Science Building

The Corps Leadership and Military Science Building envisions a 75,460 gross square foot building to provide permanent space for Corps of Cadets and ROTC programs that are currently dispersed on the north area of campus. The proposed building location is in the northern portion of the existing Upper Quad near Lane Hall.

#### 5. Robeson Hall Renovation

Robeson Hall was constructed in 1960 and there have been no major improvements or renovations since the original construction. The project includes renovating the entire 67,000 gross square foot existing building to provide modern laboratories and support space to meet the needs for instructional classrooms and laboratory space for the physics programs.

#### 6. Academic Support and Student Success Center

The envisioned project includes 28,000 gross square feet of new construction for an Academic Support and Student Success Center located on Washington Street in proximity to the Student Services Building and Smith Career Services Buildings.

#### 7. Brooks Center Renewal

The Brooks Center facility is approximately 40 years old and is 35,000 gross square feet of office, classroom, conference room, and high bay laboratory space located on university property adjacent to the Corporate Research Center and across from the airport. The existing building is carrying a significant backlog of deferred maintenance. The project includes renovating the entire facility to provide modern high bay laboratory and support space to meet the needs for instructional and research laboratory space for the College of Natural Resources programs.

#### 8. Health and Safety Improvements

The university's health, safety, and accessibility initiative for the campus is an ongoing effort, and the university includes a request for this program in each capital plan. This project is to continue progress on needed campus improvements including accessibility improvements, fire alarm systems, and life safety repairs that are beyond the scope of the Maintenance Reserve program. This project includes addressing code compliance issues specific to the Newman Library (restroom renovations, access, and egress).

#### Cooperative Extension/Agricultural Experiment Station Division

#### 1. Global Systems Sciences Buildings

This project is to provide an additional 135,000 gross square foot research space that will focus on interdisciplinary plant sciences within the Agricultural Experiment Station including research laboratories, laboratory support space, research offices, faculty offices, and graduate student research space.

#### 2. Renew Animal Production and Livestock Research Facilities, Phase II

The agency has 37 facilities that support a variety of commercial agriculture industries in the Commonwealth. The assets total approximately 250,000 gross square feet, are generally 40 to 50 years-old, and have aged past their useful life. The state appropriated a first phase of the project which is underway. This project requests the second phase of improvements for 97,000 gross square feet to complete the program.

#### 3. Center Woods Complex Improvements

This project proposal is to renew the Center Woods Complex for the Fisheries and Wildlife program, located off Plantation Road, through a combination of renovations and replacements. This project envisions a total 28,000 gross square feet of new and refurbished mixed-use space that would include teaching and research space, offices, equipment storage and other support facilities.

#### Nongeneral Fund Projects:

#### **Intelligent Infrastructure Complex**

Intelligent Infrastructure and Human-Centered Communities is one of the five original Destination Areas, will be the pioneering implementation of a new interdisciplinary collaborative educational and research environment. This Destination Area focuses on three themes: smart transportation, smart construction, and smart energy. The overall vision of the Destination Area includes several facility improvements that will be a multiphased development occurring on the north side of campus, Plantation Road, and at the Virginia Tech Transportation Institute.

#### Hitt Hall

Hitt Hall is envisioned as a 26,000 gross square foot building to provide needed instruction and laboratory space, as well as faculty, staff, and graduate student work space for the growing School of Construction. It would be a joint venture between the College of Architecture, the College of Engineering, and the Department of Building Construction that brings together faculty and students from various discipline to advance the education and research in design and construction sciences.

#### Intelligent Infrastructure Building

The Intelligent Infrastructure Building, located adjacent to Hitt Hall, is envisioned as part of a multi-use building containing 15,000 gross square feet of Makers Laboratory space that would be an innovative learning environment to promote interdisciplinary collaboration to support emerging research.

#### Smart Dining Hall

The Smart Dining Hall, located adjacent to Hitt Hall, is envisioned as part of a multiuse building containing 35,000 gross square feet of dining space. By providing at least one thousand new seats the Smart Dining Hall would significantly expand the dining options available on the north side of campus.

#### Smart Design and Construction Complex

The envisioned complex would provide facilitates for faculty and students to conduct research and develop applications in areas ranging from smart houses to smart energy.

#### • Intern Hub (VTTI)

This project would be located at the Virginia Tech Transportation Institute and provide an opportunity for faculty and students to work directly with industry leaders.

#### Rural Smart Track

This project would provide the Virginia Tech Transportation Institute Research with a new test bed for its work with industry partners and sponsors that would be focused on intelligent roadways, self-driving cars, and unmanned aircraft systems.

#### **Health Sciences and Technology**

#### Comparative Oncology Center

This project envisions a small animal medical center that provides comprehensive cancer care. The facility would be a valuable educational resource for referring veterinarians, future veterinarians, and clients by utilizing the field of comparative oncology to develop and refine diagnostic technologies and treatments. The program would recognize the inextricable linkages between animal and public health and promote productive collaborations in translational cancer research and graduate education.

#### • Translational Medicine, Phase I

The proposed facility is a critical element for the university's capacity to continue growing its medical and medical-related research. The project envisions 30,000 gross square feet of facility improvements and expansion at the veterinary hospital to provide biomedical facilities to support translational medical research and training.

#### **Creativity and Innovation District**

#### Academic Space

The inclusion of academic programing and offices within the residential living learning community helps provide a supplement and enhancement to traditional classroom learning. The academic space is envisioned to include classroom, assembly, and exhibition space.

#### Innovation and Athletics Living Learning Community

The proposed living learning community would include two 520 bed residence halls that include academic, social, research, and collaboration space to support the Creativity and Innovation District. Members of the living/learning residence hall will include students with an interest in interdisciplinary creation and entrepreneurship as well as approximately 176 student athletes.

#### **Academic Quality**

#### Applied Projects Building (CRC)

This project would be located in the Corporate Research Center and provide 30,000 gross square feet to accommodate integrated security research.

#### • Enterprise / High Performance Computing Data Center

The University's new Enterprise / High Performance Computing Data Center is envisioned to be a 5,000 gross square foot modularized building system located in the Corporate Research Center that will be a resource to facilitate high performance computing and large scale data storage. This project will support and partner with institutes, colleges, departments, and administrative areas to address needs for information storage, data transmission, and administration of university enterprise systems.

#### Falls Church Property Acquisition

This request provides authorization to exercise the land purchase option available to the University for property in Falls Church, Virginia where the Northern Virginia Center is located.

#### **Student Experience**

#### • Student Wellness Services

This project envisions a comprehensive renovation of War Memorial Hall inclusive of envelope, mechanical, electrical, and plumbing upgrades. Interior renovations convert a majority of the gymnasium to new spaces to accommodate modern priorities in student recreation and sports, showers and lockers will be upgraded, and an addition will provide a new entry and expanded program space. Additionally, the project would renovate portions of Schiffert Health Center and Cook Counseling Center space within McComas Hall.

#### Dietrick Hall Dinning Renovation and Expansion

This project encloses the overhang to create 200 additional seats and increases outdoor seating. Additional dining capacity would be created by reallocating and renovating space on the first floor.

#### Food Processing Center and Warehouse

A new 36,000 gross square feet food processing center and warehouse would provide Dining Services with modern space for central pre-prep, bake shop, and cold storage to handle the growing demands of campus dining centers.

#### Residential Renovations of 1,000 beds by 2024

This project is part of a long-range strategic plan to modernize the inventory of campus residential facilities. The proposed renovations will fully update 1,000 beds in the residential inventory at a cost of approximately \$55 thousand per bed.

#### Dietrick Plaza Improvements

The project would modernize the hardscaping in front of Dietrick to create large gathering spaces and provide updated lighting and landscaping to make the area more inviting.

#### Owens Hall Renewal

Owens Hall is a 98,000 gross square foot dining facility constructed in 1939 with several small scale interior renovations, the latest completed in 1991. The building has accumulated substantial deferred maintenance and requires a major renovation to continue service in the long term.

#### **Athletics Facility Improvements**

#### ACC Broadcasting studio expansion

This project would provide Athletics with space to support the increased demand for TV and radio broadcast capabilities.

#### Tennis Stadium Expansion

Tennis Facilities would be renovated to include expanded locker rooms, team lounges, medical training support, and fan viewing areas.

#### Cassell Coliseum Entrance Improvements

This project would expand and enclose the Beamer Way entrance to provide a new gathering area for fans and enhance energy efficiency by creating an air lock to prevent outside air from entering the building when doors are opened.

#### Athlete Nutrition Center

This project is envisioned as a renovation and expansion of the Bowman Room to update the space and provide nutrition dining and training options to athletes.

#### **Building Envelope Renewals**

This project is intended to address ongoing leaks that have been taking place on six buildings on campus. Structural evaluation and facilities condition studies identified numerous problems with structural supports and connections of precast panels that support the exterior walls.

#### **Minutes**

# GOVERNANCE AND ADMINISTRATION COMMITTEE Smithfield Room, The Inn at Virginia Tech September 11, 2017 9:00 a.m.

#### Joint Closed Session with Buildings and Grounds Committee

**Committee Members Present:** Mr. Mehul Sanghani, Mr. Mehmood Kazmi, Mr. Jeff Veatch, Mr. Dennis Treacy (Rector).

Board Members Present: Mr. Mike Quillen, Mr. C.T. Hill, Mr. Robert Mills.

**VPI & SU Staff:** Dr. Sherwood Wilson, Chief Kevin L. Foust, Ms. Kim O'Rourke, Mr. Whit Babcock, Ms. Tracy Vosburgh, Ms. Kay Heidbreder, Mr. Mike Mulhare, Dr. Patty Perillo, Deputy Chief Mac Babb, Mr. Mark Gess, Ms. Kayla Smith.

- 1. **Motion to convene in closed session.** A motion was passed unanimously to go into closed session to discuss a matter of public safety.
- 2. **Discussion of a matter of public safety.** The discussion was led by Dr. Sherwood Wilson, Vice President for Operations, and Chief Kevin L. Foust, Chief of Police and Director of Security, on the matter of public safety. No action was taken.
- 3. **Motion to reconvene in open session.** Motion to begin open session was passed unanimously. Members of the Buildings and Grounds Committee then departed.

#### Open Session

**Committee Members Present:** Mr. Mehul Sanghani (Chair), Mr. Mehmood Kazmi, Mr. Jeff Veatch, Mr. Dennis Treacy (Rector), Mr. Brett Netto (Graduate Representative), Mr. Seyi Olusina (Undergraduate Representative), Mr. Robert Sebek (Staff Representative).

**VPI & SU Staff:** Ms. Kim O'Rourke, Mr. Whit Babcock, Ms. Lori Buchanan, Ms. Shelia Collins, Mr. Al Cooper, Ms. Deborah Fulton, Ms. Debbie Greer, Ms. Hunter Gresham, Mr. Dave Guerin, Ms. Kay Heidbreder, Mr. Brian James, Dr. Robin Jones, Ms. Sharon Kurek, Dr. Peggy Layne, Ms. Angie Littlejohn, Dr. Scott Midkiff, Ms. April Myers, Dr. Patty Perillo, Dr. Timothy Sands, Ms. Sara Simpkins, Mr. John Szefc, Ms. Tracy Vosburgh, Mr. John Waid, Dr. Lisa Wilkes, Mr. Brad Wurthman.

1. **Welcome.** Mehul Sanghani, Chair of the Governance and Administration Committee, asked those in attendance to join in a moment of silence to remember the victims,

survivors, and all those who suffered as a result of the September 11, 2001, attacks. He reported that the Governance and Administration Committee met jointly in closed session with the Buildings and Grounds Committee to discuss a matter of public safety. He then welcomed committee members, presenters, and guests and invited all to introduce themselves. Mr. Sanghani also noted that the Governance and Administration Committee is a new committee and discussed its focus and mission.

- 2. **Intercollegiate Athletics**. Whit Babcock, Director of Athletics, gave a presentation that covered the following topics:
  - a. The general vision for Virginia Tech Athletics Losing some key personnel has led the department to recreate and restructure in order to continue the rise of the VT Athletic program among its peers in the ACC. Mr. Babcock also plans to maintain the same trajectory our other programs have shown for our baseball program.
  - b. Introduction of new Head Baseball Coach, John Szefc Coach Szefc spoke about what attracted him to the University and his vision for the baseball program and the athletes involved, including a focus on the importance of academics among his players.
  - c. Restructuring of Department Angie Littlejohn was appointed Senior Associate Athletics Director for Internal Operations, and Brad Wurthman was appointed Senior Associate Athletics Director for External Operations. The department has also streamlined its infrastructure, reducing the number of divisions from nine to six. Angie Littlejohn and Brad Wurthman briefly introduced themselves to the committee.
  - d. The promotion of sales of season tickets and premium seating in the new baseball facilities Seating includes four upper suites to be utilized during baseball games, as well as for other events. The sale of beer and wine will be restricted to these four suites and a contained area behind the first-base dugout.
  - e. Student Athlete Graduation Success Rate Statistics show that 19 of 22 Virginia Tech athletic teams held an average GPA above 3.0 for the 2016-17 academic year, with 279 athletes earning a 3.0 or higher and 174 athletes making the Dean's List in the spring 2017 semester. The top five majors for athletes are Human Development; Human Nutrition, Foods, & Exercise; Finance; Business; and Criminology. Virginia Tech had the fourth highest graduation rate among the ACC cohort in 2015-16 at 92 percent. A student-athlete international club has been formed with the Cranwell International Center.
- 3. **Social Media Strategies.** Tracy Vosburgh, Senior Associate Vice President for University Relations, gave a presentation to the committee on Virginia Tech's Social Media Guidelines, the Social Media Decision Tree, and how the University Relations

staff monitor social media when issues involving Virginia Tech capture media attention.

- a. In her two years at the University, Vosburgh has introduced organized principles for Social Media, as there were no previous principles in place. Susan Gill, Director of New Media for University Relations, has created and introduced a Social Media Decision Tree. Gill's team monitors social media usage on campus and shares content according to how it relates to and benefits the University.
- b. The University Relations Social Media Team is in the process of discussing with the Vice President for Policy and Governance the conversion of the Guidelines for Social Media into a university policy. There was discussion of how affiliates of Virginia Tech, such as faculty, staff, etc., are made aware of how to conduct themselves on their personal accounts and refrain from expressing personal opinions on university accounts. Having a policy will aid in communicating expectations.
- c. Vosburgh plans to meet with the Budget Office to discuss funding search engine optimization (SEO) work and the potential three-year projection for the introduction of new staff to maintain the website. Currently, web work is divided between two divisions of University Relations. A third party will be introduced in the future for optimization.
- d. The committee expressed some concerns about the new branding strategy with respect to public perception.
- 4. Human Resources Transformation Initiative. Dr. Lisa Wilkes, Interim Vice President for Human Resources, updated the committee on the Human Resources Transformation Initiative to transform the Human Resources Department focus from a transactional focus to a future-oriented organization that adds strategic value. The update included the findings and suggestions made by Sibson Consulting, as well as the progress that has been made since the reporting of the initial findings.
  - a. Findings of Sibson Consulting Virginia Tech's Department of Human Resources was assessed by Sibson Consulting on four interrelated dimensions: people, processes, technology, and strategy. Initial findings of this assessment show that the department has been focused on avoiding risk rather than on adding strategic value, HR services are decentralized and inconsistent in quality, there is a disjointed approach to compensation leading to inequity among departments across the university, and processes and systems are inefficient.
  - b. Suggestions from Sibson Consulting Sibson recommended HR establish a clear vision and supporting strategies for the department, as well as develop an operating model and organization structure to support that vision, while also leveraging existing or new technology to enhance the department's services and addressing immediate gaps in both the HR Service Center and Leave Areas. Other

recommendations include developing a plan to improve compensation administration, polices and processes, engaging in a cultural improvement effort, and creating a structured approach for communication and knowledge sharing, as well as ensuring staff have requisite skills, competencies and behaviors, and developing an effective performance management system and process for measuring performance and accountability.

- c. Progress Report In response to Sibson's recommendations, the department has established a clear vision and developed an operating model and organizational structure to support that vision, as well as addressed immediate gaps in service quality in the service center and leave unit. This fiscal year a senior leadership team has been installed and Dr. Lisa Wilkes was named Interim Vice President for Human Resources. Additional restructuring and hiring is also under way in an effort to move efficiently and effectively to a more centralized HR model. The launch of the HR Business Partner model is projected for October 1, 2017. Development of an HR metrics dashboard to be utilized by the university's senior leadership has been added to the 100-day plan. The Division of Human Resources is currently in the process of addressing all other concerns cited in Sibson's findings and creating a timeline for completion, as the Transformation Initiative is a long-term project that will span over the course of several years.
- 5. **Discussion of Future Topics**. Mehul Sanghani, Chair of the Governance and Administration Committee, led the committee in a discussion of future topics that could be presented to the committee later in the academic year. Potential topics include:
  - Regular communications audit update that includes analytics regarding social media and how the university is perceived by the public.
  - Branding rollout updates.
  - An administrative computing overview.
  - Status of search for the new Senior Vice President for Operations and Administration and position description.
  - Future plans of the Athletics Department and any issues.
  - ACC network and funding for Athletics infrastructure.

There being no further business, the meeting was adjourned at 11:30 a.m.



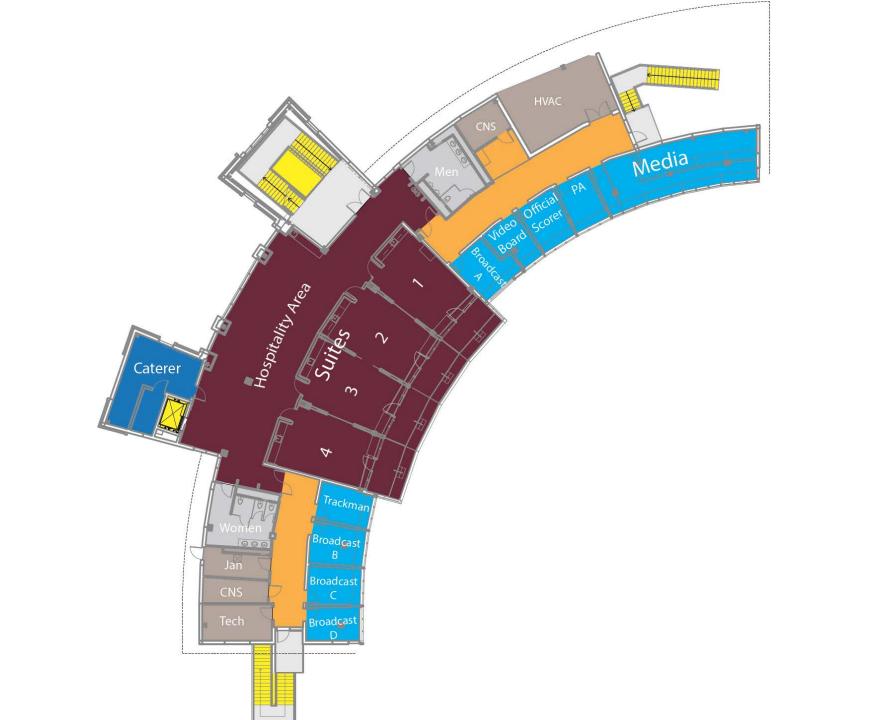
### VIRGINIATECH® ATHLETICS

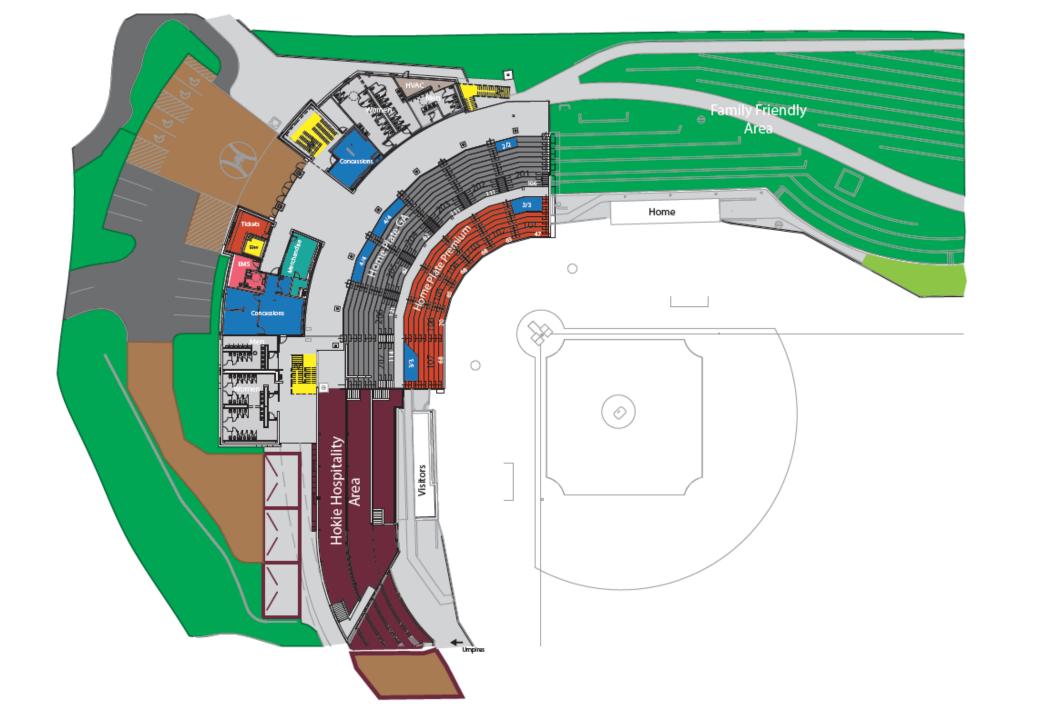
# Intercollegiate Athletics report to the Governance & Administration Committee of the Board of Visitors

September 11, 2017











#### Head Baseball Coach John Szefc





### VIRGINIATECH® ATHLETICS

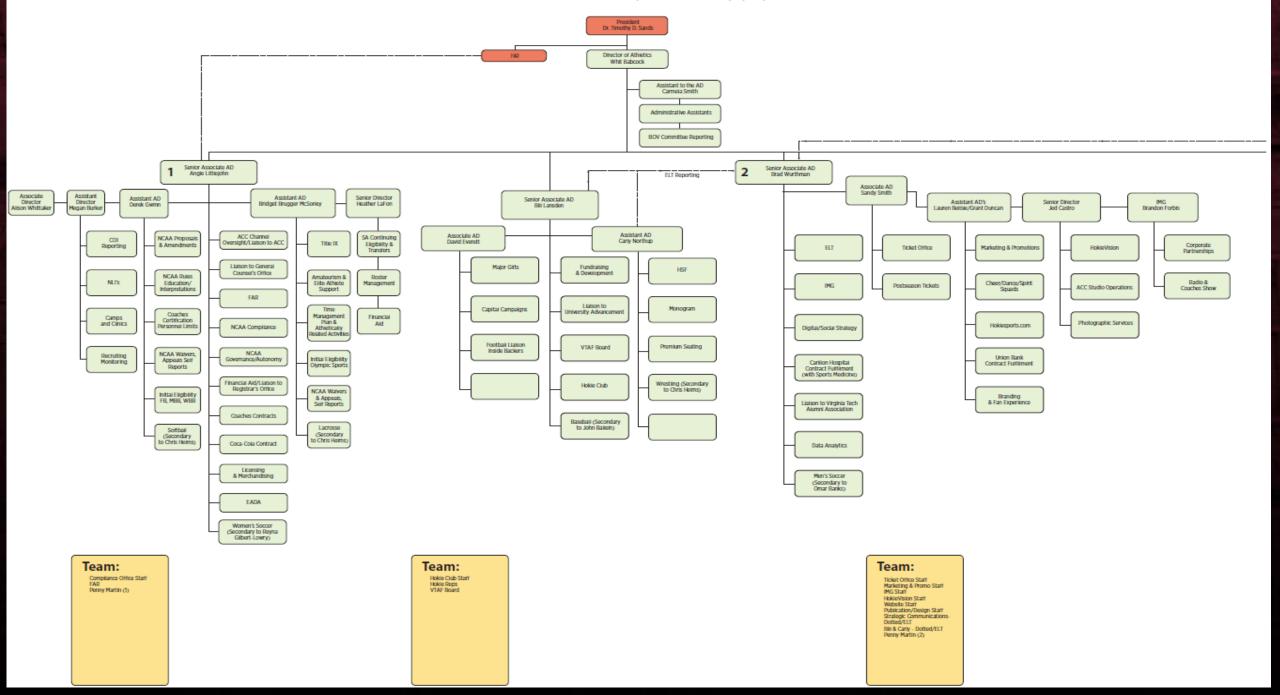
## Athletics Restructuring

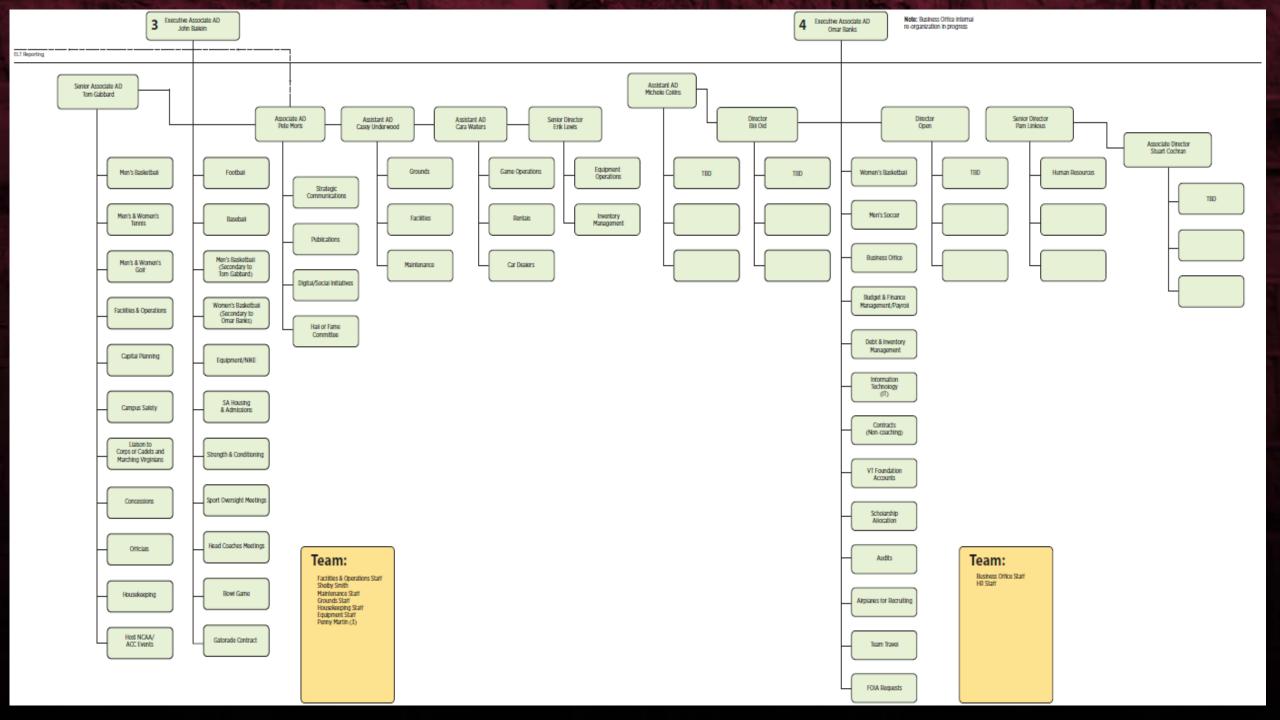
Organizational Chart

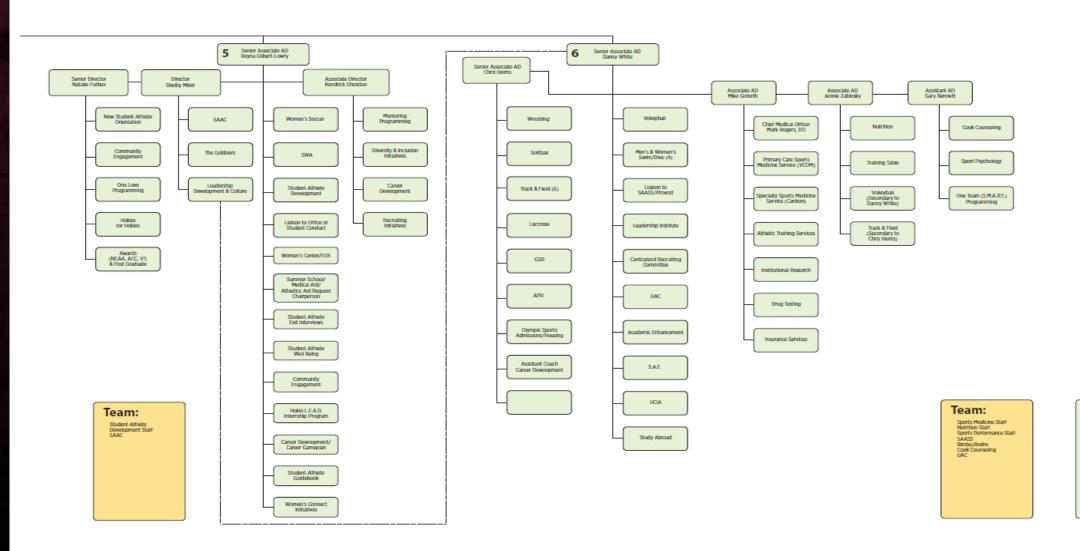




#### ORGANIZATIONAL CHART | Final Draft #17, 8/22/17







#### TBD:

- Office moves
   Job descriptions (new) if applicable
   Communication & clarity
   Buy-in
- Salary adjustments if applicable

#### **Graduation Success Rates 2009-2016**

#### (Cohort Years 2003-2009)

2009-10		2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
Notre Dame	99	Notre Dame	98	Notre Dame	98								
Duke	97	Duke	97	Duke	98	Duke	98	Duke	97	Duke	98	Duke	97
Boston College	96	Boston College	97	Boston College	97	Boston College	96	Boston College	95	Boston College	95	Boston College	95
Wake Forest	93	Wake Forest	94	Wake Forest	95	Wake Forest	94	Wake Forest	94	Wake Forest	92	Virginia Tech	92
Virginia Tech	89	Virginia Tech	91	Miami	93	Miami	92	Miami	92	Clemson	91	Wake Forest	92
Virginia	89	Miami	89	Virginia Tech	88	Virginia Tech	90	Clemson	91	Syracuse	90	Clemson	91
North Carolina	87	North Carolina	88	North Carolina	88	Virginia	88	Virginia Tech	88	Miami	89	Miami	90
Miami	86	Virginia	87	Syracuse	87	Clemson	87	Syracuse	88	Virginia Tech	88	Syracuse	90
Clemson	83	Syracuse	86	Virginia	87	Syracuse	87	North Carolina	86	Virginia	86	Florida State	87
Syracuse	83	Clemson	82	Clemson	84	Maryland	86	Virginia	86	North Carolina	85	Georgia Tech	87
Pittsburgh	81	Maryland	82	Maryland	83	North Carolina	86	Florida State	84	Florida State	85	Virginia	87
Louisville	80	Louisville	81	Louisville	80	NC State	82	Georgia Tech	81	Georgia Tech	84	Pittsburgh	84
Maryland	80	Florida State	79	Florida State	78	Florida State	81	NC State	81	NC State	83	NC State	83
Florida State	79	Pittsburgh	78	Pittsburgh	78	Louisville	81	Louisville	80	Pittsburgh	82	Louisville	83
Georgia Tech	75	Georgia Tech	77	NC State	77	Georgia Tech	79	Pittsburgh	79	Louisville	81	North Carolina	82
NC State	72	NC State	74	Georgia Tech	76	Pittsburgh	77						

<sup>\*\*2016-17</sup> Cohort data will be released by the NCAA in November, 2017



2016-2017 Academic Year GPA - 19 out of 22 teams with academic year GPA's above a 3.00

#### Spring 2017

- 279 student athletes earned a 3.0 or greater GPA
- 174 student athletes made the Dean's List (3.40 or better)
- Student Athlete weighted cumulative GPA was a 3.03
- 16 teams maintained a 3.0 or greater cumulative team GPA spring 2017



#### **Top 5 Student-Athlete Majors**

Human Development	n=37
<b>Human Nutrition, Foods &amp; Exercise</b>	n=37
Finance	n=34
Business, Undecided	n=33
Criminology	n=24



#### **Student-Athlete International Club**

Collaboration with Cranwell International Center to create monthly meetings, support system, "playbook", etc., for all international student athletes.



## I SIS the PLACE.

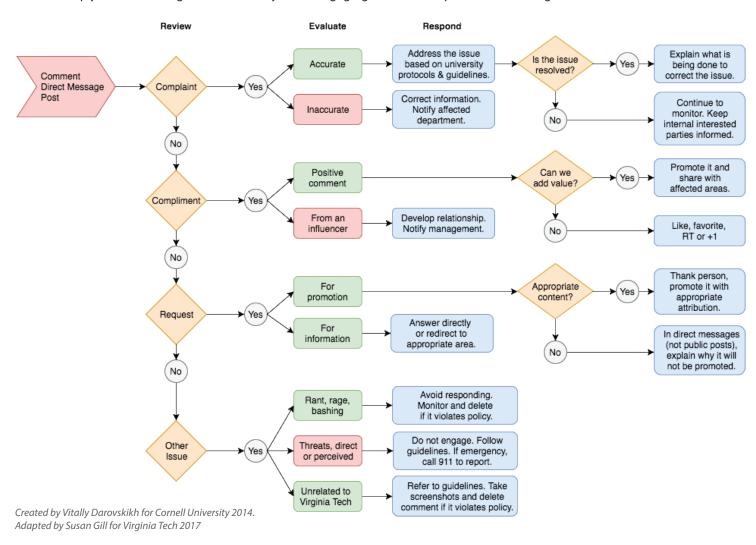


## VIRGINATECH® ATHLETICS

## Closing Remarks Q & A



Monitoring social media is critical to online reputation management. This social media decision tree should be used by administrators of university-affiliated accounts and will help you make the right choice when you are engaging online as a representative of Virginia Tech.



#### **BEST PRACTICES**

#### Always:

- Expect anything, private or public, to be shared
- Disclose your connection to Virginia Tech
- Respond in a tone that positively reflects Virginia Tech's values
- Direct Users to the most relevant portions of vt.edu
- Notify socialmedia-g@ vt.edu if uncertainty arises
- Respond in a timely fashion
- Consider aplifying message if appropriate
- Give the user an option to engage privately, if necessary

All comments are subject to social media platforms' terms of use and code of conduct. Virginia Tech reserves the right to remove any inappropriate comments. We do not permit messages selling products or promoting commercial, political, or other ventures.



#### Social Media Guidelines

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#### **Reason for guidelines**

Virginia Tech authorizes the creation and use of university social media accounts, provided their use is professional, protects the reputation and brand of the university, and complies with Virginia Tech policies and applicable state and federal laws and regulations.

The university recognizes the value of social media platforms for a range of goals and must balance its support of social media with the preservation of Virginia Tech's brand identity, integrity, and reputation.

#### **Entities affected by these guidelines**

All units of the university including, but not limited to, colleges, schools, institutes, departments, student organizations and clubs, and governing organizations.

#### Who should read these guidelines

All faculty, staff members, and students who manage social media as a university-affiliated administrator or as an individual for personal use.

• See also: Related Virginia Tech policies, p. 7

• See also: Business and personal use of social media, p. 4

#### **Guidelines available online**

• Website: branding.unirel.vt.edu/brand/social-media-guidelines

#### **Definitions**

These definitions apply to terms as they are used in these guidelines.

Account Administrator	A Virginia Tech faculty member, staff member, or student who administers or authors content for any <i>university social media account</i> .
Communications Professional	A university staff member within a unit charged with
at the Unit Level	communications oversight at the unit level.
Social Media	A website or application external to Virginia Tech that permits sharing of information between people. This includes internet-based social networking applications, blogs, forums/chat rooms, collaborative information and publishing systems (Wikis), video-and photo-sharing websites (i.e. Facebook, Twitter, YouTube, etc.), and other websites with user-generated content.
House Rules	Community commenting guidelines by which the account administrator can moderate conversations that reside on the account. See p. 5
Unit	A college, school, institute, department, student organization or club, research center, office, service or transaction center, or any other operating Virginia Tech-affiliated group.
University Social Media Account	Any account administered by an official university unit on any social network used in support of the functions or needs of that unit.



	Typically, these accounts include the name of Virginia Tech and the name of the unit (i.e. Virginia Tech College of Agriculture and Life Sciences).
	<b>Note:</b> Accounts administered by any other groups or individuals are considered non-sponsored accounts, and the university is not responsible for the content shared on these accounts.
User	A person who places postings, commentary, or other content on a university social media account or space.
Influencer	An individual or institution that has a large social media following and a strong affinity for Virginia Tech. A social ally.

#### Responsibilities

The major responsibilities each party has in connection with these guidelines.

Account Administrator	Account administrators are expected to:			
	<ul> <li>Consult the Best Practices Guidelines below and/or consult</li> </ul>			
	with your unit's communications professional for guidance			
	on compliance with these guidelines, as well as with the			
	university's brand guide before launching a social media			
	account. (Please note: The branding guidelines will be			
	updated in summer 2017).			
	o Website: <u>branding.unirel.vt.edu/brand</u>			
	o Social Media Guidelines:			
	branding.unirel.vt.edu/brand/social-media-			
	guidelines			
	<ul> <li>Correct or modify university social media accounts under the</li> </ul>			
	administrator's control, as directed by University Relations.			
	Terminate any university social media accounts that cannot			
	be made compliant with these guidelines.			
	Deactivate obsolete accounts.			
	Publish and enforce set "house rules" for code of conduct by			
	followers of the account.			
Communications	Communications professionals are expected to:			
Professional at the Unit	<ul> <li>Work collaboratively with University Relations to review and</li> </ul>			
Level	approve new university social media accounts.			
	<ul> <li>Provide guidance and support for new account</li> </ul>			
	administrators in respective units.			
	Document the university social media accounts in respective			
	units.			
Individual	Individuals are expected to:			



	<ul> <li>Refrain from using or posting to university social media accounts in violation of these guidelines.</li> <li>Surrender access to university social media accounts, as appropriate, when university employee or student status changes.</li> </ul>
University Relations	<ul> <li>University relations is expected to:</li> <li>Oversee Virginia Tech's institutional presence on social networking platforms.</li> <li>Determine whether to allow university social media accounts on new platforms as they become available. Authorize these accounts as appropriate.</li> <li>Review social media accounts that represent the university for compliance with these guidelines.</li> </ul>
	<ul> <li>Instruct account administrators to correct, modify, or terminate university social media accounts that are not in compliance with these guidelines.</li> </ul>

#### **Principles Overview**

#### **Virginia Tech Principles of Community**

Everything we do at Virginia Tech should be first and foremost guided by the <u>Virginia Tech Principles of Community</u>. Our interactions on social media are no exception. Inclusivity and respect at Virginia Tech are *everyone's* responsibility.

Website: <u>inclusive.vt.edu/vtpoc0</u>

#### Acceptable use of information systems at Virginia Tech

Access to computer systems and networks owned or operated by Virginia Tech imposes certain responsibilities and obligations and is granted subject to university policies, and local, state, and federal laws.

Social media account administrators are expected to be familiar with Virginia Tech's policy on appropriate use of computer systems and networks owned or operated by the university.

• Website: vt.edu/about/acceptable-use

The university recognizes the value of social media platforms for a range of goals, including, but not limited to, reaching new audiences and building relationships with stakeholders. This document supplements existing acceptable use policies as outlined in the Virginia Tech faculty and staff handbooks and includes:

Acceptable Use of Information Systems at Virginia Tech: vt.edu/about/acceptable-use



- Virginia Tech Identity Standards and Style Guide: branding.unirel.vt.edu/brand
- Business Conduct Standards: cafm.vt.edu/businesspractices/conductstand
- Non-discrimination statement: vt.edu/about/equal-opportunity
- Freedom of Information Act: policies.vt.edu/FOIAa.php

#### **University social media accounts**

A university social media account is any registered account administered by an official university unit on any social network used in support of the function or needs of that unit. Typically, these accounts include the name of Virginia Tech and the name of the unit.

Use of social media accounts must be conducted in a manner that is professional, protects the reputation and brand of Virginia Tech, and is in compliance with university policies.

• Business Conduct Standards: cafm.vt.edu/businesspractices/conductstand

Prohibited conduct includes use of social media in a way that constitutes libel, false advertising, copyright or trademark infringement, harassment, professional misconduct, or a violation of privacy or other rights protected under the law.

The university is not responsible for content shared or generated by non-university social media accounts administered by groups or individuals not sponsored by the university.

#### Registering an official university social media account

Existing and new university social media accounts are requested to be registered with the university. The purpose of this is to keep an updated directory for visitors to the university's websites and to allow for periodic quality control checks to occur. Registration information includes:

- Full account name
- Two best contacts (Virginia Tech employees) with email addresses
- Registration survey: <a href="mailto:bit.ly/2i6MoRc">bit.ly/2i6MoRc</a>

#### Business and personal use of social media

Virginia Tech employees may be authorized to use social media at work to promote the Virginia Tech brand and encourage active engagement with the university community. These individuals must maintain Virginia Tech's brand identity, integrity, and reputation, while minimizing potential legal risks.

These guidelines do not seek to limit personal use of social media by faculty, staff, or students. Virginia Tech employees and students may mention their university affiliation in the bio or about sections of personal social media accounts, but are prohibited from using university brand elements on those accounts in ways that violate branding guidelines and the Virginia Tech Principles of Community.

Note that, even if you are using social media personally, you may still be seen as a representative of your college, unit, or the overall university. Therefore, you are expected to act responsibly as such.



- Brand Guide: branding.unirel.vt.edu/brand
- Principles of Community: <u>inclusive.vt.edu/vtpoc0</u>
- See also: Representing Virginia Tech <u>branding.unirel.vt.edu/brand/social-media-guidelines.html#best-practices</u>

Users must adhere to the terms and conditions specific to each social network platform and follow policies for the use of personally owned devices in the workplace at Virginia Tech.

• Mobile Communications Devices Policy: policies.vt.edu/3960.pdf

Account Administrators	Account administrators are expected to:
	Post on Virginia Tech-affiliated social media platforms only
	using the account name of his or her department or unit.
	Maintain the privacy of administrators of Virginia Tech social
	media and also preserve consistency of the units'
	institutional voice.
Individuals	Individuals with access to a university social media account are
	expected to NOT:
	Use social media for personal purposes that might
	reasonably create the impression the content is authorized
	or controlled by Virginia Tech, unless using a social media
	application's sharing feature to share content from an official
	university source.
	Post content that is discriminatory, threatening, or unlawful.
	Users are responsible for their conduct when using social
	media for personal or business purposes

#### Social media house rules

Virginia Tech encourages social media users to interact with the university and each other but is not responsible for comments or posts made by followers of or visitors to Virginia Tech accounts. Comments posted by these individuals may not reflect the official views or policies of the university. In accordance with this, university social media accounts should include a version of community guidelines in the accounts' about sections.

**Note:** Before removing non-English comments, use translation tools to verify if the comment indeed violates the other standards as listed.

#### **Example of house rules**

From Virginia Tech's Facebook page



Virginia Tech welcomes your comments on our Facebook page and encourages interaction among Hokies around the world. We ask that you use the Virginia Tech Principles of Community (inclusive.vt.edu/vtpoc0) as guidance in your posts and remain true to the spirit of Ut Prosim (That I May Serve).

We review all comments made. Comments will be removed if they are off-topic, offensive, insult or attack, contain illegal suggestions, use foul language, or contain unauthorized commercial solicitation. We reserve the right to terminate access to the page by repeat offenders.

Please email us at <u>socialmedia-g@vt.edu</u> with any concerns about the content on this site. Comments made to this page are the opinions of the authors, not of the university.

#### **Procedures**

#### Launching or assuming responsibility for university social media accounts

Account Administrator	Account administrators are expected to:	
	Contact their unit's communications professional to establish	
	a university social media account. If your unit does not have	
	a communications professional, contact University	
	Advancement.	
	Familiarize themselves with this document and the university	
	Brand Guide when launching new university social media	
	accounts or assuming responsibility for existing ones.	
	Correct or modify university social media accounts under	
	their control, as directed by University Advancement and/or	
	the unit's communications professional.	
	Terminate any university social media accounts that cannot	
	be made compliant with these guidelines.	
Communications	Unit communications professionals are expected to:	
Professional at the Unit	Oversee creation of new social media accounts in their units	
Level	to ensure compliance with best practices.	
	Maintain a list of social media accounts in their units and	
	encourage registration to the university register.	
	Train account administrators in their units about their roles	
	and responsibilities under these guidelines.	
	Familiarize themselves with these guidelines and the	
	university brand guide.	
	Be accountable for ensuring that content posted to their	
	accounts meets university guidelines.	
	Be responsible for ensuring central University Relations is	
	informed in matters of issues or crisis management.	



#### Required actions upon change in an individual's university status

Individual	When the status of an individual with access to a university social media account changes (i.e. role change within unit, transfer to another unit, or separation from the university), the individual is expected to:  • Surrender that access. The account administrator will
	transfer that access, as appropriate to another staff member.
Account Administrator	Account administrators are expected to:
	<ul> <li>Review individuals' access to all social media platforms, social media tools and revoke where appropriate.</li> <li>Review and modify passwords for all accounts to prevent unauthorized access when appropriate.</li> <li>Review social media policy, strategy, and brand guidelines with University Advancement and the communications professional at the unit level.</li> </ul>
Communications Professional at the Unit Level	<ul> <li>Unit communications professionals are expected to:</li> <li>Review social media guidelines, strategy, and brand guidelines with new account administrators.</li> <li>Update the list of university social media accounts in their units and encourage registration in the university social</li> </ul>
	media register.

#### **Related Virginia Tech Policies**

Policy	Website
Acceptable Use of Information Systems at	vt.edu/about/acceptable-use
Virginia Tech	
Administrative Data Management and Access	policies.vt.edu/7100.pdf
Policies	
Business Conduct Standards	cafm.vt.edu/businesspractices/conductstand
Equal Opportunity/Affirmative Action Statement	vt.edu/about/equal-opportunity
Freedom of Information Act	policies.vt.edu/FOIAa.php
Mobile Communications Devices	policies.vt.edu/3960.pdf
Student Privacy/FERPA	registrar.vt.edu/contact/FERPA
Virginia Tech Faculty Handbook	provost.vt.edu/faculty_affairs/faculty_handbook
Virginia Tech Identity Standards and Style Guide	branding.unirel.vt.edu/brand
Virginia Tech Policies	policies.vt.edu/index.php
Virginia Tech Sales, Solicitation, and Advertising	policies.vt.edu/5215.pdf
on Campus	
Virginia Tech Staff Handbook	hr.vt.edu/resources/current-employees/policies-
	handbooks
Virginia Tech Student Handbook	hokiehandbook.vt.edu



#### **Contacts**

Subject	Contact	Telephone	Email/Web Address
Guidelines clarification and interpretation	University Relations	540-231-0946	socialmedia-g@vt.edu
Establishing a new university	University Relations	540-231-0946	socialmedia-g@vt.edu
social media account	College/Unit Communications Professional	Unit-specific	Unit-specific
Social media community guidelines	University Relations	540-231-0946	socialmedia-g@vt.edu
Resources/training opportunities	University Relations	540-231-0946	socialmedia-g@vt.edu

#### **Social Media Best Practices**

The people of Virginia Tech and Hokie Nation make exciting and meaningful connections every day — through research, public service, alumni connections, daily interactions on campus, and more.

Social networks help us to advance these connections while furthering relationships, cultivating Hokie pride, and acting as good stewards of the Virginia Tech brand. Social media offers Virginia Tech and its units and programs opportunities to engage specific audiences, including prospective and current students, parents, alumni, faculty and staff, donors, media, and opinion leaders. Our overarching goal is to raise awareness of Virginia Tech.

These best practices can be applied whether you're a staff member managing a department Facebook account, a faculty member operating your own professional Twitter account, or a student group running a university-affiliated Instagram account.

#### **Representing Virginia Tech**

By having a social media account that indicates you work at or attend Virginia Tech, or if you run an account for your unit, you may be perceived as being a spokesperson for Virginia Tech. It is essential that you do not speak <u>for</u> Virginia Tech, the institution, but that you represent your unit. In that role, you should consider yourself a spokesperson. To mitigate any potential issues, be mindful of the following:

- Stick to your area of professional expertise.
- Confirm information before posting/sharing to ensure it is correct. When in doubt, don't post.
- Use good judgment when responding to comments. Review the *decision tree* at the end of this document for reference.
- Questions/comments that are related to a news story or press release should be referred to @vtnews on Twitter and/or the Media Relations Director in University Relations.

Website: <u>vtnews.vt.edu/contact</u>Twitter: <u>twitter.com/vtnews</u>



- Keep personal accounts separate from your role at Virginia Tech when possible. If there is
  overlap, ensure your personal views are not viewed as official Commonwealth of Virginia
  communications.
  - O You may include a disclaimer in your About section (from Policy: 1.75 Use of Electronic Communications And Social Media), such as: "The views expressed on this (website, blog, social media site) are my own and do not reflect the views of my employer or of the Commonwealth of Virginia."

#### Virginia Tech branding and style requirements

To avoid confusion on what constitutes an official Virginia Tech social media account, affiliated accounts must adhere to the Virginia Tech Brand Guide to ensure consistency across platforms.

#### Official logos

Official Virginia Tech logos are available to download to help you create profile photos and cover photos as the platform allows. Official university primary and secondary colors are available in the Brand Guide for reference when creating page identity images.

- Logo download website (PID required):
   secure.hosting.vt.edu/www.downloads.branding.unirel.vt.edu
- Brand Guide (PDF, page 10):
   branding.unirel.vt.edu/content/dam/branding\_unirel\_vt\_edu/2015-brand-guide.pdf

#### **Profile requirements**

•	
Page/usernames	Full, official name of your unit.
	<ul> <li>Typically begins with "Virginia Tech" (i.e. Virginia</li> </ul>
	Tech College of Agriculture and Life Sciences); but
	may not contain "Virginia Tech" if it holds a donor's
	name — in that case, ensure Virginia Tech is in the
	about information, as described below.
	<ul> <li>If space is limited in the platform, "VT" is an</li> </ul>
	acceptable alternative to "Virginia Tech" (i.e.
	@VT_Football)
Contact information	Official website link.
	<ul> <li>As space allows, include other contact information</li> </ul>
	such as:
	o Address
	o Telephone number(s)
	o Email address(es)
	o Other websites
"About" information	As space allows, fill out as completely as possible the
	about section of your profile.
	<ul> <li>This includes mission, descriptions, founding</li> </ul>



	information, etc.
	<ul> <li>Include "Virginia Tech" here if your unit's official</li> </ul>
	name does not contain it (i.e. the name comes from a
	donor).
Profile picture	Must represent your unit in a clear manner.
	<ul> <li>Do not use prohibited secondary logos (see Brand</li> </ul>
	Guide, page 12).
	Must be readable at small, thumbnail size and be
	high enough resolution for larger expanded sizes.
	If unsure about appropriateness, contact University
	Relations for help (socialmedia-g@vt.edu)
Other photos, cover photo	If available, choose a photo that works well in the
	horizontal area at the top of many social media
	platform pages.
	<ul> <li>It should represent your unit and/or directly</li> </ul>
	complement your profile picture.
	Swap this photo regularly to refresh the look of your
	page.

#### Starting a new account

Before starting a new social media account, consider a few key questions:

Who is the audience?	Determine who you're trying to reach and where that
	audience is, social media platform-wise (for
	descriptions on the different platforms, see the Social
	media communications plan section below).
	Determine how your messages will be targeted (i.e.
	promoted posts to a specific audience, different
	platforms for different audiences, etc.)
Why are you starting this account?	Define the purpose for the new account.
	<ul> <li>Determine what the goal is and how to measure</li> </ul>
	success.
Do you have the resources?	Determine whether you have the resources to
	manage a university-affiliated social media presence,
	which requires frequent and consistent attention. If
	you don't have the time to devote you may be
	quickly overwhelmed.
What makes your account unique?	Determine what your account offers that others
	don't, particularly in your unit.
Are you duplicating messages?	Define messaging framework for your target



	<ul> <li>audience and determine if it overlaps with another</li> <li>Virginia Tech account.</li> <li>Determine if partnering with another account can strengthen your message.</li> </ul>
How can account administrators be contacted?	<ul> <li>Consider creating a generic email address to minimize the effort required for transitioning to a new account admin if admins (such as students) change frequently.</li> </ul>
What are your peer institutions doing on social media?	<ul> <li>Follow and analyze content on social media from your peers as a starting point for you in planning reaching those audiences.</li> </ul>

**Note:** If you wish to do this for a time-bound event (like a conference), ask yourself if you have time to build up an audience. If not, do not create a new account and instead utilize an established account with an event-specific hashtag.

#### **Troubleshooting & Account Verification**

When starting a new account, you may run into your preferred username being used by another account. Each social media platform has their own way of reporting unofficial accounts, so the best route is to start with the Help sections. For example, Twitter has a procedure if you encounter unauthorized accounts using your unit's official name: <a href="mailto:support.twitter.com/articles/18367">support.twitter.com/articles/18367</a>

To mitigate copyright issues, you can also apply to get your account verified. This also varies by platform and can usually be found in the Help section.

• Facebook verification: facebook.com/help/100168986860974

• Twitter verification: support.twitter.com/articles/20174631

#### **Social media platforms**

Your communications plan for your social media accounts will depend on the platform and the intended audiences. University-wide, Virginia Tech has more than 130 social media accounts. The following are accounts that Virginia Tech currently uses on the central university level:

Twitter	<ul> <li>Audience skews male, age 18-29, college graduates, and typically live in urban environments.</li> </ul>
	<ul> <li>Micro-blogging platform that utilizes messages with 140 characters or less.</li> </ul>
	<ul> <li>Uses hashtags to tap into conversations and/or aggregate groups of posts easily.</li> <li>Easy to "talk" to individuals and groups via replies,</li> </ul>
	<ul> <li>retweets, and quote retweets.</li> <li>Useful for live updates from events, conferences, etc.</li> <li>Useful for driving audiences to a call-to-action and creating awareness.</li> </ul>



	<ul> <li>Posts that include photos have higher rates of engagement than those without.</li> <li>Began the live video trend but is used less commonly today outside of news coverage.</li> <li>User-friendly analytics and demographics; downloadable to a spreadsheet.</li> </ul>
Facebook	<ul> <li>Audience skews female, age 18-49*; all other demographics are relatively equal.</li> <li>Platform that allows individuals to follow or become "fans" of business and institution pages in addition to personally connecting with other individuals.</li> <li>Posts that include native photos and videos (not linked to from an outside source, like YouTube) have higher rates of engagement than those without.</li> <li>Should drive audiences to a call-to-action.</li> <li>Emerging trend of live videos on the platform.</li> <li>User-friendly analytics with some demographic information available; downloadable to a spreadsheet.</li> </ul>
Snapchat	<ul> <li>Audience skews age 18-24.</li> <li>Photo- and video-sharing platform that utilizes decorative filters.</li> <li>Images and videos are only available for a limited amount of time after viewing.</li> <li>Utilizes stories to craft a visual narrative.</li> <li>Emerging platform for reaching prospective and current students and young alumni.</li> <li>Metrics are limited; cannot accurately determine number of followers.</li> <li>Metrics are limited and are not downloadable to a spreadsheet.</li> <li>Posts must be made from a mobile device or tablet.</li> </ul>
Pinterest	<ul> <li>Audience skews female, age 30-49, higher income, and suburban/rural</li> <li>Users "pin" items found online to customized boards, much like a virtual bulletin board for ideas, crafts, fashion, recipes, etc.</li> <li>Users will "repin" items found on Pinterest to their own boards.</li> <li>Needs good visuals for success because the algorithm</li> </ul>



	relies on images to create posts.
LinkedIn	<ul> <li>Audience is nearly even split with male and female</li> </ul>
	users, age 30-64, college graduates, higher income,
	and urban.
	<ul> <li>Used for networking with others in your field of</li> </ul>
	business and recruiting potential employees.
	<ul> <li>Personal profile is an online resume.</li> </ul>
	<ul> <li>Company pages can be used to aggregate and</li> </ul>
	connect alumni and students with each other and
	with the institution.
	<ul> <li>Can get demographic information to inform</li> </ul>
	strategic alumni and development decisions.
	<ul> <li>Area to feature news, links, and updates.</li> </ul>
Google+	Audience is typically male, age 25-44, higher income,
	and international.
	<ul> <li>Hasn't reached the number of active users as other</li> </ul>
	social media platforms, but has emerged as a niche
	platform.
	<ul> <li>More popular in certain international markets.</li> </ul>
	<ul> <li>Useful for connecting and sharing with non-profits,</li> </ul>
	NGOs, and international companies.
Slack	Chat forum
	Used to send group messages and direct messages
	Adopted by businesses as a way to streamline  allaboration and take as a way to streamline  allaboration and take as a way to streamline.
	collaboration and take conversations out of email

Information updated June 2017

#### Tips on content creation

The ever-evolving landscape of social media means that you'll have to stay abreast of emerging technology and platform developments. Take time to assess new content features and if they can help you achieve your goals. Some sites offer information on image sizes for each platform:

- Constant Contact: blogs.constantcontact.com/social-media-image-sizes
- Marketing Tech: marketingtechblog.com/social-media-image-dimensions

#### **Using submitted content**

To help maintain good relationships with students and alumni and to give you more content for your posts, you can solicit submissions for photos and other content from your followers. If you receive submissions that you intend to post from your account, ensure you have permission from the user as



<sup>\*</sup>Highest number of users per age group on Facebook is 18-29, but ages 30-49 have higher rates of engagement with posts.

well as the photographer (if a different person) before sharing. Collect the following information and give proper attribution:

- Name
- Hometown (if student)
- Major
- Graduation year

Tools for Instagram, such as the Repost app, will add an attribution box to the image. You should still tag the submitter's username in the comment box with the other pertinent information.

#### **Using Hashtags**

When using or creating other hashtags, do your research before you tweet. This includes going to Twitter and Instagram and performing a search for the intended hashtag. Take note of the posts associated with the hashtag and use your best judgment about using that hashtag with your own promotions.

Virginia Tech uses certain hashtags for tweets and other social media posts. They are:

- #VirginiaTech
- #UtProsim
- #Hokies
- #HokieLove
- #HokieGrad (for commencement)

- #HokieFacts
- #WhyVT
- #VT4L
- #VTFirstDays
- #HokiePets
- #HokieBaby

- #HokieNation
- #HokiesAbroad
- #TravelingHokies

#### **Comment/conversation moderation**

If you are unsure about how to best resolve a situation regarding comment/conversation moderation, contact Susan Gill, Director of New Media, at <a href="mailto:susan83@vt.edu">susan83@vt.edu</a> or 540-231-0946.

Commenting decision tree: <u>branding.unirel.vt.edu/brand/social-media-guidelines/how-to-moderate</u>

Social media administrators should respond to commenters who express concerns and attempt to address them directly or refer them to a person or department who can.

The structure of your response will vary based on the nature of the social networking platform but it should always be friendly and representative of Virginia Tech's culture and values.

Not every critique needs a response; some people are just venting frustrations, or they are "trolls" — those who engage in off-topic or inflammatory posts in an attempt to provoke others.



Comments that are inappropriate, offensive, insult or attack, contain illegal suggestions, or use foul language should be removed as allowed by that particular social media platform, as should those that are intentionally repetitive (spam). Keep a log of any comments removed, and most importantly, be consistent with the treatment of all commenters.

#### Removing posts that have become controversial

Occasionally, you may find that something you've posted to your page has taken a life of its own in the comments section. If your audience is staying on-topic and remaining civil as per your community commenting guidelines, it is advisable to let the commenters keep each other in check. If needed, remind commenters about your commenting guidelines.

However, if the conversation seems to be sliding toward only one point of view in a manner that is contrary to the spirit of your post, you may need to make a moderator decision. Please contact Susan Gill, 540-231-0946, to discuss the best course of action.

#### **Communications during campus emergencies**

In an emergency or another incident, university-affiliated accounts <u>should not</u> post information or comment with a response that has not been approved for dissemination from approved sources or spokespeople. If you wish to disseminate the information, you should share posts from the official channels listed below. Contact Susan Gill, Director of New Media, <u>susan83@vt.edu</u> or 540-231-0946 for more information

Social media is an increasingly vital part of how we as a society communicate, and that's especially true in times of heightened awareness. Rumors quickly spread in the absence of reliable, verified information.

The University Status website contains information on operating statuses at Virginia Tech campuses. Please refer to this page for general and contact information: vt.edu/status

Official messages during emergencies and other incidents will come from the following social media accounts:

Virginia Tech

Twitter: twitter.com/virginia techFacebook: facebook.com/virginiatech

VT Alerts

o Twitter: <u>twitter.com/vtalerts</u>

• Virginia Tech Police

Twitter: twitter.com/vatechpolice

o Facebook: <u>facebook.com/VirginiaTechPolice</u>

• Virginia Tech Office of Emergency Management

o Twitter: twitter.com/behokieready

Facebook: facebook.com/BeHokieReady



In an emergency or another incident, university-affiliated accounts should not post information that has not been approved for dissemination from approved sources or spokespeople. If you wish to disseminate the information, you should share posts from the official channels listed above.

College communicators who receive questions during emergencies or other incidents should refer them to the Senior Associate Vice President for University Relations, Assistant Vice President of University Relations, or Media Relations Director, as appropriate.

#### Threats received via social media

If you become aware of a potential threat via your role as a social media administrator, report it immediately. If the nature of the threat is an emergency, call 911. You can also refer a situation of concern to the university Threat Assessment Team at <a href="mailto:ThreatAssessment@vt.edu">ThreatAssessment@vt.edu</a> or to Virginia Tech Police at 540-231-6411. Additionally, include <a href="mailto:socialmedia-g@vt.edu">socialmedia-g@vt.edu</a> on an email, or notify Susan Gill at 540-231-0946 after you have notified emergency personnel.

• Website: threatassessment.vt.edu

Include as much information as possible; including the username of the individual involved, a screenshot of the message, who or what is involved, when the message was received, and other pertinent information.

#### Measuring success (analytics/metrics)

It is important to be able to set goals and measure success against those goals for social media. This will inform overall communications strategy and help you assess whether certain platforms work better for your intended audiences than others.

#### **Learning tools**

Many social media companies have blogs with how-tos. To educate yourself on how and what to measure, look to the experts. Here are some suggestions on where to start:

- Razor Social: razorsocial.com/social-media-analytics-tools
- Social Media Examiner: socialmediaexaminer.com/5-tools-to-measure-social-media-roi
- HootSuite Blog: blog.hootsuite.com/social-media-metrics
- Buffer: blog.bufferapp.com/definitive-guide-social-media-metrics-stats
- Simply Measured Blog: bit.ly/2hDXNe7



#### **Definitions**

Dashboard	A place to consolidate and quickly analyze data; spreadsheets are		
	commonly used, and there are a variety of browser-based and		
	downloadable software options, typically for a fee.		
Engagement	A metric used to describe the amount of interaction — likes, shares,		
	comments — a piece of content receives.		
Engagement Rate	A metric used to describe the amount of engagement as compared to		
	the number of users who saw the content.		
Follower	Refers to a person who subscribes to your account in order to receiv		
	your updates.		
Impressions	A metric used to show the number of times content associated with		
	your page is displayed.		
Reach	A metric used to show the number of people who saw your content.		
	Includes people who have chosen to follow your account and those		
	who have not.		

#### **Measurement steps**

#### Baseline data for existing accounts

If you are setting up a measurement plan for the first time, or if you have inherited an existing social media account, you should determine a baseline for your account(s) to have a basis for measurement.

- 1. Collect data as far back as possible, but a minimum of a year is ideal
- 2. Add the data to a dashboard for easy analysis (Excel is one example of a place to collect data)
- 3. Make note of Follower growth rate and average Reach/Impressions and Engagement Rate

#### Set goals

Determine what your goals are for the next year, quarter, etc. Do you want to:

- Increase the number of followers by a certain percentage?
- Drive more traffic to your website using social media?
- Increase donations to your program or unit?
- Have conversations with your followers?

To best accomplish these and other goals, create calls-to-action. For example:

- Increase followers = "Share with your friends" or "Like and follow"
- Drive more traffic = "Click here" with web URL
- Increase donations = "Donate now" button or web URL link with appeal
- Have conversations = ask questions and respond to answers

#### Create and execute a plan

Plan out the promotions you want to do around specific events and throughout the year. Be sure to include the calls-to-action you've determined and craft messaging to reflect those actions. Paying for promoted posts may help with your reach if you don't have a great number of followers.



#### Measure effectiveness

After the promotions run, collect the statistics and add them to your dashboard. Determine whether you met or exceeded your determined goal. If you did not do either, adjust your goals, expectations, or messaging for the next promotion.

#### Where to find your data

Platform	Location	
Facebook	<ul> <li>Log into Facebook and navigate to your page</li> </ul>	
	<ul> <li>Visit the Insights tab to see your data.</li> </ul>	
	<ul> <li>Data can be exported for further analysis.</li> </ul>	
Twitter	<ul> <li>Log into your Twitter account.</li> </ul>	
	<ul> <li>Navigate to <u>analytics.twitter.com</u></li> </ul>	
	<ul> <li>Analytics are turned off be default on most</li> </ul>	
	accounts and must be activated to begin	
	collecting.	
	<ul> <li>View your overview on the Home tab.</li> </ul>	
	<ul> <li>Data can be exported for further analysis in the</li> </ul>	
	Tweets tab.	
Instagram	On your mobile device, sign into your account.	
	<ul> <li>Ensure that your profile is set up as a "business"</li> </ul>	
	account. (See facebook.com/business/e/getting-	
	started-with-instagram-for-business for	
	instructions.)	
	<ul> <li>You can view basic information about posts up to</li> </ul>	
	2 years.	
	<ul> <li>No data export feature currently exists on the</li> </ul>	
	platform.	
	<ul> <li>To get deeper information, consider a 3<sup>rd</sup>-party</li> </ul>	
	application, such as Iconosquare, Sprout Social,	
	and others.	
Pinterest	Log into your Pinterest account.	
	<ul> <li>Navigate to <u>analytics.pinterest.com</u></li> </ul>	
	<ul> <li>Full analytics tracking may need to be set up on</li> </ul>	
	your website.	
	<ul> <li>You can also track traffic from Pinterest to your</li> </ul>	
	website using Google Analytics.	



## Virginia Tech Identity Standards and Style Guide/Brand Guide

Virginia Tech Social Media Guidelines: <a href="http://vt.edu/social-media">http://vt.edu/social-media</a>

Campus Emergency Communications: <a href="http://branding.unirel.vt.edu/brand/social-media-guidelines/emergency.html">http://branding.unirel.vt.edu/brand/social-media-guidelines/emergency.html</a>

Virginia Tech Social Media Guidelines (downloadable PDF): <a href="http://bit.ly/social-media-PDF">http://bit.ly/social-media-PDF</a>





# HUMAN RESOURCES TRANSFORMATION INITIATIVE

**Executive Overview** 

**Board of Visitors** 

**September 11, 2017** 

## Introduction

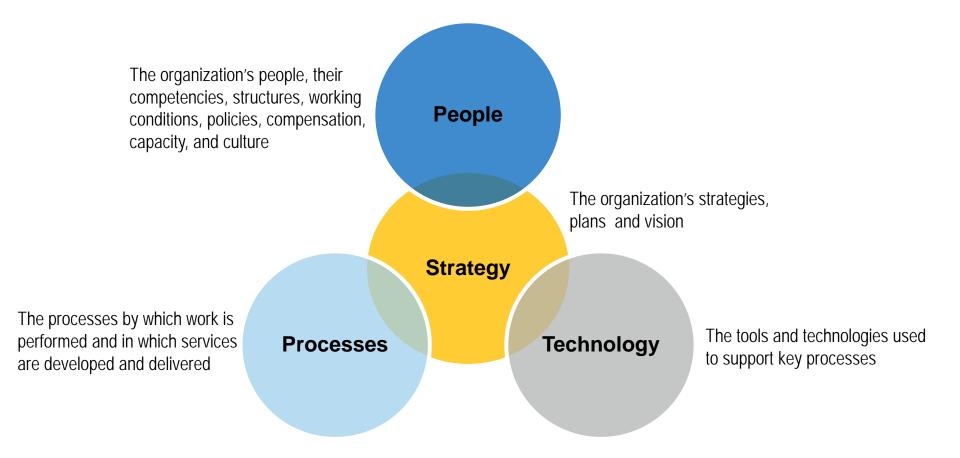
## Background and Objective

- ➤ Sibson Consulting was engaged by Virginia Polytechnic Institute and State University ("Virginia Tech"), to assess the quality and effectiveness of the University's human resources function and to develop recommendations and implementation plans for improving the overall quality, effectiveness, and efficiency of the Human Resources organization
- ➤ The first phase of the initiative is to conduct a comprehensive assessment of the current organization and operation
- ➤ The objective of this assessment is to evaluate the current state of HR including the existing services, practices, processes, structures, roles, organizations, and systems and use the findings to uncover and identify the best opportunities for improvement
- > To achieve the objective, Sibson completed the following
  - Conducted a thorough content review of a variety of client data and other relevant materials
  - Conducted 42 interviews of HR employees and stakeholders (individual and group),
    - A comprehensive interview list can be found in the Appendix
  - Conducted eight in-depth "shadowing" sessions to better understand the work performed by the HR units

## Introduction

## Assessment Approach

Virginia Tech's Human Resources organization was assessed along four independent yet interrelated dimensions:



Sibson directed respondents to provide perspective in each of these critical areas

## **Assessment Findings**

- ➤ Administrative, Rather Than Strategic: The current HR function is focused on transactional and administrative activities rather than adding strategic value
- Inconsistent, Decentralized HR Services: The level and quality of HR services across the institution is highly varied
- ➤ Inequity in Pay and Other Employment Terms: Policies are broad or ill-defined at Central HR and units have made their own decisions and policies to fit their needs, resulting in differing pay and other practices across the institution
- ➤ **Disjointed Approach to Compensation:** Different areas of the institution pay differently for similar work. As a result, employees are constantly moving to new positions to improve their pay
- > HR Underperformance: Not fully leveraging industry and HR best practices
- Inefficient Processes and Systems: Multiple handoffs, approvals and paper based processes
- > Risk Aversion: Greater focus on avoiding risk than on strategic growth and improvement.
- ➤ Ineffective, Inconsistent Performance Management: Managers do not often provide their direct reports with regular feedback, and the performance management program is not sufficiently focused on professional development

## Recommendations

- 1. Establish a clear vision and supporting strategies for HR
- 2. Develop an operating model and organizational structure that support HR's vision
- Engage in a detailed process redesign effort to improve the quality and efficiency of transactional processes
- 4. Leverage existing or new technology to enhance HR services and analytics
- 5. Address immediate gaps in service quality in both Service Center and Leave areas
- 6. Develop a plan to improve compensation administration, policies and processes
- 7. Engage in a cultural improvement effort within HR
- 8. Create a structured approach for communication and knowledge sharing across functional areas
- 9. Ensure that HR staff have requisite skills, competencies and behaviors
- 10. Develop an effective performance management system and process for measuring performance and accountability

## Where HR Adds Value to the Institution

## THREE PRIMARY WAYS FOR HR TO CREATE VALUE



## The Case for Change

## Traditional Virginia Tech HR Service Distribution



The current HR organization is not supporting the strategic objectives of the University and is focused primarily on performing administrative/transactional services.

## The Case for Change

## Future State Goals

## **From Current State**

- Insufficient customer service and incorrect and/or incomplete information
- Unaligned to the University's vision and strategic initiatives
- Desire for HR to play more of a strategic role, but low levels of confidence in HR to do so
- Siloed with limited collaboration between subunits
- The decentralized HR Partner model creates risk to the University and diminishes quality, consistency, and accuracy of HR services
- Inefficient and inconsistent processes, policies and systems

## **To Future State**

- Alignment between HR and institutional goals
- Optimal structure and composition of the HR organization
- Reduced HR-related work for faculty and staff to allow more time for core activities
- Increased quality of hires across campus
- Efficient and streamlined HR processes
- Effective, future-focused performance management
- Consistency and clarity in promotions, titles, benefits, and pay
- An integrated HR infrastructure that supports a changing and culturally diverse workforce

In order to support the University's vision, HR must evolve to provide a greater level of strategic and consultative services.

## The Strategic Path to HR Transformation

## Committees and Teams

HR Executive Committee

#### Monthly Meetings: September 2016 - May 2017

- Create a guiding vision for the future of HR at Virginia Tech
- Determine appropriate HR leadership structure, roles and reporting relationships
- Review work and recommendations of HR Advisory Committee and HR Project Teams

HR Advisory Committee

## Bi-Weekly Meetings: September 2016 – May 2017

- Review leading practices and develop appropriate HR delivery model for VT
- Define future HR services, points of delivery, organizational alignment to new model
- Develop recommendations for implementing new HR model (costs, timelines, etc.)

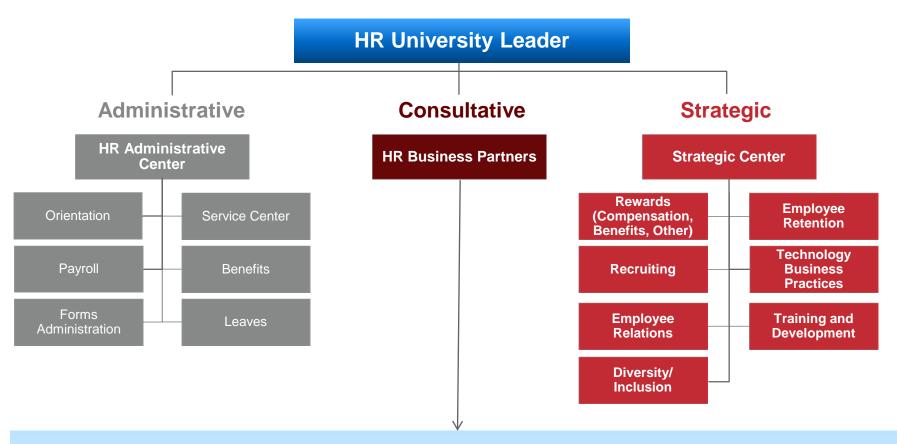
HR Project Teams

## Regular Meetings: September 2016 – May 2017

- Streamline processes, create efficiencies, reduce errors
- Develop recommendations for enhancing use of technology
- Initial focus on Service Center, Benefits, and Leaves

## **Emerging Model for HR at Virginia Tech**

## High-Level Structure



Within each major academic and administrative Division Supports the strategic and consultative HR needs of the Division Led by an individual with deep HR skills and abilities Reports to University HR leader and Division

## **Benefits of the Emerging Model to Divisions**

- 1. Proactively identifying and addressing the Division HR's needs to ensure that it has the right people and talent to achieve its future goals.
  - On-going assessment of the Division's workforce with accompanying plans to address staffing needs, enhance skills, and build high performing cultures
  - Targeted training and development activities
  - Professional development and career framework opportunities that align with the current and future business needs and strategy of the institution and the Division
  - Integrated performance management and employee development
  - Support for strengthening morale and employee engagement
  - More consultation and support on strategic Division-specific recruiting needs
- Faster and simpler HR processes that are aligned to the demands of the Division.
  - Streamlined recruiting tools and hiring processes, eliminating current bureaucracies
  - Improved onboarding experience for all new hires
  - Learning Management System to facilitate value-added professional development
- Consistency and equity in compensation and other HR
  - Fair and consistent pay practices
  - Improved retention strategies and activities
  - Reduced risk of employment related claims or litigation

# Human Resources Transformation Initiative



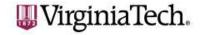






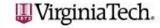
LIVE A LEARN F WORK

- Lisa J. Wilkes, Ph.D.
- Interim Vice President for Human Resources



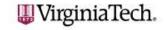
## Status of Initial Recommendations

- 1. Establish a clear vision and supporting strategies for HR Completed
- 2. Develop an operating model and organizational structure that support HR's vision Completed
- 3. Engage in a detailed process redesign effort to improve the quality and efficiency of transactional processes In process
- Leverage existing or new technology to enhance HR services and analytics - In process
- 5. Address immediate gaps in service quality in both Service Center and Leave areas Completed



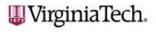
## Status of Initial Recommendations (continued)

- 6. Develop a plan to improve compensation administration, policies and processes In process
- 7. Engage in a cultural improvement effort within HR In process
- 8. Create a structured approach for communication and knowledge sharing across functional areas In process
- Ensure that HR staff have requisite skills, competencies and behaviors - In process
- 10. Develop an effective performance management system and process for measuring performance and accountability In process



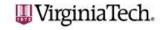
## **Initiatives Completed in FY17**

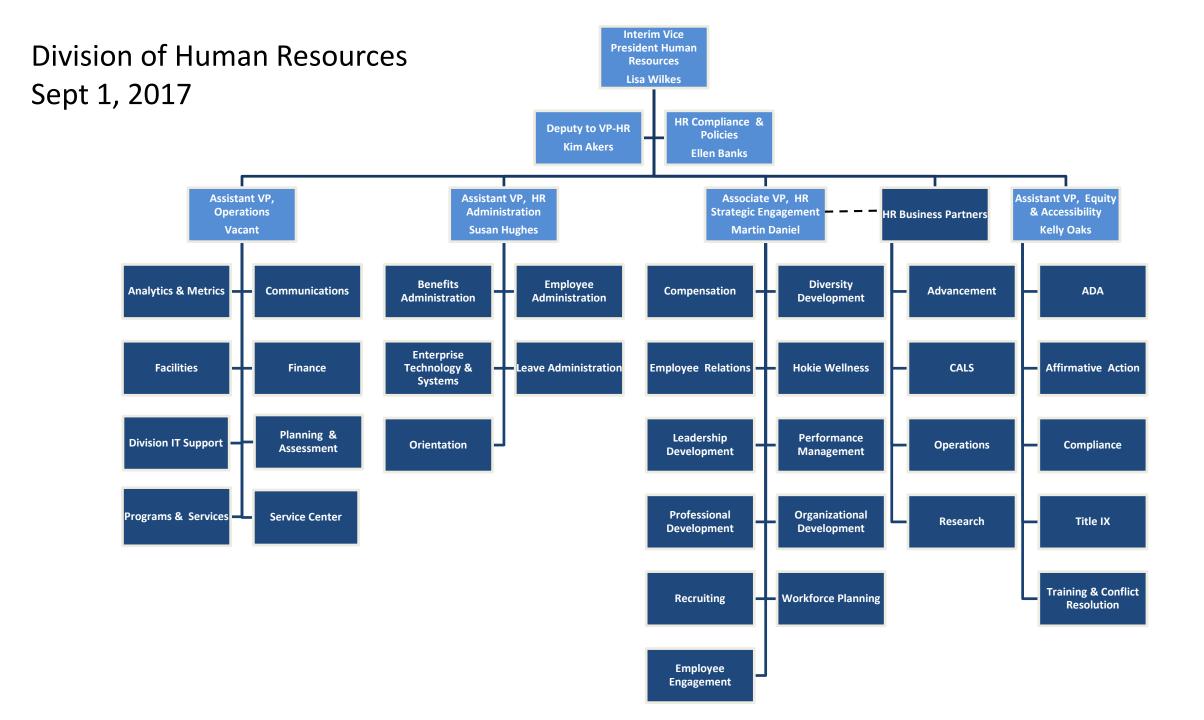
- Committed to hire VP, Human Resources and establish HR as division
- Administrative Arm
  - Improved business practices, processes and services in benefits
  - Revamped HR Service Center Model and installed phone tree
  - Hired new leave analyst, HR records manager, orientation coordinator, and applicant tracking system coordinator
- Consulting Arm
  - Developed framework for HR Business Partner model
  - Identified initial pilot areas
- Strategic Arm
  - Confirmed necessity for new systems
  - Built organizational framework



## **Accomplishments in FY18**

- Named interim vice president
- Established division of human resources
- Drafted vision and mission statement
- Installed HR senior leadership team
- Developed 100 day plan





## 100 Day Plan September – December 2017

## 100 Day Plan - Implement and Execute Eight Key Strategies to Support HR Transformation

## **HR Transformation Elements**

## 1. Implement HR Business Partner Model

- Launch first four pilots by 10-1-17
  - Hire new HRBP for Advancement
  - Formalize HRBP role in CALS
  - Formalize HRBP role in Research
  - Identify HRPB role in Operations

## **Infrastructure and Support Requirements**

#### 4. Develop & Implement Communications Plan

- Articulate and broadly communicate HR Mission and Vision
- Continue to engage HR Executive Committee and HR Advisory Committees on quarterly basis
- Provide regular updates on HR progress to campus

#### 2. Enhance HR Administrative Services

- Realign leadership and services to integrate, streamline and simplify HR processes
- Identify new benefits & leaves programs
- Enhance HR service center focus and quality
- Develop consistent processes for units not in HR pilot program

## 5. Leverage Technology

- Upgrade/replace applicant tracking system
- Automate multiple paper based processes
- Advocate for Learning Management System
- Identify Performance Management System
- Establish HR metrics program/team
- Identify Complaint Management System

## 3. Add New Strategic HR Services

- Identify and install a leader of the Strategic HR unit
- Finalize and prioritize strategic HR initiatives
- Add new focus to compensation, recruiting and selection, workforce planning, leadership development, organizational development, and professional development

#### 6. Secure Required Investments

- Realign budgets and secure resources for current year
- Establish HR operations team
- Develop 3-5 year funding plan

## **Current and Future Initiatives**

#### 7. Lead Day-to-Day Projects and Initiatives

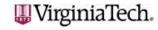
- OFCCP Audit
- Compensation Plan
- Restructuring Initiative
- Campus Accessibility

- Recruiting Initiative
- Benefit outreach/educational programs
- Enhanced employee engagement/service programs
- Inclusive workplace

#### 8. Continue to Evolve Organization and Services

- Equity and Accessibility reporting structure and organizational alignment
- Great Place to Work Initiative

## **Questions?**



## **RESOLUTION TO RATIFY THE 2017-18 FACULTY HANDBOOK**

#### Documents included:

- Resolution to ratify the 2017-18 faculty handbook.
   Table of revisions made to faculty handbook.
- 3. Redlined version of changes to faculty handbook.

#### **RESOLUTION TO RATIFY THE 2017-18 FACULTY HANDBOOK**

**WHEREAS**, the Faculty Handbook is the record for policies pertaining to all types of faculty employees; and

WHEREAS, the oversight of policies governing all types of faculty employees at the university is the responsibility of the Board of Visitors; and

**WHEREAS**, the Faculty Handbook is revised annually to incorporate editorial updates, new or amended policies; and

WHEREAS, the Faculty Handbook includes the mission statement of the university; and

**WHEREAS**, to ensure that the Faculty Handbook reflects the policies passed by the board, the mission of the university, and that any changes to the handbook are appropriate and accurate, the board annually reviews and ratifies a revised edition of the Faculty Handbook;

**NOW, THEREFORE, BE IT RESOLVED** that the Virginia Tech Board of Visitors hereby ratifies the September 10, 2017 version of the Faculty Handbook that incorporates the revisions summarized in the attachment.

#### **RECOMMENDATION:**

That the 2017-18 Faculty Handbook be ratified.

September 10, 2017

Global Changes		Vice Provost for Enrollment and Degree Management changed to Vice Provost for Enrollment	To reflect title change
COVER PAGE			The state of the s
Section No.	Section Name	Revision	Source
<b>CHAPTER ONE</b>	: MISSION AND GOVERNANCE C	F THE UNIVERSITY	
Section No.	Section Name	Revision	Source
1.	4 Central Administration	Addition of "senior vice president for operations and administration"	Per updated Office of the President organizational chart effective August 1, 2017.
1.4.1	President	Revised list of those who report to president.	Per updated Office of the President organizational chart effective August 1, 2017.
1.4.2	Executive Vice President and Provost	Revised list of those who report to provost.     Added "Vice Provost for Learning Systems Innovation and Effectiveness"	Per Provost organizational chart     To reflect newly created position
1.4.3	Senior Vice President for Operations and Administration	New section to reflect updated organizational structure.	Per updated Office of the President organizational chart effective August 1, 2017.
CHAPTER TWO	: EMPLOYMENT POLICIES AND	PROCEDURES FOR ALL FACULTY	
Section No.	Section Name	Revision	Source
2.5.5	Appointment of Executive Vice President and Provost, Senior Vice President for Operations and Administration, and Vice Presidents	Revised section title to reflect updated organizational structure.	Per updated Office of the President organizational chart effective August 1, 2017.
2.5.10	Faculty Credentialing Guidelines	Revised language for consistency with university policy/SACS	1. For consistency.
2.7.3	University Safety and Security Policy	Revisions and additions to language	To reflect changes made to University     Policy 5615 "University Safety and Security     Policy" effective 2/1/17
2.7.4	Campus and Workplace Violence Prevention	Revisions and additions to language	To reflect changes made to University     Policy 5615 "University Safety and Security     Policy" effective 2/1/17
2.10.5	Annual Leave and Holidays	Addition of Labor Day as a holiday observed by university faculty members.	Per resolution passed by University Council on 4/10/17
2.11.11	Voluntary Transitional Retirement Transition Program for Faculty with Tenure or Continued Appointment	Enhancements made to program to allow for transitional retirement options of 2 and 3 years for tenrued faculty.	"Voluntary Transitional Retirement Program for Tenured Faculty," revised and approved by BOV, April 3, 2017.
2.19	Use of University Facilities	Revisions to language.	To reflect changes made to University     Policy 5000, "University Facilities Usage and     Event Approval," 1/31/17

CHAPTER THR	CHAPTER THREE: EMPLOYMENT POLICIES AND PROCEDURES FOR TENURED AND TENURE-TRACK FACULTY		
Section No.	Section Name	Revision	Source
3.2.2	Alumni Distinguished Professor	Revisions to language indicating that, instead of limiting the number of Alumni Distinguished Professors to 10, that the number shall be determined the provost in consultation with the president and the Alumni Association.	Per resolution approved by the Board of Visitors 4/3/17.
3.2.3	University Distinguished Professor	Revisions to language indicating that, instead of limiting the number of University Distinguished Professors to 1 percent of the total full-time faculty, that the number shall be determined the provost and president.	Per resolution approved by the Board of Visitors 4/3/17.
3.3	Procedures for Faculty Appointments with Tenure	Revisions to make process more consistent with standard tenure process.	Per resolution approved by Board of Visitors 6/5/17.
3.4.5	Appeals of Decisions on Reappointment, Tenure, or Promotion	1. Revisions for clarity.	Per resolution approved by Board of Visitors 6/5/17.
CHAPTER FOL	JR: EMPLOYMENT POLICIES AND	PROCEDURES FOR FACULTY WITH CONTINUED APPOINTMENT OR ON CONTINUED-APPOINTMENT TRA	ACK
Section No.	Section Name	Revision	Source
4.4	Procedures for Appointments with Continued Appointment	1. Language added.	1. For clarity and consistency with changes made in Chapter 3.3
4.5.5	Appeals of Decisions on Reappointment, Continued Appointment, or Promotion	1. Revisions for clarity.	Per resolution approved by Board of Visitors 6/5/17.
4.5.5.3	Review of Progress Toward Promotion to Professor for Faculty with Continued Appointment	1. Change to title	For clarity and consistency.
<b>CHAPTER FIVE</b>	E: EMPLOYMENT POLICIES AND	PROCEDURES FOR NON-TENURE-TRACK INSTRUCTIONAL FACULTY	
Section No.	Section Name	Revision	Source
5.1.7	Instructor Faculty Ranks	1. Revisions for clarity	1. Per resolution approved by Board of Visitors 6/5/17.
5.2.2	Reappointment	Revisions to add language allowing promotion of faculty in restricted positions in certain cases.	1. Per resolution approved by Board of Visitors 6/5/17.
5.2.4	Promotion Guidelines for Non- Tenure Track Faculty Appointments	Revisions to add language allowing promotion of faculty in restricted positions in certain cases.	Per resolution approved by Board of Visitors 6/5/17.
5.2.4.1	Promotion Guidelines for Collegiate Faculty Appointments	Addition of section/language describing the process for promotion of collegiate faculty.	Per resolution approved by Board of Visitors 6/5/17.
CHAPTER SIX:	EMPLOYMENT POLICIES AND P	ROCEDURES FOR RESEARCH FACULTY	<u>'</u>
Section No.	Section Name	Revision	Source
<b>CHAPTER SEV</b>	/EN: EMPLOYMENT POLICIES AN	ID PROCEDURES FOR ADMINISTRATIVE AND PROFESSIONAL FACULTY	
Section No.	Section Name	Revision	Source
7.5	Teaching Credit Classes and Overload Compensation for Administrative and Professional Faculty	Revisions made for clarity.	To reflect changes made to University Policy 4072, "Teaching Credit Classes and Overload Compensation for Administrative and Professional Faculty Members," 1/19/17
7.6.3	Reassignment	Revisions made to clarify process.	Per resolution approved by Board of Visitors 4/3/17.
7.6.4	Removal for Just Cause	Updated title from associate vice president for human resources to vice president for human resources	Per updated Office of the President organizational chart effective August 1, 2017

7.7.1	Faculty Reconciliation and	1. Updated title from associate vice president for human resources to vice president for human resources	Per updated Office of the President
	Mediation Services		organizational chart effective August 1, 2017.
7.7.2	The Formal Grievance	Updated title from associate vice president for human resources to vice president for human resources	Per updated Office of the President
	Procedure		organizational chart effective August 1, 2017.
7.7.5	Particular Concerns and	1. Updated title from associate vice president for human resources to vice president for human resources	Per updated Office of the President
	Definitions		organizational chart effective August 1, 2017.
7.7.6	Overview of the Formal	1. Updated title from associate vice president for human resources to vice president for human resources	Per updated Office of the President
	Grievance Process for		organizational chart effective August 1, 2017.
	Administrative and Professional		
CHAPTER EIG	Faculty  SHT: EMPLOYMENT POLICIES AN	D PROCEDURES FOR GRADUATE ASSISTANTS	
Section No.	Section Name	Revision	Source
		NO REVISIONS TO THIS CHAPTER	6/12/17: confirmed by Karen DePauw
CHAPTER NIN	IE: INSTRUCTION-RELATED POLI	CIES	,
Section No.	Section Name	Revision	Source
9.1	Assignment of Academic	Revisions to language to provide clarity for instructors with distinctive assignments.	Per resolution approved by Board of
	Responsibilities		Visitors 6/5/17.
	N: RESEARCH, CREATIVE, AND S		T.
Section No.	Section Name	Revision	Source
10.3	Removal of a Principal, Co-	1. Revisions to language for clarity.	1. To reflect changes made to University
	Principal, or Lead Investigator, or Equivalent		Policy 13025, "Removal of a Principal, Co- Principal, Lead Investigator, or Equivalent,"
	Equivalent		3/10/17
10.4.1	Effort Certification	Revisions to language for clarity.	1. To reflect changes made to University Policy 3105, "Effort Certification" 2/13/17
	EVEN: FACULTY BENEFITS PROG		
Section No.	Section Name	Revision	Source
11.1.1	Group Life Insurance	Text edits for clairty and consistency with university, state, and federal policy.	For clarity and consistency.
11.1.3.3	Voluntary Transitional	Addition of section to include enhanced transitional retirement program for tenured faculty.	1. To reflect changes to University Policy
	Retirement Program for Faculty with Tenure or Continued		4410, approved by the Board of Visitors 4/3/17.
	Appointment		4/3/17.
11.1.3.2	Optional Retirement Plan	Text edits for clairty and consistency with university and state policy.	For clarity and consistency.
<del>11.2.1</del>	Long-Term Care	Removed to reflect that Genworth no longer provides long-term care insurance. No new provider has been	Per Human Resources.
		named	
11.2.1	Accidental Death and Dismemberment Insurance	Section number changed to account for removal of section 11.2.1	1. For consistency.
11.2.2	Health Insurance	Section number changed to account for removal of section 11.2.1	1. For consistency.
11.2.3	Health Flexible Spending Account	Section number changed to account for removal of section 11.2.1	1. For consistency.
11.2.4	Dependent Care Flexible Spending Account	Section number changed to account for removal of section 11.2.1	1. For consistency.
11.2.5	Employee Assistance Program	Section number changed to account for removal of section 11.2.1	1. For consistency
		Language revised for clarity and consistency.	To reflect changes made to University     Policy 4345, "Employee Assistance Program"     2/13/17
11.2.6	Tax-Deferred	1. Costion number changed to account for removal of accition 44.0.4	2/10/11
11.2.0	Investments/Deferred	Section number changed to account for removal of section 11.2.1	
	Compensation/Cash Match		
	2 3pooa.io.i/ Odoli Matoli	1	

11.2.7	Credit Unions	Section number changed to account for removal of section 11.2.1	
11.2.8	Charitable Deductions	Section number changed to account for removal of section 11.2.1	
11.2.9	Optional Life Insurance	Section number changed to account for removal of section 11.2.1	
11.2.10	Legal Resources	Section number changed to account for removal of section 11.2.1	
11.2.11	New York Life Insurance Company	Section number changed to account for removal of section 11.2.1	
11.2.12	Aflac	Section number changed to account for removal of section 11.2.1	
11.3.3	Workers' Compensation	Revisions to clarify language and update contact information for provider.	To reflect changes made to University     Policy 4415, "Workers' Compensation"     1/3/17
11.3.3.1	Reporting Work-Related Injuries	Revisions to language to clarify process.	To reflect changes made to University     Policy 4415, "Workers' Compensation"     1/3/17
<b>CHAPTER TWE</b>	LVE: FACULTY PREPAREDNESS	5	
Section No.	Section Name	Revision	Source
		Graphics updated to reflect most current version	most recent version on OEM website-dated June 2016

## AMENDMENT TO JUNE 5, 2017 RESOLUTION FOR ATMOS GAS LINE EASEMENTS TO SERVE THE VIRGINIA TECH BASEBALL FACILITIES

A gas line route previously approved by the Board of Visitors for natural gas service for the new Virginia Tech baseball stadium needs to be relocated. Upon additional onsite review by Atmos, the university's needs are better served with the newly proposed gas line route.

## AMENDMENT TO JUNE 5, 2017 RESOLUTION FOR ATMOS GAS LINE EASEMENTS TO SERVE THE VIRGINIA TECH BASEBALL FACILITIES

WHEREAS, the Virginia Polytechnic Institute and State University ("Virginia Tech") Board of Visitors at its June 5, 2017 meeting authorized the Vice President, his successors and/or assigns, to execute an easement or easements as may be needed to extend Atmos Energy Corporation ("Atmos") gas lines to serve the planned improvements to the Virginia Tech Baseball Facilities; and

**WHEREAS**, on June 5, 2017, the Virginia Tech Board of Visitors approved the location of the gas line route shown on the attached drawing entitled "ATMOS GAS LINE SKETCH VT BASEBALL." Upon additional onsite review by Atmos, Virginia Tech's needs would be better served with an alternate gas line route; and

WHEREAS, Capital Construction and Renovation, the Department of Athletics, the Department of Horticulture, and Atmos developed an alternate route for the gas line being twenty feet (20') wide and approximately three hundred fifty feet (350') long along the southern edge of the Hahn Horticulture Garden as more particularly shown and described on the attached drawing entitled "GAS" with limited damage to the flora in that area; and

**WHEREAS**, Virginia Tech and Atmos are agreeable to extending the gas line in the general areas and locations depicted on the attached drawing to accommodate the improvements to the Virginia Tech Baseball Facilities;

**NOW, THEREFORE, BE IT RESOLVED** that the previous authorization of a gas line extension along Duck Pond Drive is hereby revoked; and

**BE IT FURTHER RESOLVED**, that the Vice President for Operations, his successors and/or assigns, be authorized to execute an easement to extend an Atmos gas line to serve the planned new Virginia Tech baseball stadium as set forth herein, in accordance with applicable Virginia Tech procedures for easements as permitted by the Higher Education Restructuring Act and Management Agreement with the Commonwealth of Virginia, and the <u>Code of Virginia</u> (1950), as amended.

#### **RECOMMENDATION:**

That the above resolution revoking the authorization of a gas line extension along Duck Pond Drive and authorizing the Vice President for Operations, his successors and/or assigns, to execute an easement to extend an Atmos gas line to serve the planned new Virginia Tech baseball stadium be approved.

September 11, 2017



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## RESOLUTION FOR ATMOS GAS LINE EXTENSION EASEMENT TO THE VIRGINIA TECH RECTOR FIELD HOUSE

Natural gas service is needed for the Virginia Tech Rector Field House to fuel new boilers for hot water and heating equipment as part of the Virginia Tech Rector Field House Improvements Project.

## RESOLUTION FOR ATMOS GAS LINE EXTENSION EASEMENT TO THE RECTOR FIELD HOUSE

**WHEREAS**, Virginia Polytechnic Institute and State University ("Virginia Tech") has initiated a construction and rehabilitation project to expand and improve the Virginia Tech Rector Field House located on Beamer Way on the main campus of Virginia Tech; and

**WHEREAS**, the improvements to the Virginia Tech Rector Field House will necessitate natural gas service to the site to economically and reliably fuel new boilers being installed to provide heat and hot water; and

**WHEREAS**, Atmos Energy Corporation ("Atmos") has natural gas lines in the general area that could be extended without undue disruption to pedestrian and vehicular traffic in that area of campus; and

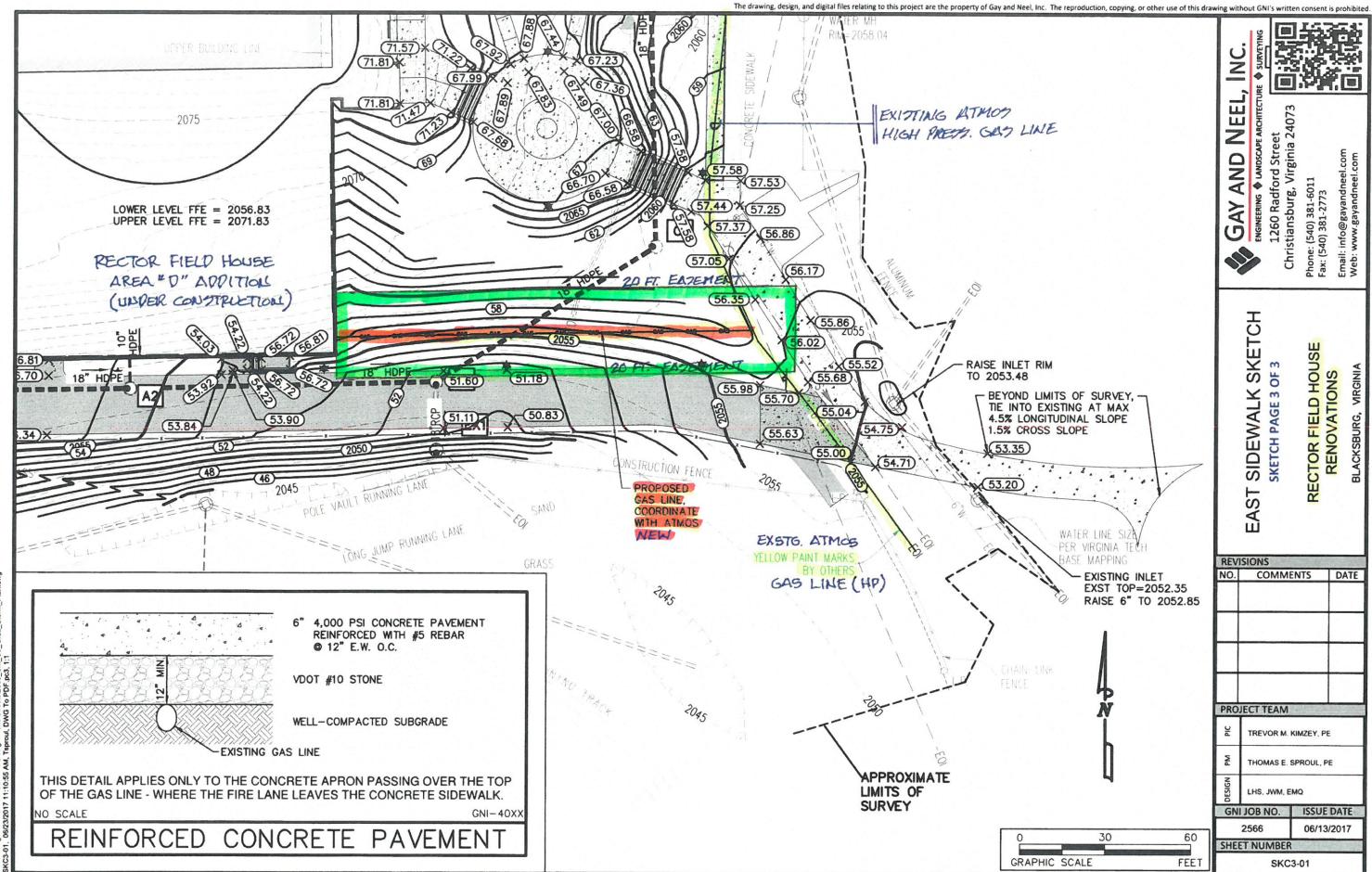
WHEREAS, Virginia Tech and Atmos are agreeable to extending a gas line in the general area and location as depicted on the attached drawing entitled "EAST SIDEWALK SKETCH RECTOR FIELD HOUSE RENOVATIONS," which gas line extension would be twenty feet (20') in width and approximately one hundred eighty feet (180') in length, to accommodate the improvements to the Virginia Tech Rector Field House;

**NOW, THEREFORE, BE IT RESOLVED,** that the Vice President for Operations, his successors and/or assigns, be authorized to execute an easement to extend Atmos' gas line to serve the planned improvements to the Virginia Tech Rector Field House, in accordance with applicable Virginia Tech procedures for easements as permitted by the Higher Education Restructuring Act and Management Agreement with the Commonwealth of Virginia, and the <u>Code of Virginia (1950)</u>, as amended.

#### **RECOMMENDATION:**

That the above resolution authorizing the Vice President for Operations, his successors and/or assigns, to execute an easement to extend Atmos' gas line to serve the planned improvements to the Virginia Tech Rector Field House be approved.

September 11, 2017



# RESOLUTION FOR APPROVAL OF AN UPDATE TO THE CAPITAL CONSTRUCTION DELIVERY METHOD APPROVAL PROCESS

The Committee will consider for approval a resolution updating the university's capital construction delivery method approval process.

# RESOLUTION FOR APPROVAL OF AN UPDATE TO THE CAPITAL CONSTRUCTION DELIVERY METHOD APPROVAL PROCESS

**WHEREAS,** effective July 1, 2006, Virginia Polytechnic Institute and State University (Virginia Tech) operates as a Tier III institution in accordance with its Management Agreement and operational policies; and

WHEREAS, pursuant to the Management Agreement, Virginia Tech has delegated authority relating to the procurement of goods, services, insurance, and construction services; and

**WHEREAS**, a resolution for approval of the construction procurement approval process for capital project delivery was approved by the Board of Visitors June, 6, 2016; and

**WHEREAS**, the Commonwealth of Virginia 2017 General Assembly passed legislation (Title 2.2 Chapter 43.1) regulating the types of construction procurement methods available for public institutions of higher education; and

**WHEREAS,** such legislation requires Virginia Tech to update its Capital Construction Delivery Method approval process and submit the proposed updates to the Department of General Services for review and recommendations; and

WHEREAS, the Department of General Services has reviewed and provided recommendations, which recommendations have been incorporated into the university's updated Capital Construction Delivery Method Approval Process; and

**WHEREAS**, the university submits for Board of Visitors approval the updated Capital Construction Delivery Method Approval Process; and

**WHEREAS**, with the approval of these updated procedures, Virginia Tech confirms that all of the required Board-level policies and procedures are in place to implement the new legislation;

**NOW, THEREFORE, BE IT RESOLVED,** that the university adopts the proposed Capital Construction Delivery Method Approval Process.

#### **RECOMMENDATION:**

That the above resolution approving the Capital Construction Delivery Method Approval Process be approved.

September 11, 2017

# Virginia Polytechnic Institute and State University Facilities Department Procedures

# Approval Process for Construction Manager at Risk (CMAR) and Design – Build (D-B) Capital Project Delivery Methods

Date: September 11, 2017 Revision: 1

#### Purpose:

Pursuant to the Restructuring Act and in accordance with Chapter 780 (2016) Item 4-4.01 #1c and *Code of Virginia* §2.2-4378, 2.2-4379, 2.2-4381 and 2.2-4383, the following process is adopted for use of the Construction Manager at Risk (CMAR) and Design –Build (D-B) Capital Project Delivery Methods.

#### **Responsible Staff:**

Capital Construction and Renovations (CCR) – the Facilities division responsible for the procurement, administration, management, and implementation of Major Capital Outlay Projects.

CCR Project Manager (PM) – coordinates with CCR management and project stakeholders to recommend a project delivery method.

Senior Facilities Contract Officer – administers the capital outlay procurement process, reviews delivery method options, and manages contract development, approval, and execution.

Director of Capital Construction and Renovation (DCCR) – provides CCR leadership, manages operations, and recommends project delivery methods to meet university goals.

Assistant Vice President for Facilities Operations and Construction (AVPFOC) - provides CCR leadership and recommends project delivery methods.

Associate Vice President and Chief Facilities Officer (AVPCFO) – approves project delivery methods and recommends contracts for execution.

#### Procedure:

- A. Except for projects that use the Design-Bid-Build delivery method, the construction delivery method for a capital outlay project shall be approved in writing by the Virginia Tech Associate Vice President and Chief Facilities Officer (AVPCFO).
- B. In order to obtain the AVPCFO approval and document the university's determination, a written recommendation for the CMAR or D-B project delivery method will be provided to the AVPCFO through the AVPFOC, Director of CCR and from the PM in consultation with the Senior Facilities Contract Officer. The written recommendation will justify why sealed bidding is not practicable and/or fiscally advantageous to the university. In addition, the following will be considered in recommending the CMAR or D-B construction delivery method for each capital project:

#### 1. Considerations for Adopting the CMAR Delivery Method

- a. Construction Costs
- b. Project Complexity (difficult site location, unique equipment, specialized building systems, multifaceted program, accelerated schedule, historic designation, intricate phasing or other aspect that makes competitive sealed bidding impractical)
- c. Building Use
- d. Project Timeline
- e. Need to perform Value Engineering and/or Constructability Analysis concurrent with design
- f. Need for Quality Control and/or vendor pregualification
- g. Need for Cost/Design control
- h. Need for project phasing

#### 2. Considerations for Adopting the Design-Build Delivery Method

- a. Construction Costs
- b. Project Complexity (simplicity)
- c. Building Use
- d. Project Timeline
- e. Need for a Single Point of Contact

#### C. General Guidelines for Both CMAR and D-B Projects

The following general guidelines shall apply to university CMAR and D-B Projects:

- 1. At least five working days prior to the release of a CMAR or D-B RFQ, the university will provide a copy of its written determination for using either delivery method together with a signed Procurement Review Submittal Form (Department of General Services [DGS] 30-456 or DGS 30-471) to DGS for review. Upon receipt of DGS' recommendation, the university shall consider DGS comments and document the university's final determination and planned course of action in the project file and provide a copy to DGS for information.
- 2. The university shall have in its employ or under contract a licensed architect or engineer with professional competence appropriate to the project who shall i) advise regarding the use of CMAR or D-B for that project and will ii) assist with the preparation of the Request for Proposal and evaluation of proposals.
- 3. The Request for Qualifications and RFP will include criteria for contractor selection and will establish a two-step (RFQ/RFP) contractor selection method.
- 4. The Request for Qualifications will be posted for no less than 30 days on eVA, the Commonwealth statewide electronic procurement system. It will include a CMAR or D-B justification to support why sealed bidding is not practicable and/or fiscally advantageous.
- 5. The selection committee shall evaluate the firms' RFQ responses and any other relevant information and shall determine two to five offerors deemed best qualified with respect to the criteria established for the project in the RFQ to receive the Request for Proposals. Prior CMAR or D-B experience or experience with BCOM shall not be required as a prerequisite for award of a contract. However, in the selection of a contractor, the university may consider the experience of each contractor on comparable projects.
- 6. For CMAR Projects:
  - i. At least 90 percent of the construction work shall be subcontracted by the Construction Manager through publicly advertised competitive sealed bidding to the maximum extent

- practicable.
- ii. The contract with the Construction Manager at Risk shall be entered into no later than the completion of the Schematic Phase of design, unless prohibited by authorization of funding restrictions.
- iii. The establishment of interim GMP contracts for early release packages of construction work are permitted.
- iv. The GMP for the project shall be established based on Working Drawings.

#### 7. For D-B Projects

- Sealed Technical Proposals as described in the RFP shall be submitted to the evaluation committee.
- ii. Separately sealed Cost Proposals shall remain sealed until evaluation of the Technical Proposals and the design adjustments are completed.
- iii. After evaluation and ranking the committee shall conduct negotiations with two or more offerors submitting the highest ranked proposals. Cost shall be a critical component in evaluations.

#### Reporting:

The university shall report on completed projects that employ the CMAR or D-B delivery methods annually or as needed upon request by DGS.

#### References:

- Virginia Tech Management Agreement
- Virginia Tech Construction and Professional Services Manual

#### **Approval and Revisions:**

**Initial Adoption** 

Approved by the Board of Visitors on June 6, 2016.

Revision 1

Updated Approved by the Board of Visitors on September 11, 2017.



Associate Vice President and Chief Facilities Officer

230 Sterrett Dr., Suite 112 (0127) Blacksburg, Virginia 24061

Phone: 540/231-6291 Fax: 540/231-4745

July 24, 2017

W. Michael Coppa Acting Director of Division of Engineering and Buildings Department of General Services 1100 Bank Street, Suite 506 Richmond, Virginia 23219

Dear Mr. Coppa,

In reply to your May 23, 2017 correspondence indicating changes in the *Acts of Assembly* Chapters 699 and 704 affecting construction procurement and the utilization of construction management and design-build, please find the response for Virginia Polytechnic Institute and State University attached.

The completed procedure summary checklists and our draft construction management and design-build procedures are included for Department of General Services (DGS) review and comment. Please provide a response by Wednesday, August 9, 2017 so that we may include this item in materials for review and approval by the university's Board of Visitors at their September 2017 meeting.

Additionally, I acknowledge the project specific requirement that DGS evaluate the proposed procurement method and make recommendation as to whether the use of the construction management or design-build procurement method is appropriate.

Please contact my office if you have any further questions.

Sincerely,

Christopher H. Kiwus, PE, PhD

Associate Vice President and Chief Facilities Officer

Attachments: 3

CC:

Robert R. Broyden Lynn Eichhorn

Mark A. Gess Kay K. Heidbreder Mary W. Helmick Timothy L. Hodge Elizabeth G. Hooper G.E. Dwyn Taylor II Sherwood G. Wilson Christopher Yianilos

Invent the Future

(Rev. 6/17)

# Virginia Polytechnic Institute and State University (Virginia Tech) Covered Institution Procurement Procedure Summary Construction Management at Risk

# **Construction Manager at Risk Procedures**

Construction Manager at Nisk Procedures	Agency Procedure Item
Criteria	Number/Page Number
<b>Construction Cost</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.1.a- pg 2
<b>Project Complexity</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.4, §2.2-4381.D.4)	B.1.b- pg 2
<b>Building Use</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.1.c- pg 2
<b>Project Timeline</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.1.d- pg2
Value Eng. and/or Constructability Analysis Concurrent with Design Considered (Relevant COV Sections: §2.2-4381.A)	B.1.e- pg2
GMP Established at Working Drawings (Relevant COV Sections: §2.2-4381.A)	C.6.ivpg3
2-5 Offerors in Short List (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	C.5-pg 2
Interim GMP for Early Packages Permitted (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	C.6.iiipg 3
Need for <b>Quality Control/Vendor Prequalification</b> Considered (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	B.1.f-pg2
Need for <b>Cost/Design Contol</b> Considered (Relevant COV Sections: §2.2-4380.C.5, §2.2 4381.D.5)	B.1.g-pg2
Need for <b>Project Phasing</b> Considered (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	B.1.h-pg2
Written determination that Competitive Sealed Bidding is not Practicable or Advantageous (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	Bpg 2
Justification included in Request for Qualification (RFQ) (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	C.4-pg2
Licensed Architect or Engineer employed or under contract to advise in use of CM@Risk (Relevant COV Sections: §2.2-4380.B.2, §2.2-4381.C.2)	C.2-pg 2
<b>30 Day RFQ Posting Time</b> (Relevant COV Sections: §2.2-4380.B.3, §2.2-4381.C.3)	C.4-pg 2
<b>Two Step</b> Request for Qualifications/Request for Proposals (RFQ/RFP) Process (Relevant COV Sections: §2.2-4380.B.7, §2.2-4381.C.7)	C.3-pg 2
<b>Criteria for evaluation</b> included in RFQ & RFP (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	C.3-pg 2
Contract Entered Into No Later than the Completion of Schematic Design Phase (Relevant COV Sections: §2.2-4380.B.4, §2.2-4381.C.4)	C.6.iipg 3
Prior CM@ Risk or BCOM Experience not a Prerequisite for award. (Relevant COV Sections: §2.2-4380.B.5, §2.2-4381.C.5)	C.5-pg 3
90% of Construction Work Subcontracted Through Publicly Advertised Competitive Sealed Bidding to the Maximum Extent Practicable (Relevant COV Sections: §2.2-4380.B.6, §2.2-4381.C.6)	C.6.ipg3

#### DGS-30-901

(Rev. 6/17)

# Virginia Polytechnic Institute and State University (Virginia Tech) Covered Institution Procurement Procedure Summary Design-Build

# **Design-Build Procedures**

Criteria	Agency Procedure Item Number/Page Number
<b>Construction Cost</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.2.a-pg 2
<b>Project Complexity</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.4, §2.2-4381.D.4)	B.2.b-pg 2
<b>Building Use</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.2.c-pg 2
<b>Project Timeline</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.2.d-pg 2
Cost Proposals Remain Sealed Until Ranking of Technical Proposals is Complete (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	C.7.iipg 3
Cost is Critical Component (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	C.7.iiipg 3
2-5 Offerors in Short List (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	C.5-pg 2
Having a <b>Single Point of Contact</b> Considered (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	B.2.e-pg2
<b>Written determination</b> that Competitive Sealed Bidding is not Practicable or Advantageous (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	Bpg 2
Justification included in Request for Qualification (RFQ) (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	C.4-pg 2
<b>Licensed Architect or Engineer</b> employed or under contract to advise in use of Design-Build (Relevant COV Sections: §2.2-4380.B.2, §2.2-4381.C.2)	C.2-pg 2
<b>30 Day RFQ Posting Time</b> (Relevant COV Sections: §2.2-4380.B.3, §2.2-4381.C.3)	C.4-pg 2
<b>Two Step</b> Request for Qualifications/Request for Proposals (RFQ/RFP) Process (Relevant COV Sections: §2.2-4380.B.7, §2.2-4381.C.7)	C.3-pg 2
Criteria for evaluation included in RFQ and RFP?(Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	C.3-pg 2
<b>Prior Design-Build or BCOM Experience not a Prerequisite</b> for award. (Relevant COV Sections: §2.2-4380.B.5, §2.2-4381.C.5)	C.5-pg 3

# Virginia Polytechnic Institute and State University Facilities Procedures

# Approval Process for Construction Manager at Risk (CMAR) and Design – Build (D-B) Capital Project Delivery Methods

Date: Revision: X

#### Purpose:

Pursuant to the Restructuring Act and in accordance with Chapter 780 (2016) Item 4-4.01 #1c and *Code of Virginia* §2.2-4378, 2.2-4379, 2.2-4381 and 2.2-4383, the following process is adopted for use of the Construction Manager at Risk (CMAR) and Design —Build (D-B) Capital Project Delivery Methods.

#### **Responsible Staff:**

Capital Construction and Renovations (CCR) – the Facilities division responsible for the procurement, administration, management, and implementation of Major Capital Outlay Projects.

CCR Project Manager (PM) – coordinates with CCR management and project stakeholders to recommend a project delivery method.

Senior Facilities Contract Officer – administers the capital outlay procurement process, reviews delivery method options, and manages contract development, approval, and execution.

Director of Capital Construction and Renovation (DCCR) – provides CCR leadership, manages operations, and recommends project delivery methods to meet university goals.

Assistant Vice President for Facilities Operations and Construction (AVPFOC) - provides CCR leadership and recommends project delivery methods.

Associate Vice President and Chief Facilities Officer (AVPCFO) – approves project delivery methods and recommends contracts for execution.

#### Procedure:

- A. Except for projects that use the Design-Bid-Build delivery method, the construction delivery method for a capital outlay project shall be approved in writing by the Virginia Tech Associate Vice President and Chief Facilities Officer (AVPCFO).
- B. In order to obtain the AVPCFO approval and document the university's determination, a written recommendation for the CMAR or D-B project delivery method will be provided to the AVPCFO through the AVPFOC, Director of CCR and from the PM in consultation with the Senior Facilities Contract Officer. The written recommendation will justify why sealed bidding is not practicable and/or fiscally advantageous to the university. In addition, the following will be considered in recommending the CMAR or D-B construction delivery method for each capital project:

#### 1. Considerations for Adopting the CMAR Delivery Method

- a. Construction Costs
- b. Project Complexity (difficult site location, unique equipment, specialized building systems, multifaceted program, accelerated schedule, historic designation, intricate phasing or other aspect that makes competitive sealed bidding impractical)
- c. Building Use
- d. Project Timeline
- e. Need to perform Value Engineering and/or Constructability Analysis concurrent with design
- f. Need for Quality Control and/or vendor pregualification
- g. Need for Cost/Design control
- h. Need for project phasing

#### 2. Considerations for Adopting the Design-Build Delivery Method

- a. Construction Costs
- b. Project Complexity (simplicity)
- c. Building Use
- d. Project Timeline
- e. Need for a Single Point of Contact

#### C. General Guidelines for Both CMAR and D-B Projects

The following general guidelines shall apply to university CMAR and D-B Projects:

- 1. At least five working days prior to the release of a CMAR or D-B RFQ, the university will provide a copy of its written determination for using either delivery method together with a signed Procurement Review Submittal Form (Department of General Services [DGS] 30-456 or DGS 30-471) to DGS for review. Upon receipt of DGS' recommendation, the university shall consider DGS comments and document the university's final determination and planned course of action in the project file and provide a copy to DGS for information.
- 2. The university shall have in its employ or under contract a licensed architect or engineer with professional competence appropriate to the project who shall i) advise regarding the use of CMAR or D-B for that project and will ii) assist with the preparation of the Request for Proposal and evaluation of proposals.
- 3. The Request for Qualifications and RFP will include criteria for contractor selection and will establish a two-step (RFQ/RFP) contractor selection method.
- 4. The Request for Qualifications will be posted for no less than 30 days on eVA, the Commonwealth statewide electronic procurement system. It will include a CMAR or D-B justification to support why sealed bidding is not practicable and/or fiscally advantageous.
- 5. The selection committee shall evaluate the firms' RFQ responses and any other relevant information and shall determine two to five offerors deemed best qualified with respect to the criteria established for the project in the RFQ to receive the Request for Proposals. Prior CMAR or D-B experience or experience with BCOM shall not be required as a prerequisite for award of a contract. However, in the selection of a contractor, the university may consider the experience of each contractor on comparable projects.
- 6. For CMAR Projects:
  - i. At least 90 percent of the construction work shall be subcontracted by the Construction Manager through publicly advertised competitive sealed bidding to the maximum extent

- practicable.
- ii. The contract with the Construction Manager at Risk shall be entered into no later than the completion of the Schematic Phase of design, unless prohibited by authorization of funding restrictions.
- iii. The establishment of GMP contracts for early release packages of construction work are permitted.
- iv. The GMP for the project shall be established based on Working Drawings.

#### 7. For D-B Projects

- Sealed Technical Proposals as described in the RFP shall be submitted to the evaluation committee.
- ii. Separately sealed Cost Proposals shall remain sealed until evaluation of the Technical Proposals and the design adjustments are completed.
- iii. After evaluation and ranking the committee shall conduct negotiations with two or more offerors submitting the highest ranked proposals. Cost shall be a critical component in evaluations.

#### Reporting:

The university shall report on completed projects that employ the CMAR or D-B delivery methods annually or as needed upon request by DGS.

#### References:

- Virginia Tech Management Agreement
- Virginia Tech Construction and Professional Services Manual

#### **Approval and Revisions:**



# COMMONWEALTH of VIRGINIA **Department of General Services**

Division of Engineering and Buildings

1100 Bank Street Suite 506 Richmond, Virginia 23219 (804) 786-3263 Voice/TDD (804) 786-6152 FAX (804) 371-7934

August 8, 2017

Christopher H. Kiwus, PE, PhD Associate Vice President and Chief Facilities Officer 230 Sterrett Drive, Suite 112 (0127) Blacksburg, VA 24061

Dear Dr. Kiwus,

Attached are the results of the DGS review based on the procedures submitted under §2.2-4381.B.2 of the Code of Virginia. These procedures have been reviewed for compliance with §2.2-4381 of the Code of Virginia and the Secretary of Administration's Procedures.

This review has been completed to reflect compliance with the Acts of the Assemby Chapters 699 and 704 which is effective July 1, 2017.

Please provide a copy of the procedures approved by the Board of Visitors for our files and for use in future project reviews.

Acting Director

#### DGS-30-901

(Rèv. 6/17)

# Virginina Polytechnic Institute and State University (Virginia Tech) Covered Institution Procurement Procedure Summary Design-Build

Submitting Institution:

Virginia Tech

Procedures Received 7-24-17

**DGS Response Date:** 

August 8, 2017

### **Design-Build Procedures**

	Agency Procedure Item	DGS
Criteria	Number/Page Number	Comments/Recommendations
<b>Construction Cost</b> Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	B.2.a-pg 2	Compliant
Project Complexity Considered (Relevant COV Sections: §2.2-4381.B.1,		
\$2.2-4380.C.4, §2.2-4381.D.4)	B.2.b-pg 2	Compliant
Building Use Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-		
4380.C.3, §2.2-4381.D.3)	B.2.c-pg 2	Compliant
Project Timeline Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-		
4380.C.3, §2.2-4381.D.3)	B.2.d-pg 2	Compliant
Cost Proposals Remain Sealed Until Ranking of Technical Proposals is		
Complete (Relevant COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	C.7.iipg 3	Compliant
Cost is Critical Component (Relevant COV Sections: §2.2-4380.C.5, §2.2-	67.111	Compliant
4381.D.5)	C.7.iiipg 3	Compliant
2-5 Offerors in Short List (Relevant COV Sections: §2.2-4380.C.5, §2.2-	0.5	Consultant.
4381.D.5)	C.5-pg 2	Compliant
Having a Single Point of Contact Considered (Relevant COV Sections: §2.2-		
4380.C.5, §2.2-4381.D.5)	B.2.e-pg2	Compliant
Written determination that Competitive Sealed Bidding is not Practicable		
or Advantageous (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	Bpg 2	Compliant
Justification included in Request for Qualification (RFQ)		
(Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	B.4-pg 2	Compliant
Licensed Architect or Engineer employed or under contract to advise in		
use of Design-Build (Relevant COV Sections: §2.2-4380.B.2, §2.2-4381.C.2)	C.2-pg 2	Compliant
30 Day RFQ Posting Time (Relevant COV Sections: §2.2-4380.B.3, §2.2-		
4381.C.3)	C.4-pg 2	Compliant
Two Step Request for Qualifications/Request for Proposals (RFQ/RFP)		
Process (Relevant COV Sections: §2.2-4380.B.7, §2.2-4381.C.7)	C.3-pg 2	Compliant
Criteria for evaluation included in RFQ and RFP?(Relevant COV Sections:		
§2.2-4380.B.1, §2.2-4381.C.1)	C.3-pg 2	Compliant
Prior Design-Build or BCOM Experience not a Prerequisite for award.		
(Relevant COV Sections: §2.2-4380.B.5, §2.2-4381.C.5)	D.5-pg 3	Compliant

#### DGS-30-900

(Rev. 6/17)

### Virginina Polytechnic Institute and State University (Virginia Tech) Covered Institution Procurement Procedure Summary Construction Management at Risk

**Submitting Institution:** 

Virginia Tech

Procedures Received 7-24-17

**DGS Response Date:** 

August 8, 2017

#### **Construction Manager at Risk Procedures**

Criteria	Agency Procedure Item Number/Page Number	DGS Comments/Recommendations
Construction Cost Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-		Compliant
	B.1.a- pg 2	Compilant
Project Complexity Considered (Relevant COV Sections: §2.2-4381.B.1,	D 1 h == 2	Compliant
§2.2-4380.C.4, §2.2-4381.D.4)	B.1.b- pg 2	Compilant
Building Use Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-		Constitut
4380.C.3, §2.2-4381.D.3)	B.1.c- pg 2	Compliant
Project Timeline Considered (Relevant COV Sections: §2.2-4381.B.1, §2.2-		
4380.C.3, §2.2-4381.D.3)	B.1.d- pg2	Compliant
Value Eng. and/or Constructability Analysis Concurrent with Design		
Considered (Relevant COV Sections: §2.2-4381.A)	B.1.e- pg2	Compliant
GMP Established at Working Drawings (Relevant COV Sections: §2.2-		
4381.A)	C.6.ivpg3	Compliant
2-5 Offerors in Short List (Relevant COV Sections: §2.2-4380.C.5, §2.2-	C.O.IV. PB3	- Compiler
4381.D.5)	C 5 pg 2	Compliant
·	C.5-pg 2	It is recommended that the
Interim GMP for Early Packages Permitted (Relevant COV Sections: §2.2-		wording of this section be
4380.C.5, §2.2-4381.D.5)		modified to specifically reflect
		"interim GMP contracts" for early
	C C ::: na 2	I
	C.6.iiipg 3	release packages.
Need for <b>Quality Control/Vendor Prequalification</b> Considered (Relevant	245 2	G Bross
COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	B.1.f-pg2	Compliant
Need for Cost/Design Contol Considered (Relevant COV Sections: §2.2-		
4380.C.5, §2.2-4381.D.5)	B.1.g-pg2	Compliant
Need for <b>Project Phasing</b> Considered (Relevant COV Sections: §2.2-		
4380.C.5, §2.2-4381.D.5)	B.1.h-pg2	Compliant
Written determination that Competitive Sealed Bidding is not Practicable		
or Advantageous (Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	Bpg 2	Compliant
Justification included in Request for Qualification (RFQ)		
(Relevant COV Sections: §2.2-4380.B.1, §2.2-4381.C.1)	C.4-pg2	Compliant
Licensed Architect or Engineer employed or under contract to advise in		
use of CM@Risk (Relevant COV Sections: §2.2-4380.B.2, §2.2-4381.C.2)	C.2-pg 2	Compliant
30 Day RFQ Posting Time (Relevant COV Sections: §2.2-4380.B.3, §2.2-	C.4-pg 2	Compliant
Two Step Request for Qualifications/Request for Proposals (RFQ/RFP)	51. PO -	· · · · · · · · · · · · · · · · · · ·
Process (Relevant COV Sections: §2.2-4380.B.7, §2.2-4381.C.7)	C.3-pg 2	Compliant
Criteria for evaluation included in RFQ & RFP (Relevant COV Sections: §2.2-	0.0 68 -	·
4380.B.1, §2.2-4381.C.1)	C.3-pg 2	Compliant
Contract Entered Into No Later than the Completion of Schematic Design	C.3 PB 2	SS.II.p.II.
Phase (Relevant COV Sections: §2.2-4380.B.4, §2.2-4381.C.4)	C.6.iipg 3	Compliant
Prior CM@ Risk or BCOM Experience not a Prerequisite for award.	C.O.IIIPg 3	соттричис
- ,	C 5, ng 2	Compliant
(Relevant COV Sections: §2.2-4380.B.5, §2.2-4381.C.5)	C.5-pg 3	Compilant
90% of Construction Work Subcontracted Through Publicly Advertised		
Competitive Sealed Bidding to the Maximum Extent Practicable (Relevant	C.6.ipg3	Compliant
COV Sections: §2.2-4380.B.6, §2.2-4381.C.6)	C.u.npg3	oo mphane

# Virginia Polytechnic Institute and State University Facilities Department Procedures

# Approval Process for Construction Manager at Risk (CMAR) and Design – Build (D-B) Capital Project Delivery Methods

Date: September 11, 2017 Revision: 1

#### Purpose:

Pursuant to the Restructuring Act and in accordance with Chapter 780 (2016) Item 4-4.01 #1c and *Code of Virginia* §2.2-4378, 2.2-4379, 2.2-4381 and 2.2-4383, the following process is adopted for use of the Construction Manager at Risk (CMAR) and Design —Build (D-B) Capital Project Delivery Methods.

#### Responsible Staff:

Capital Construction and Renovations (CCR) – the Facilities division responsible for the procurement, administration, management, and implementation of Major Capital Outlay Projects.

CCR Project Manager (PM) – coordinates with CCR management and project stakeholders to recommend a project delivery method.

Senior Facilities Contract Officer – administers the capital outlay procurement process, reviews delivery method options, and manages contract development, approval, and execution.

Director of Capital Construction and Renovation (DCCR) – provides CCR leadership, manages operations, and recommends project delivery methods to meet university goals.

Assistant Vice President for Facilities Operations and Construction (AVPFOC) - provides CCR leadership and recommends project delivery methods.

Associate Vice President and Chief Facilities Officer (AVPCFO) – approves project delivery methods and recommends contracts for execution.

#### Procedure:

- A. Except for projects that use the Design-Bid-Build delivery method, the construction delivery method for a capital outlay project shall be approved in writing by the Virginia Tech Associate Vice President and Chief Facilities Officer (AVPCFO).
- B. In order to obtain the AVPCFO approval and document the university's determination, a written recommendation for the CMAR or D-B project delivery method will be provided to the AVPCFO through the AVPFOC, Director of CCR and from the PM in consultation with the Senior Facilities Contract Officer. The written recommendation will justify why sealed bidding is not practicable and/or fiscally advantageous to the university. In addition, the following will be considered in recommending the CMAR or D-B construction delivery method for each capital project:

#### 1. Considerations for Adopting the CMAR Delivery Method

- a. Construction Costs
- b. Project Complexity (difficult site location, unique equipment, specialized building systems, multifaceted program, accelerated schedule, historic designation, intricate phasing or other aspect that makes competitive sealed bidding impractical)
- c. Building Use
- d. Project Timeline
- e. Need to perform Value Engineering and/or Constructability Analysis concurrent with design
- f. Need for Quality Control and/or vendor prequalification
- g. Need for Cost/Design control
- h. Need for project phasing

#### 2. Considerations for Adopting the Design-Build Delivery Method

- a. Construction Costs
- b. Project Complexity (simplicity)
- c. Building Use
- d. Project Timeline
- e. Need for a Single Point of Contact

#### C. General Guidelines for Both CMAR and D-B Projects

The following general guidelines shall apply to university CMAR and D-B Projects:

- 1. At least five working days prior to the release of a CMAR or D-B RFQ, the university will provide a copy of its written determination for using either delivery method together with a signed Procurement Review Submittal Form (Department of General Services [DGS] 30-456 or DGS 30-471) to DGS for review. Upon receipt of DGS' recommendation, the university shall consider DGS comments and document the university's final determination and planned course of action in the project file and provide a copy to DGS for information.
- 2. The university shall have in its employ or under contract a licensed architect or engineer with professional competence appropriate to the project who shall i) advise regarding the use of CMAR or D-B for that project and will ii) assist with the preparation of the Request for Proposal and evaluation of proposals.
- 3. The Request for Qualifications and RFP will include criteria for contractor selection and will establish a two-step (RFQ/RFP) contractor selection method.
- 4. The Request for Qualifications will be posted for no less than 30 days on eVA, the Commonwealth statewide electronic procurement system. It will include a CMAR or D-B justification to support why sealed bidding is not practicable and/or fiscally advantageous.
- 5. The selection committee shall evaluate the firms' RFQ responses and any other relevant information and shall determine two to five offerors deemed best qualified with respect to the criteria established for the project in the RFQ to receive the Request for Proposals. Prior CMAR or D-B experience or experience with BCOM shall not be required as a prerequisite for award of a contract. However, in the selection of a contractor, the university may consider the experience of each contractor on comparable projects.
- 6. For CMAR Projects:
  - i. At least 90 percent of the construction work shall be subcontracted by the Construction Manager through publicly advertised competitive sealed bidding to the maximum extent

- practicable.
- ii. The contract with the Construction Manager at Risk shall be entered into no later than the completion of the Schematic Phase of design, unless prohibited by authorization of funding restrictions.
- iii. The establishment of <u>interim\_GMP</u> contracts for early release packages of construction work are permitted.
- iv. The GMP for the project shall be established based on Working Drawings.

#### 7. For D-B Projects

- Sealed Technical Proposals as described in the RFP shall be submitted to the evaluation committee.
- ii. Separately sealed Cost Proposals shall remain sealed until evaluation of the Technical Proposals and the design adjustments are completed.
- iii. After evaluation and ranking the committee shall conduct negotiations with two or more offerors submitting the highest ranked proposals. Cost shall be a critical component in evaluations.

#### Reporting:

The university shall report on completed projects that employ the CMAR or D-B delivery methods annually or as needed upon request by DGS.

#### References:

- Virginia Tech Management Agreement
- Virginia Tech Construction and Professional Services Manual

#### **Approval and Revisions:**

**Initial Adoption** 

Approved by the Board of Visitors on June 6, 2016.

Revision 1

Updated Approved by the Board of Visitors on September 11, 2017.

# RESOLUTION TO REVISE #12005 POLICY ON COMMEMORATIVE TRIBUTES FINANCE AND RESOURCE MANAGEMENT COMMITTEE

August 30, 2017

**WHEREAS**, the Policy on Commemorative Tributes (#12005) applies to the commemorative naming of physical spaces and other entities such as buildings, portions of buildings, streets or other physical facilities, and to the erection and plan for donor recognition walls or hanging of plaques, portraits or other permanent memorials honoring individuals or organizations on the campus or outlying properties of the university, as well as specific academic units, such as departments, schools, colleges, institutes, or centers that may be named in honor of individuals; and,

**WHEREAS**, the Commemorative Tributes Committee is responsible for making recommendations to the President, and the positions that serve on the Commemorative Tributes Committee are specified in Section 2.1 of the policy; and,

**WHEREAS**, the university wishes to add to the membership of the Commemorative Tributes Committee the position of Vice Provost for Inclusion and Diversity, a position that did not exist when the policy was created by the Board of Visitors in 1969.

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors of Virginia Polytechnic Institute and State University approves the revision to the Policy on Commemorative Tributes (#12005) to add the position of Vice Provost for Inclusion and Diversity to the membership of the Commemorative Tributes Committee, effective immediately.

#### **RECOMMENDATION:**

That the Policy on Commemorative Tributes (#12005) be revised to add the position of Vice Provost for Inclusion and Diversity to the membership of the Commemorative Tributes Committee, effective immediately.

Rev.:

# Virginia Polytechnic Institute and State University

<u>56</u>

Policy and Procedures 2016September 11, 2017

Date: June 6,

No. 12005

#### **Subject: Policy on Commemorative Tributes**

Policy 1 2.1 2.2 2.3 2.4 2.5 2.6 3. Definitions .......4 5. 6. 

## 1. Purpose

The following policy and procedures apply to the commemorative naming of physical spaces and/or other entities the University Commemorative Tributes Committee will take under consideration, such as buildings, portions of buildings, streets or other physical facilities, and to the erection and plan for donor recognition walls or hanging of plaques, portraits or other permanent memorials honoring individuals or organizations on the campus or outlying properties of the university, as well as specific academic units, such as departments, schools, colleges, institutes, or centers that may be named in honor of individuals.

### 2. Policy

The university will approve commemorative namings of buildings, physical facilities, specific academic components, and the erection of plaques, signs, and portraits as a commemorative tribute in appropriate instances where the university has significantly benefited from the relationship with the person or organization and such naming brings no adverse reflection on the university. The process for securing a naming opportunity is as follows:

- 1. The University Commemorative Tributes Committee is responsible for reviewing proposals for the naming of buildings, other physical facilities, centers, institutes, etc., and for making recommendations to the president.
- 2. After review, the president will submit his/her selected proposals for commemorative tributes to the Board of Visitors.
- 3. Board of Visitors will act on those proposals recommended by the president. Final approval rests with the Board of Visitors.
- 4. The Board of Visitors authorizes the President, upon the recommendation of the Commemorative Tributes Committee, to approve the erection of plaques, permanent signs and other memorials (such as bricks and benches), and the commissioning and hanging of portraits related to the naming.
- 5. This policy applies only to the naming of facilities and physical spaces in honor of persons or organizations and does not apply to the identification of rooms or facilities with numbers, letters, colors, or generic terms.

Revision: <del>5</del> 2016September 11, 2017

-June ---

#### 2.1 Commemorative Tributes Committee

The Commemorative Tributes Committee will consist of the following:

- 1. Vice President for Advancement, Chair
- 2. Executive Vice President and Provost
- 3. Vice President for Student Affairs
- 4. Vice President for Administration
- 5. Vice President for Finance and Chief Financial Officer
- 5.6. Vice Provost for Inclusion and Diversity
- 6.7. President of the Faculty Senate (or designee)
- 7.8. President of the Student Government Association (or designee)
- <u>8.9.</u> Chief Executive Officer of the Virginia Tech Foundation, Inc.

(As the university's organizational structure evolves, the President is authorized by the Board of Visitors to adjust the titles of the committee's membership to reflect those organizational changes.)

### 2.2 Policy for All Commemorative Tributes

- 1. Consideration should be given to the desirability of an appropriate relationship between the use of the physical facility and the person or organization for which the facility is named.
- 2. In reviewing proposals for names of buildings or other facilities, it is appropriate for the members of the Commemorative Tributes Committee to contact appropriate members of the university community to obtain and/or validate information.
- 3. Any building or other facility bearing the name of a person or organization should be clearly identifiable, distinctive, significant, enduring, and functional and should reflect honor on the person or organization for which it is named. Portions of buildings or rooms within buildings generally should meet these same criteria. In addition, names assigned to portions of buildings or rooms should be helpful to users in identification of the facilities.
- 4. This policy applies only to the naming of facilities in honor of persons or organizations and does not apply to the identification of rooms or facilities with numbers, letters, colors, or generic terms.
- 5. Buildings, physical facilities or major academic units are not named for individuals who have been employed by the university during the year preceding the naming. Exceptions may be granted in extraordinary cases.
  - a. In cases where the individual being honored may still be employed by the university but has been separated from the role for which his/her contributions have been most substantial for at least one year, the individual would qualify for an honorific naming.
- 6. Named structures and spaces will exist as long as a building is standing, or unless a major renovation occurs that will result in changes to the space. Circumstances will be evaluated on an individual basis in cases where structures or spaces are removed or changed.

### 2.3 Policy for Names in Tribute of Corporate Entities

- 1. Corporate names are considered to be appropriate for naming of internal spaces and designated exterior locations (i.e., courtyards, gardens, athletic fields). Such naming opportunities must be stated in the proposal, as part of the negotiation, prior to consideration by the Commemorative Tributes Committee.
- 2. Corporate names are not considered to be appropriate for the external identification of buildings.
- 3. Naming privileges are to be negotiated for a period of up to ten years.
- 4. The naming privilege may be granted at the receipt of the pledge commitment and its first payment.
- 5. Exceptions may be granted in extraordinary situations.

2016September 11, 2017

— June 6,

### 2.4 Policy for Building Names in Tribute to Individuals

The following guidelines should be observed in naming buildings or portions of buildings:

- 1. Entire buildings, building additions, or portions of buildings may be named in honor of an individual or individuals.
- 2. The naming of a building, part of a building, or other facility or property of the university is a high honor and would not be done casually. The honor is reserved for those who have made extraordinary contributions to the University through their achievements in service and/or in financial support to the university.
- 3. To merit recognition in the naming of a building or portion of a building, an individual's relationship to the university should be truly exceptional in both quality and impact and be of significant duration.
- 4. When financial contributions are a factor, the level of contribution needed to name a building, addition to a building, or portion of a building (as may be the case in a major renovation project) will vary depending on the financing considerations, purpose, size, prominence on campus, and the level of private support needed for construction. Such gift commitments must be payable over a defined pledge term and the donor must provide a legally binding commitment enforceable against his/her assets/estate until the pledge is retired. Prior to initiating the formal naming process, at least 75% of the gift commitment for the established naming opportunity must be received by the Virginia Tech Foundation, Inc. Exceptions may be granted in extraordinary situations.
  - a. In cases of existing construction, outright gifts and/or irrevocable deferred gifts, e.g., life income plans, may be used. The amount credited toward the naming opportunity will be based on the present value of the charitable gift plan.
  - b. In cases of new construction and when financial support is needed for construction, only outright gifts of readily marketable assets may be used.
  - c. The required gift level for naming spaces within buildings, such as auditoriums, classrooms, laboratories, etc., will be established following the same principles as to naming of existing major facilities.
- 5. Building names should reflect honor on the university as well as on the person or persons being honored and are considered to be permanent.

### 2.5 Plaques and Portraits, and Miscellaneous Items of Recognition

- 1. Donor walls, plaques, portraits, and miscellaneous items (bricks, benches, etc.) should be encouraged to commemorate truly outstanding contributions, either in service or financial support, of persons or organizations.
- 2. Such tributes should be located inside or outside buildings or facilities that have strong identification with the persons or organizations being honored.
- 3. The cost of such plaques, portraits, and miscellaneous recognition items generally should be borne by donors interested in the tributes.
- 4. All internal and external designs need to be reviewed and approved by the Office of University Planning in accordance with university signage standards and design guidelines to assure compliance with the university's master plan.

# 2.6 Departments, Schools, Colleges, Institutes, Centers, or Other Academic Units

1. A major academic unit may be named in honor of an individual in recognition of service to the university and/or in recognition of financial contributions sufficient to provide physical facilities and equipment for

Revision: 5

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2016September 11, 2017

its academic and/or research programs, or which would provide sufficient income to cover an appropriate portion of the annual operating costs of the unit, or both.

- 2. The name applied to an academic unit should be appropriate to its purpose, and should reflect honor on the university as well as upon the person for which it is named.
- 3. Because the life of a university center or institute is not expected to continue indefinitely, gift funding for an institute or a center may be accomplished by endowment or current gifts. If accomplished by a current gift, the name of the institute or center shall generally be limited to the term during which the expendable gift provides funding. The policies and procedures for naming the center or institute shall be the same as for naming other major academic units of the university.

### 3. Procedures

### 4. Definitions

### 5. References

Policy 5410, Official Building and Facility Names, Designations and Numbers <a href="http://www.policies.vt.edu/5410.pdf">http://www.policies.vt.edu/5410.pdf</a>

# 6. Approval and Revisions

Approved by the Board of Visitors on May 16, 1969 – Policy for Commemorative Tributes.

• Revision 1 - To update policy into standard policy format for inclusion in the University policies.

Approved May 2, 1980 by the Board of Visitors.

• Revision 2 - Section 2.1 updated to include title changes of existing members and add additional vice presidents to the committee.

Approved October 15, 1992 by the President, Dr. James McComas.

Approved February 27, 2001 by the Vice President for Development and University Relations, Elizabeth A. Flanagan.

Administrative updates approved on October 31, 2001 by the President, Dr. Charles Steger.

• Revision 3 – Full revision.

Approved August 25, 2003 by the Board of Visitors.

Revision 4

April 1, 2008: Updates to position titles and/or responsibilities due to university reorganization.

Revision 5

Virginia Polytechnic Institute and State University Policy on Commemorative Tributes Current Version Revision: 5

Attachment J Policy 12005

2016September 11, 2017

<del>June 6,</del>

The current university organization, additional procedural considerations giving context and definition to specific naming and funding options, and clarification of naming eligibility necessitates a full policy revision. This major revision updates the committee composition, modifies the 12- month separation rule to factor in eligibility based on the vacated role, incorporates the permanency of namings and the need to individually evaluate spaces that may move or cease to exist, defines the minimum criteria of philanthropic commitments that must be received from corporations and individuals before namings can be formally applied, and specifies the requirement that all identifying signage must be created in consultation with the Office of University Planning.

Approved June 6, 2016 by the Board of Visitors.

#### • Revision 6

The position of Vice Provost for Inclusion and Diversity was added to the membership of the Commemorative Tributes Committee, Section 2.1.

Approved September 11, 2017, by the Board of Visitors.



## Governing Board Certification Form Academic Year 2017-18

As Chairman of the Governing Board at <u>Virginia Polytechnic</u> <u>Institute & State University</u>, I attest that:

- 1) Responsibility for the administration of the athletics program has been delegated to the Chief Executive Officer of the Institution.
- 2) The Chief Executive Officer has the mandate and support of the board to operate a program of integrity in full compliance with NCAA, Conference and all other relevant rules and regulations.
- 3) The Chief Executive Officer, in consultation with the Faculty Athletics Representative and the Athletics Director, determines how the institutional vote shall be cast on issues of athletics policy presented to the NCAA and the Conference.

Date Presente	ed to the Governing Board:	
Signed:		
Digited.	(Chairman of the Governing Board)	
Signed:		
<i>U</i>	(CEO of Member Institution)	

Please return completed form before October 20, 2017 to:

Commissioner John D. Swofford Atlantic Coast Conference 4512 Weybridge Lane Greensboro, NC 27407

# RESEARCH AND DEVELOPMENT DISCLOSURE REPORT May 20, 2017 through August 25, 2017

Reason for Conflict	External Entity	Owner	Principal	Co - P.I.'s	College	Period of	Award	Project Description
			Investigator			Performance	Amount	
Faculty-Employee Owned Business	NanoSafe, Inc.	Matthew Hull			ICTAS	6-1-17 thru 6/30/2018	Master Agreement up to \$500,000	NanoSafe, Inc. is an S-Corporation that is seeking funding from SBIR and other federal programs. Some of these opportunities could involve subcontracts to Virginia Tech. An MOU has been executed to establish a relationship
								on which to move forward on the first NSF SBIR. proposal. A management plan will be developed for each award between NanoSafe and VT.

# RESOLUTION SUPPORTING THE AMENDMENT OF CHAPTER 638 VIRGINIA ACTS OF ASSEMBLY RELATING TO THE NEW RIVER VALLEY EMERGENCY COMMUNICATIONS AUTHORITY

**WHEREAS**, The Virginia General Assembly enacted the New River Valley Emergency Communications Regional Authority Act, effective July 1, 2010 ("the Act"), enabling the County of Montgomery, the Town of Blacksburg, the Town of Christiansburg and Virginia Polytechnic Institute and State University to form a regional authority to provide the core responsibilities for governance of a consolidated public safety communications center with regional interoperable communications; and

WHEREAS, the governing bodies of the Town of Blacksburg, the Town of Christiansburg, the County of Montgomery and the Board of Visitors for Virginia Polytechnic Institute and State University, by Resolution, approved, executed and delivered a Memorandum of Understanding supporting the formation of the New River Valley Emergency Communications Regional Authority (the "Authority") to provide 911 dispatch and emergency communications services for the people of Montgomery County and for Virginia Polytechnic Institute and State University's Blacksburg campus; and

**WHEREAS**, the Authority was properly formed in 2010 and has successfully operated dispatch services for one (1) year; and

**WHEREAS**, the Authority has developed a funding formula for the allocation of its Annual Budget in Annual Contributions to be allocated among the Town of Blacksburg, the Town of Christiansburg, the County of Montgomery and Virginia Polytechnic Institute and State University and payable quarterly to the Authority, subject, however, to appropriation; and

**WHEREAS**, the Authority has suggested that certain amendments be made to the Act permitting the implementation of the funding formula and the allocation of Annual Contributions to the Authority's Annual Budget among the Town of Blacksburg, the Town of Christiansburg, the County of Montgomery and Virginia Polytechnic Institute and State University based on use of Authority services by each member; and

**WHEREAS**, a copy of "Amendment of Chapter 638 of the 2010 Virginia Acts of Assembly (the "Act") relating to the New River Valley Emergency Communications Regional Authority" (the "Amendment to the Act") setting out the proposed amendments to the Act has been submitted to this meeting.

**NOW, THEREFORE, BE IT RESOLVED,** that the Virginia Tech Board of Visitors hereby approves the proposed Amendment to the Act and authorizes and directs the Authority to submit the same for approval by the Virginia General Assembly at its 2018 legislative session.

### **RECOMMENDATION:**

That the above resolution approve supporting the amendment of the act to permit implementation of a funding formula and the allocation of annual contributions among the Authority members based on use of authority services.

September 11, 2017

#### VIRGINIA ACTS OF ASSEMBLY -- 201018 SESSION

#### **CHAPTER 638**

An Act to create Amendment of Chapter 638 of the 2010 Virginia Acts of Assembly (the "Act") relating to the New River Valley Emergency Communications Regional Authority.

	[H <del>1002</del>	]
Approved April 11, 2010		

Be it enacted by tThe General Assembly of Virginia hereby amends Chapter 638 of the 2010 Virginia Acts of Assembly by amending the Act as follows:

**1.** § *1. Title.* 

This Act shall be known and may be cited as the New River Valley Emergency Communications Regional Authority Act.

§ 2 Creation; public purpose.

If the governing bodies of the Towns of Blacksburg and Christiansburg, the County of Montgomery, and the Board of Visitors for Virginia Polytechnic Institute and State University (Virginia Tech) by resolution support the formation of a regional authority to provide 911 dispatch and emergency communications services to the people of each jurisdiction and campus, an authority known as the New River Valley Emergency Communications Regional Authority Act (hereinafter the Authority) shall thereupon exist for such participating entities and shall exercise its powers and functions as prescribed herein.

In any suit, action, or proceeding relating to or involving the validity or enforcement of any contract of the Authority, the Authority shall be deemed to have been created as a political subdivision and body corporate and to have been established and authorized to transact business and exercise its powers hereunder upon proof of the adoption of a resolution as aforesaid by the governing bodies of such towns, county, and university supporting the formation of such Authority. A copy of such resolution duly certified by the clerk or secretary of the governing body of the towns, county, and university by which it is adopted shall be admissible as evidence in any suit, action, or proceedings. Any political subdivision of the Commonwealth is authorized to join such Authority pursuant to the terms and conditions of this Act.

The ownership and operation by the Authority of emergency communications services and the exercise of powers conferred by this Act are proper and essential governmental functions and public purposes and matters of public necessity for which public moneys may be spent and private property acquired through the power of eminent domain as hereinafter provided. The purposes of such Authority shall be to develop a consolidated system for the receipt of and response to 911 emergency calls and communications that will improve response time, quality of service, and coordination of available resources for the citizens of the affected localities.

The Authority and its members, officers, employees, and agents shall all enjoy sovereign immunity for torts committed in exercise of its governmental and proprietary functions. Nothing in this Act shall be construed as a waiver of the sovereign immunity enjoyed by any of the participating political subdivisions.

The courts of the Commonwealth of Virginia shall have original jurisdiction of all actions brought by or against the Authority, which courts shall in all cases apply the law of the Commonwealth of Virginia.

§ 3 Definitions.

As used in this act, the following words and terms have the following meanings unless a different meaning clearly appears from the context:

"Act" means the New River Valley Emergency Communications Regional Authority Act.

"Annual <u>deficitBudget</u>" means the amount of budgeted expenditures <u>in excess of anticipated revenues</u> <u>from necessary each fiscal year for the payment of</u> operations or capital budgets.

"Annual Contribution" means the portion of the Annual Budget attributable to each Participating Political Subdivision each fiscal year.

"Authority" means the New River Valley Emergency Communications Regional Authority created by this Act.

"Board" means the governing body of the Authority.

"Bonds" means any bonds, notes, debentures, grant obligations, or other evidence of financial indebtedness issued by this Authority pursuant to this Act.

"Commonwealth" means the Commonwealth of Virginia.

"Facility" means any and all buildings, structures, or facilities purchased, constructed, or otherwise acquired or operated by the Authority pursuant to the provisions of this Act. Any facility may consist of or include any or all buildings or other structures, improvements, additions, extensions, replacements, machinery, or equipment, together with appurtenances, lands, rights in land, water rights, franchises, furnishings, landscaping, utilities, roadways, or other facilities necessary or desirable in connection therewith or incidental thereto.

"Participating political subdivisions" means the Towns of Blacksburg and Christiansburg, the County of Montgomery, and Virginia Polytechnic Institute and State University or any other political subdivision that may join or has joined the Authority pursuant to §§ 4 and 5 of this Act.

"Political subdivision" means a county, city, town, public body, public authority, institution (including an institution of higher education), or commission of the Commonwealth.

"University" means Virginia Polytechnic Institute and State University.

§ 4 Participating political subdivision.

At the time of creation of the Authority, each participating political subdivision shall have entered or shall enter into a memorandum of understanding by and among each of the participating political subdivisions setting forth the terms and conditions of the intended formation of the Authority.

No pecuniary liability of any kind shall be imposed upon any participating political subdivision because of any act, omission, agreement, contract, tort, malfeasance, misfeasance, or nonfeasance by or on the part of the Authority or any member thereof, or its agents, servants, or employees, except as otherwise provided in this Act with respect to contracts and agreements between the Authority and any other political subdivision.

#### § 5 Joinder.

Membership in the Authority may be expanded only in accordance with the terms of a joinder agreement adopted by the governing bodies of all participating political subdivisions. Only another political subdivision may become a participating political subdivision of the Authority. The governing body of any locality wishing to become a member of the Authority shall by concurrent resolutions or ordinances and by agreement provide for the joinder of such locality. The agreement creating the expanded Authority shall specify the number and terms of office of members of the Board of the expanded Authority that are to be appointed by each of the participating political subdivisions and the names, addresses, and terms of office of initial appointments to Board membership.

§ 6 Appointment of members of the Board.

The powers of the Authority shall be vested in the members of the Board. The Board shall consist of five persons. Each participating political subdivision shall have the right to appoint one member of the Board and all participating political subdivisions shall jointly appoint the fifth member of the Board by unanimous approval of the participating political subdivisions. Each member of the Board shall be appointed for a term of four years, except that the initial members of the Board representing the participating political subdivisions shall be appointed for the following staggered terms to be selected by lot by the members of the Board at its initial meeting: one member shall be appointed for a term of one year; one member shall be appointed for a term of two years; one member shall be appointed for a term of four years. The jointly appointed member shall be appointed for an initial term of four years. Upon the expiration of the original term of office of a member of the Board, that member may continue to exercise all powers as a member of the Board until that person's successor is duly appointed and qualified.

Any vacancy in the membership of the Board other than by expiration of term shall be filled by the governing body that appointed the member or, in the case of the jointly appointed member, by approval of the governing bodies. The person appointed to fill such vacancy shall serve for the unexpired term only. Each participating political subdivision shall have the absolute right to remove its appointee to the Board, with or without cause, at any time. The participating political subdivisions shall have the absolute right to remove their joint appointee to the Board, with or without cause, at any time by resolution adopted by a majority of the governing bodies of the participating political subdivisions. Except as may be prohibited by the Constitution of Virginia, members of the Board may include elected or appointed officials, employees, managers, administrators, or officers of any participating political subdivision.

Each member of the Board may be reimbursed by the Authority for the amount of actual expenses incurred by him in the performance of his duties in addition to such other salary or benefit, or both, to be determined by the Authority.

#### § 7 Organization.

A majority of the members of the Board shall constitute a quorum, and the vote of a majority of members of the Board shall be necessary for any action taken by the Board. Each member of the Board shall be entitled to one vote except as otherwise set forth herein. No vacancy in the membership of the Board shall impair the right of a quorum to exercise all the rights and perform all the duties of the Authority. The Board shall elect from its membership a chairman, vice-chairman, and secretary-

treasurer of the Board, such officers to serve in these capacities for terms of two years, except that an initial member of the Board whose term on the Board is for one year may be elected to serve in such capacity for a term of one year and if reappointed to the Board may thereupon be reelected to the Board to serve in such capacity.

The Authority shall hold regular meetings at such times and places as may be established by its bylaws.

The Board may make and from time to time amend and repeal bylaws, not inconsistent with this Act, governing the manner in which the Authority's business may be transacted and in which the power granted to it may be enjoyed. The Board may appoint such committees as it may deem advisable and fix the duties and responsibilities of such committees.

§ 8. Powers.

The Authority is hereby granted all powers necessary or appropriate to carry out the purposes of this Act, including the powers to:

- 1. Adopt bylaws for the regulation of its affairs and the conduct of its business;
- 2. Sue and be sued in its own name;
- 3. Have perpetual succession;
- 4. Adopt a corporate seal and alter the same;
- 5. Maintain offices at such places as it may designate;
- 6. Acquire, establish, construct, enlarge, improve, maintain, equip, operate, and regulate any structures, facilities, and other property incidental thereto;
- 7. Construct, renovate, install, maintain, and operate facilities for the location of dispatching services, necessary equipment, and administration space;
- 8. Apply for and accept gifts, grants of money, grants or loans of other property, or other financial assistance from, or borrow money from or issue bonds to, the United States of America and agencies and instrumentalities thereof; the Commonwealth and political subdivisions, agencies, and instrumentalities thereof; or any other person or entity, whether public or private, for or in aid of the construction, acquisition, ownership, operation, maintenance, or repair of the Authority's facilities (whether or not such facilities are then in existence) or for the payment of the principal of any indebtedness of the Authority, interest thereon, or other costs incident thereto and to borrow money on such terms as the Authority deems advisable. To this end the Authority shall have the power to render such services, comply with such conditions, and execute such agreements and legal instruments as may be necessary, convenient, or desirable or imposed as a condition to such financial aid, loads, grants, or other assistance;
- 9. Appoint, employ, or engage such officers, employees, architects, engineers, attorneys, accountants, financial advisors, investment bankers, and other advisors, consultants, and agents as may be necessary or appropriate and fix their duties and compensation;

10. Establish personnel rules;

- 11. Own; purchase; lease; obtain options upon; acquire by gift, grant, or bequest; or otherwise acquire any property, real, personal or intangible, or any interest therein, and in connection therewith to create, assume, or take subject to any indebtedness secured by such property;
- 12. Sell, lease, grant options upon, exchange, transfer, assign, or otherwise dispose of any property, real or personal, or any interest therein;
- 13. Make, assume, and enter into all contracts, leases, and arrangements necessary or incidental to the exercise of its powers, including contracts for the management or operation of all or any part of its facilities;
- 14. Adopt, amend, and repeal rules and regulations for the use, maintenance, and operation of its facilities and governing the conduct of persons and organizations using its facilities and to enforce such rules and regulations and all other rules, regulations, ordinances, and statutes relating to its facilities;
- 15. Purchase and maintain insurance and provide indemnification on behalf of any person who is or was a director, officer, employee, or agent of the Authority against any liability asserted against or incurred by him in any such capacity or arising out of his status as such;
  - 16. Place a lien upon any or all of its property or otherwise secure its debts; and
  - 17. Do all things necessary or convenient to the purposes of this Act.
  - § 9. Rules, regulations, and minimum standards.

The Authority shall have the power to adopt, amend, and repeal rules, regulations, and minimum standards for the use, maintenance, and operation of its facilities and governing the conduct of persons and organizations using its facilities.

The Authority's rules and regulations shall be available for public inspection in the Authority's principal office.

The Authority's rules and regulations shall have the force of law, as shall any other rule or regulation of the Authority that shall contain a determination by the Authority that it is necessary to accord the same force and effect of law in the interest of the public safety.

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§ 10. Reports. The Authority shall keep minutes of its proceedings, which shall be open to public inspection during normal business hours. It shall keep suitable records of all its financial transactions and shall arrange to have the same audited annually by an independent certified public accountant. Copies of each such audit shall be furnished to each participating political subdivision and shall be open to public inspection. The Authority shall be deemed a local governmental agency subject to the requirements of the State and Local Government Conflict of Interests Act (§ 2.2-3100 et seq.) of the Code of Virginia.

#### § 11. Procurement.

All contracts that the Authority may let for professional services, nonprofessional services, or materials shall be subject to the Virginia Public Procurement Act (§ 2.2-4300 et seq.) of the Code of Virginia.

§ 12 Deposit and investment of funds.

Except as provided by contract with a participating political subdivision, all moneys received pursuant to the authority of this Act, whether as proceeds from the sale of bonds or as revenues or otherwise, shall be deemed to be trust funds to be held and applied solely as provided in this Act. All moneys of the Authority shall be deposited in a qualified public depository and secured in accordance with the Virginia Security for Public Deposits Act (§ 2.2-4400 et seq.) of the Code of Virginia.

Funds of the Authority not needed for immediate use or disbursement may, subject to the provisions of any contract between the Authority and the holders of its bonds, be invested in securities that are considered lawful investments for public sinking funds or other public funds as set forth in the Investment of Public Funds Act (§ 2.2-4500 et seq.) of the Code of Virginia.

§ 13 Authority to issue bonds.

The Authority shall have the power to issue bonds in its discretion, for any of its purposes, including the payment of all or any part of the cost of Authority facilities and including the payment or retirement of bonds previously issued by it. The Authority may issue such types of bonds as it may determine, including (without limiting the generality of the foregoing) bonds payable, both as to principal and interest (i) from its revenues and receipts generally and (ii) exclusively from the revenues and receipts of certain designated facilities or loans, whether or not they are financed in whole or in part from the proceeds of such bonds. Any such bonds may be additionally secured by a pledge of any grant or contribution from a participating political subdivision, the Commonwealth, or any political subdivision, agency, or instrumentality thereof; any federal agency; or any unit, private corporation, copartnership, association, or individual as such participating political subdivision or other entities may be authorized to make under general law or by pledge of any income or revenues of the Authority or by mortgage or encumbrance of any property or facilities of the Authority. Unless otherwise provided in the proceeding authorizing the issuance of the bonds or in the trust indenture or agreement securing the same, all bonds shall be payable solely and exclusively from the revenues and receipts of a particular facility or loan. Bonds may be executed and delivered by the Authority at any time and from time to time, may be in such form and denominations and of such terms and maturities, may be in registered or bearer form either as to principal or interest or both, may be payable in such installments and at such time or times not exceeding 40 years from the date thereof, may be payable at such place or places whether within or without the Commonwealth, may bear interest at such rate or rates, may be payable at such time or times and at such places, may be evidenced in such manner, and may contain such provisions not inconsistent herewith, all as shall be provided and specified by the Authority in authorizing each particular bond issue.

If deemed advisable by the Authority, there may be retained in the proceedings under which any bonds of the Authority are authorized to be issued an option to redeem all or any part thereof as may be specified in such proceedings, at such price or prices and after such notice or notices and on such terms and conditions as may be set forth in such proceedings and as may be briefly recited on the face of the bonds, but nothing herein contained shall be construed to confer on the Authority any right or option to redeem any bonds except as may be provided in the proceedings under which they shall be issued. Any bonds of the Authority may be sold at public or private sale in such manner and from time to time as may be determined by the Authority to be most advantageous and the Authority may pay all costs, premiums, and commissions that it may deem necessary or advantageous in connection with the issuance thereof. Issuance by the Authority of one or more series of bonds for one or more purposes shall not preclude it from issuing other bonds in connection with the same facility or any other facility, but the proceedings whereunder any subsequent bonds may be issued shall recognize and protect any prior pledge or mortgage made for any prior issue of bonds. Any bonds of the Authority at any time outstanding may from time to time be refunded by the Authority by the issuance of its refunding bonds in such amount as the Authority may deem necessary, but not exceeding an amount sufficient to refund the principal of the bonds so to be refunded, together with any unpaid interest thereon and any costs, premiums, or commissions necessary to be paid in connection therewith. Any such refunding may be

effected whether the bonds to be refunded shall have then matured or shall thereafter mature, either by sale of the refunding bonds and the application of the proceeds thereof to the payment of the bonds to be refunded thereby, or by the exchange of the refunding bonds for the bonds to be refunded thereby, with the consent of the holders of the bonds so to be refunded, and regardless of whether or not the bonds to be refunded were issued in connection with the same facilities or separate facilities, and regardless of whether or not the bonds proposed to be refunded shall be payable on the same date or on different dates or shall be due serially or otherwise.

All bonds shall be signed by the chairman or vice-chairman of the Authority or shall bear his facsimile signature, and the corporate seal of the Authority or a facsimile thereof shall be impressed or imprinted thereon and attested by the signature of the secretary (or the secretary-treasurer) or the assistant secretary (or assistant secretary-treasurer) of the Authority or shall bear his facsimile signature, and any coupons attached thereto shall bear the facsimile signature of said chairman. In case any officer whose signature or a facsimile of whose signature shall appear on any bonds or coupons shall cease to be an officer before delivery of such bonds, such signature, or such facsimile, shall nevertheless be valid and sufficient for all purposes the same as if he had remained in office until such delivery. When the signatures of both the chairman or the vice-chairman and the secretary (or secretary-treasurer) or the assistant secretary (or the assistant secretary-treasurer) are facsimiles, the bonds must be authenticated by a corporate trustee or other authenticating agent approved by the Authority.

If the proceeds derived from a particular bond issue, due to error of estimates or otherwise, shall be less than the cost of the Authority facilities for which such bonds were issued, additional bonds may in like manner be issued to provide the amount of such deficit, and unless otherwise provided in the proceedings authorizing the issuance of the bonds of such issue or in the trust indenture securing the same, shall be deemed to be of the same issue and shall be entitled to payment from the same fund without preference or priority of the bonds of the first issue. If the proceeds of the bonds of any issue shall except such cost, the surplus may be deposited to the credit of the sinking fund for such bonds or may be applied to the payment of the cost of any additions, improvements, or enlargements of the Authority facilities for which such bonds shall have been issued.

Prior to the preparation of definitive bonds, the Authority may, under like restrictions, issue interim receipts or temporary bonds with or without coupons, exchangeable for definitive bonds when such bonds shall have been executed and are available for delivery. The Authority may also provide for the replacement of any bonds that shall become mutilated or shall be destroyed or lost. Bonds may be issued under the provisions of this Act without obtaining the consent of any department, division, commission, board, bureau, or agency of the Commonwealth, and without any other proceedings or the happening of any other conditions or things other than those proceedings, conditions, or things that are specifically required by this Act; provided that nothing contained in this Act shall be construed as affecting the powers and duties now conferred by law upon the State Corporation Commission.

All bonds issued under the provisions of this Act shall have and are hereby declared to have all the qualities and incidents of and shall be and are hereby made negotiable instruments under the Uniform Commercial Code (§ 8.1A-101 et seq.) of the Code of Virginia, subject only to provisions respecting registration of the bonds.

In addition to all other powers granted to the Authority by this Act, the Authority is authorized to provide for the issuance from time to time of notes or other obligations of the Authority for any of its authorized purposes. All of the provisions of this Act that relate to bonds shall apply to such notes or other obligations insofar as such provisions may be appropriate.

§ 14 Credit of Commonwealth and political subdivisions not pledged.

Bonds issued pursuant to the provisions of this Act shall not be deemed to constitute a debt of the Commonwealth or any political subdivision thereof other than the Authority, but such bonds shall be payable solely from the funds provided therefore as herein authorized. All such bonds shall contain on the face thereof a statement to the effect that neither the Commonwealth, nor any political subdivision thereof, nor the Authority, except as may be otherwise stated, shall be obligated to pay the same or the interest thereon or other costs incident thereto except from the revenues and money pledged therefore and that neither the faith and credit nor the taxing power of the Commonwealth, nor any political subdivision thereof, is pledged to the payment of the principal of such bonds or the interest thereon or other costs incident thereto.

Bonds issued pursuant to the provisions of this Act shall not constitute indebtedness within the meaning of any debt limitation or restriction.

§ 15 Members of the Board and persons executing bonds not liable thereon.

Neither the members of the Board nor any person executing the bonds shall be liable personally on the Authority's bonds by reasons of the issuance thereof.

§ 16 Security for payment of bonds; default.

The principal of and interest on any bonds issued by the Authority may be secured by a pledge of the revenues and receipts out of which the same shall be made payable, and may be secured by a trust indenture or agreement covering all or any part of the Authority facilities from which revenues or receipts so pledged may be derived, including any enlargements or any additions to any such projects thereafter made. The resolution under which the bonds are authorized to be issued and any such trust indenture or agreement may contain any agreements and provisions respecting the maintenance of the projects covered thereby, the fixing and collection of rents for any portions thereof leased by the Authority to others, the creation and maintenance of special funds from such revenues, and the rights and remedies available in the event of default, all as the Authority shall deem advisable not in conflict with the provisions hereof. Each pledge, agreement, and trust indenture made for the benefit or security of any of the bonds of the Authority shall continue to be effective until the principal of and interest on the bonds for the benefit of which the same were made shall have been fully paid. In the event of default in such payment or in any agreements of the Authority made as a part of the contract under which the bonds were issued, whether contained in the proceeding authorizing the bonds or in any trust indenture or agreement executed as security therefor, may be enforced by mandamus, suit, action, or proceeding at law or in equity to compel the Authority and the members, officers, agents, or employees thereof to perform each and every term, provision, and covenant contained in any trust indenture or agreement of the Authority, the appointment of a receiver in equity, or by foreclosure of any such trust indenture, or any one or more of said remedies.

#### § 17 Taxation.

The exercise of the powers granted by this Act shall in all respects be presumed to be for the benefit of the inhabitants of the Commonwealth, for the increase of their commerce, and for the promotion of their health, safety, welfare, convenience, and prosperity, and as the operation and maintenance of any project that the Authority is authorized to undertake will constitute the performance of an essential governmental function, the Authority shall not be required to pay any taxes or assessments upon any facilities acquired and constructed by it under the provisions of this Act and the bonds issued under the provisions of this Act, their transfer and the income therefrom, including any profit made on the same thereof, shall at all times be free and exempt from taxation by the Commonwealth and by any political subdivision thereof.

#### § 18 Bonds as legal investments.

Bonds issued by the Authority under the provisions of this Act are hereby made securities in which all public officers and public bodies of the Commonwealth and its political subdivisions, all insurance companies, trust companies, banking associations, investment companies, executors, administrators, trustees, and other fiduciaries may properly and legally invest funds, including capital in their control or belonging to them. Such bonds are hereby made securities that may properly and legally be deposited with and received by any state or municipal officer or any agency or political subdivision of the Commonwealth for any purpose for which the deposit of bonds or obligations is now or may hereafter be authorized by law.

#### § 19 Appropriation by political subdivision.

Any participating political subdivision or other political subdivision of the Commonwealth is authorized to provide services, to donate real or personal property, and to make appropriations to the Authority for the acquisition, construction, maintenance, and operation of the Authority's facilities. Any such political subdivision is hereby authorized to issue its bonds, including, but not limited to, general obligation bonds, in the manner provided in the Public Finance Act (§ 15.2-2600 et seq.) of the Code of Virginia or in any applicable municipal charter for the purpose of providing funds to be appropriated to the Authority, and such political subdivisions may enter into contracts obligating such bond proceeds to the Authority.

The Authority may agree to assume or reimburse a participating political subdivision for any indebtedness incurred by such participating political subdivision with respect to facilities conveyed by it to the Authority.

#### § 20 Annual deficitBudget.

The Board shall have full authority to adopt its operating and capital budgets on an annual fiscal year (July 1 through June 30) basis, to amend the same from time to time, and for the annual deficit Annual Contribution to be divided apportioned among all participating political subdivisions by an apportionment formula approved by the Board. Each participating political subdivision shall contribute its respective one quarterattributed share of the annual deficit Annual Budget (referred to herein as its Annual Contribution) each year and otherwise as required; however, such obligation shall be subject to and dependent upon annual appropriations being made from time to time by the governing body of each such respective participating political subdivision, and as to the university by normal approval of appropriations, and shall not be deemed to constitute a debt of such participating political subdivisions within the meaning of Article VII, Section 10 of the Constitution of Virginia, and as to the university, within the meaning of Article X, Section 9 of the Constitution of

Virginia, or any applicable statutory debt limitation. Should any participating political subdivision fail to contribute in full its proportionate share of the annual deficitAnnual Contribution it shall remain a member of the Authority, but its representative on the Board shall not be entitled to cast a vote on any Authority matter until that participating political subdivision's share of the annual deficitAnnual Contribution has been paid in full. Further, should any participating political subdivision fail to contribute in full its proportionate share of the annual deficitAnnual Contribution, the Authority shall have a lien on any share of the Authority's profit or surplus revenues otherwise entitled to be distributed to the participating political subdivision. A participating political subdivision may contribute a portion or all of its share of the its annual deficitAnnual Contribution through "in-kind" contributions, subject to the approval of such contribution and valuation by the Authority.

§ 21 Contracts with political subdivisions.

The Authority is authorized to enter into contracts with any one or more political subdivisions.

§ 22 Authority as political subdivision.

The Authority is a political subdivision whose actions are exempt from the Commonwealth's rules and regulations on its agencies and commissions as to demolition, alteration, capital outlay requirements, temporary building use requirements, and like regulations and requirements. The Authority is subject to local building code requirements.

§ 23 Fees for Service.

The Authority is authorized to charge a fee for service to individuals who are not members of the participating political subdivisions and is, likewise, authorized to determine a fee schedule.

§ 24 Liberal construction.

Neither this Act nor anything herein contained is or shall be construed as a restriction or limitation upon any powers that the Authority might otherwise have under any laws of the Commonwealth, and this Act is cumulative to any such powers; however, the borrowing of money or issuance of bonds under the provisions of this Act need not comply with the requirements of any other law applicable to the issuance of bonds, notes, or other obligations. This Act does and shall be construed to provide a complete, additional, and alternative method for the doing of the things authorized hereby and shall be regarded as supplemental and additional to powers conferred by other laws. The provisions of this Act are severable, and if any of its provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the other provisions of this Act.

§ 25 Application of local ordinances, service charges, and taxes upon leaseholds.

Nothing herein contained shall be construed to exempt the Authority's property from any applicable zoning, subdivision, erosion and sediment control, and fire prevention codes or from building regulations of a political subdivision in which such property is located. Nor shall anything herein contained exempt the property of the Authority from any service charge authorized by the General Assembly pursuant to Article X, Section 6 (g) of the Constitution of Virginia.

§ 26 Existing contracts. Leases, franchises, etc., not impaired.

No provisions of this Act shall relieve, impair, or affect any right, duty, liability, or obligation arising out of any contract, concession, lease, or franchise now in existence except to the extent that such contract, concession, lease, or franchise may permit. Notwithstanding the foregoing provision of this section, the Authority may renegotiate, renew, extend the term of, or otherwise modify at any time any contract, concession lease, or franchise now in existence in such manner and on such terms and conditions as it may deem appropriate, provided that the operator of or under said contract, concession, lease, or franchise consents to said renegotiation, renewal, extension, or modification.

§ 27 Employees of the Authority.

- A. Employees of the Authority shall be employed on such terms and conditions as are established by the Authority. The Board of the Authority shall develop and adopt personnel rules, policies, and procedures to give its employees grievance rights, ensure that the employment decisions shall be based upon the merit and fitness of applicants, and prohibit discrimination because of race, religion, color, sex, or national origin.
- B. In cooperation with the Board, each participating political subdivision shall determine which of its current positions will remain under their individual employ and which will be recreated as part of the Authority. Any employee of Virginia Tech who (i) is not offered a position with the Authority for which the employee is qualified or is offered a position that requires relocation or a reduction in salary or (ii) is not offered the opportunity to remain employed with Virginia Tech shall be eligible for the severance benefits conferred by the provisions of the Workforce Transition Act (§ 2.2-3200 et seq.) of the Code of Virginia. Any employee of Virginia Tech who accepts employment with the Authority shall not be considered to be involuntarily separated from state employment and shall not be eligible for the severance benefits conferred by the Workforce Transition Act.
- C. Notwithstanding any other provision of law to the contrary, any person whose employment is recreated in the Authority as a result of this Act and who is a member of any plan for providing health

insurance coverage pursuant to Chapter 28 (§ 2.2-2818 et seq.) of Title 2.2 of the Code of Virginia shall be eligible to continue to be a member of such health insurance plan. Notwithstanding subsection A of § 2.2-2818 of the Code of Virginia, the Authority shall pay the employer contribution, the amount of which is determined by negotiated agreement with the provider, of the costs of providing health insurance coverage to its employees who elect to continue to be members of the state employees' insurance plan. Alternatively, an employee may elect to become a member of any health insurance plan established by the Authority. The Authority is authorized to (i) establish a health insurance plan for the benefit of its employees and (ii) enter into agreements with the Department of Human Resources Management providing for the coverage of its employees under the state employees' health insurance plan, provided that such agreement shall require the Authority to pay the costs described above of providing health insurance coverage under such a plan.

D. Notwithstanding any other provision of law to the contrary, any person whose employment is transferred to the Authority as a result of this Act and who is a member of the Virginia Retirement System, or other retirement plan as authorized by Article 4 (§ 51.1-125 et seq.) of Chapter 1 of Title 51.1 of the Code of Virginia, shall continue to be a member of the Virginia Retirement System or other such authorized retirement plan under the same terms and conditions as if no transfer had occurred. Alternatively, such employee may elect, during an open enrollment period, to become a member of the retirement program established by the Authority for the benefit of its employees by transferring assets equal to the value to the actuarially determined present value of the accrued basic benefit as of the transfer date. The Authority shall reimburse the Virginia Retirement System for the actual cost of actuarial services necessary to determine the present value of the accrued basic benefit of employees who elect to transfer to the Authority's retirement plan. The following rules shall apply:

1. With respect to any transferred employee who elects to remain a member of the Virginia Retirement System or other such authorized retirement plan, the Authority shall collect and remit any employer and employee contributions to the Virginia Retirement System or other such authorized retirement plan for

retirement for such transferred employees.

2. Transferred employees who elect to become members of the retirement program established by the Authority for the benefits of its employees shall be given full credit for their creditable service as defined in § 51.1-124.3 of the Code of Virginia, vesting and benefit accrual under the retirement program established by the Authority. For any such employee, employment with the Authority shall be treated as employment with any nonparticipating employer for purposes of the Virginia Retirement System or other retirement plan as authorized by Article 4 of Chapter 1 of Title 51.1 of the Code of Virginia.

3. For transferred employees who elect to become members of the retirement program established by the Authority, the Virginia Retirement System or other such authorized plan shall transfer to the retirement plan established by the Authority assets equal to the actuarially determined present value of e accrued basic benefits as of the transfer date. For purposes hereof, the basic benefits shall be the benefit accrued under the Virginia Retirement System or other such authorized retirement plan, based on creditable service and average final compensation as defined in § 51.1-124.3 of the Code of Virginia and determined as of the transfer date. The actuarial present value shall be determined on the same basis, using the same actuarial factors and assumptions used in determining the funding needs of the Virginia Retirement System or other such authorized retirement plan, so that the transfer of assets to the retirement plan established by the Authority will have no effect on the funded status and financial stability of the Virginia Retirement System or other such authorized retirement plan.

§ 28 Withdrawal of membership.

A participating political subdivision may withdraw its membership in the Authority at the end of any fiscal year if the withdrawing participating political subdivision has given notice to the Authority and all other participating political subdivisions of its intention to withdraw at least one year before the end of such fiscal year and the withdrawing participating political subdivision has paid in full its share of the annual deficitAnnual Contribution, if any, provided that no participating political subdivision may withdraw its membership in the Authority if the Authority has any outstanding debt without written approval of each participating political subdivision. As used in this section, the term "debt" shall mean a monetary obligation, whether general or limited in any way, to repay a loan or bond, or any long-term obligation, whether absolute or contingent in any way, to refund or reimburse any agency or entity for grant funds received by the Authority.

§ 29 Dissolution of Authority.

Whenever it shall appear to the Board or to all participating political subdivisions that the need for the Authority no longer exists, all participating political subdivisions may petition the Circuit Court of Montgomery County, Virginia, for the dissolution of the Authority. If the court determines that the need for the Authority as set forth in this Act no longer exists and that all debts and other obligations of any kind have been fully paid or provided for:

1. The Court shall enter an order dissolving the Authority; and

2. The remaining assets of the Authority shall be distributed to the participating political subdivisions in proportion to their respective shares of the annual deficit Annual Contribution less any amounts owed to the Authority by such participating political subdivision.

Each participating political subdivision and all holders of the Authority's bonds shall be made parties to any such proceeding and shall be given notice as provided by law. Any party defendant may reply to such petition at any time within six months after the filing of the petition. An appeal from the final judgment of the court shall lie to the Supreme Court of Virginia.

# RESOLUTION APPROVING THE COMPREHENSIVE AGREEMENT FOR THE CONSTRUCT VT CARILION RESEARCH INSTITUTE BIOSCIENCES ADDITION IN ROANOKE, VIRGINIA IN ACCORDANCE WITH THE PUBLIC-PRIVATE EDUCATION FACILITIES AND INFRASTRUCTURE ACT (PPEA) OF 2002

**WHEREAS**, the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA) grants responsible public entities the authority to create public-private partnerships for the development of a wide range of projects for public use if the public entity determines there is a need for the project and that the private involvement may provide the project to the public in a timely or cost-effective fashion; and

**WHEREAS,** for the purposes of the PPEA, the Commonwealth of Virginia, its agencies and institutions taken together, including Virginia Polytechnic Institute and State University (Virginia Tech), is a "responsible public entity" that has the power to develop or operate the applicable qualifying project; and

WHEREAS, the Virginia Tech Board of Visitors has adopted "Guidelines for Projects Under the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA)"; and

**WHEREAS,** Virginia Tech desires to construct a state-of-the-art research center in Roanoke, Virginia; and

**WHEREAS**, a high-priority capital project was appropriated by the General Assembly Chapter 759/2016 under item 1.B with the title "Construct VT Carilion Research Institute Biosciences Addition", commonly known as the "Health Sciences and Technology Expansion" project, and

WHEREAS, Virginia Tech received and accepted an unsolicited proposal for consideration and advertised and considered competing proposals; and

**WHEREAS,** Virginia Tech has determined that proceeding under the procurement procedures of the PPEA is advantageous both to it and the public; and

**WHEREAS**, in accordance with the PPEA process, Virginia Tech has selected Carilion Clinic as the private entity the university wishes to enter into a Comprehensive Agreement with to construct the VT Carilion Research Institute Biosciences Addition at the Riverside Center in Roanoke, Virginia which will house the Comparative Oncology Research Center; and

**WHEREAS,** Carilion Clinic has submitted to Virginia Tech all information required by the Code of Virginia; and

**WHEREAS**, there is a public need for the new project, the estimated cost of the new project is reasonable in relation to similar facilities, and Carilion Clinic plans will result in the timely development and operation of the resulting building;

**NOW, THEREFORE, BE IT RESOLVED,** that the Virginia Tech Board of Visitors approves the Comprehensive Agreement with Carilion Clinic to construct the VT Carilion Research Institute Biosciences Addition at the Riverside Center in Roanoke, Virginia as provided by the PPEA; authorizes the Vice President for Operations, his successors and/or assigns, to execute the Comprehensive Agreement forthwith; and directs the Vice President for Finance and Chief Financial Officer, his successors and/or assigns, to make the Comprehensive Agreement and the procurement file available for public inspection to the extent required by law.

#### **RECOMMENDATION:**

That the above resolution to approve the Comprehensive Agreement with Carilion Clinic to construct the VT Carilion Research Institute Biosciences Addition at the Riverside Center in Roanoke, Virginia as provided by the PPEA; authorize the Vice President for Operations, his successors and/or assigns, to execute the Comprehensive Agreement forthwith; and direct the Vice President for Finance and Chief Financial Officer, his successors and/or assigns, to make the Comprehensive Agreement and the procurement file available for public inspection to the extent required by law be approved.

September 11, 2017

# **COMPREHENSIVE AGREEMENT**

between

# VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

and

# **CARILION CLINIC**

For

Virginia Tech Carilion Clinic Research Institute Biosciences Addition Project

Roanoke, VA

\_\_\_Date\_\_\_

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#### **COMPREHENSIVE AGREEMENT**

THIS COMPREHENSIVE AGREEMENT ("Agreement") in accordance with the Virginia Public-Private Education Facilities and Infrastructure Act of 2002 ("PPEA") and the enabling legislation in the Code of Virginia (Va. Code Ann. §56-575.1, et seq.) is entered into as of the \_\_\_\_\_ day of \_\_\_\_\_\_, 2017 (the "Effective Date"), by and between Virginia Polytechnic Institute and State University, an agency of the Commonwealth of Virginia, ("Virginia Tech" or "University"), and Carilion Clinic ("Carilion" or the "Developer"), a nonprofit corporation incorporated in and authorized to do business in Virginia.

#### Recitals

- R-1. On or about April 28, 2017, Virginia Tech received an unsolicited proposal pursuant to Virginia Tech's PPEA Guidelines (attached as **Exhibit F**) to design and construct the Virginia Tech Carilion Clinic Research Institute Biosciences Addition Project, to contain approximately 139,300 square feet, on property owned by Carilion (or its subsidiary or affiliate holding title) in the Riverside Center Research Education and Medical Park at #4 Riverside Circle S.W., in the City of Roanoke, Virginia (the "Project").
- R-2. Pursuant to the PPEA and its implementing procedures, Virginia Tech subsequently gave notice on May 3, 2017, that it had decided to consider the unsolicited proposal and invited any competing proposals submitted to it by a specified deadline for consideration in order to determine whether it should advance to the detail phase for proposals and thereafter enter into a Comprehensive Agreement pursuant to the PPEA with any offeror(s) for the design and construction of the Project. Virginia Tech also declared its intent to use the competitive negotiation method, as defined in the Code of Virginia § 2.2-4301, to consider the unsolicited proposal and any competing proposals.
- R-3. Virginia Tech subsequently selected Carilion to be advanced to the conceptual phase in accordance with the PPEA.

- R-4. On April 28, 2017, Carilion submitted a conceptual-phase proposal to Virginia Tech. A copy of Carilion's conceptual-phase proposal is attached hereto as **Exhibit A**. Carilion named Skanska USA Building Inc. and AECOM Technical Services, Inc., the Project Contractor and Project Design Professional, respectively. Carilion submitted a detailed proposal dated July 12, 2017, a copy of which is attached hereto as **Exhibit B**.
- R-5. Virginia Tech subsequently selected Developer for negotiation of a comprehensive agreement under the PPEA for the contemplated project based upon Developer's conceptual and detailed phase proposals and its oral representations made in and during combined meetings with Virginia Tech and Virginia Tech's evaluations of those proposals and representations.
- R-6. By an act of the 2008 Virginia General Assembly, Virginia Tech is granted approval pursuant to the Public-Private Educational Facilities and Infrastructure Act of 2002 (Va. Code Ann. §56-575.1, et seq.) to enter into this Agreement for the design and construction of the Virginia Tech Carilion Clinic Research Institute Biosciences Addition Project.
- R-7. A portion of the Project is intended to serve Carilion on a part-time or full-time basis, and the parties will cooperate to develop a long-term lease agreement as appropriate to Carilion's use of this portion of the Project developed for Carilion's benefit and as more particularly described in Section 37 below.
- R-8. The parties have now negotiated a comprehensive agreement consistent with the PPEA, Carilion's proposals, and Virginia Tech's implementing procedures and instructions, the terms and conditions of which are set out in this Agreement.

**NOW THEREFORE,** for and in consideration of the mutual promises, conditions and covenants herein set forth, the parties agree as follows:

#### 1. <u>Incorporation of Recitals.</u>

The foregoing recitals are true and correct and are incorporated herein by reference. The powers and duties of a private entity acting as "Developer" as applicable to the contracted services under the PPEA are hereby incorporated into this Agreement and imposed upon Developer, but such powers and duties will cease upon transfer of legal title to the Project

property to Owner as the responsible public entity, except insofar as any remaining powers and duties of the Developer to be included in the Facility Use and Operation Agreement.

- **2. <u>Definitions.</u>** The following definitions apply to this Agreement:
- (a) "A&E Contract" means Carilion's contract with the Project Design Professional for the Project.
- (b) "Allowances" are a portion of the scope of the Work. Allowances and contingencies are contemplated and will be included in the Firm Fixed Contract Price ("FFCP") as defined in subsection (p) below below, to be set forth with particularity in the Construction Contract. In the event that the cost incurred by Carilion for Allowance items is less than the amount included for Allowances in the FFCP, the cost savings will be retained by or returned to Virginia Tech or applied back to the Project. At Project Final Completion, all of the Developer's records related to costs incurred in the Project shall be audited by Virginia Tech and cumulative savings from the FFCP, if any, will be refunded to or retained by Virginia Tech or applied back to the Project. No Allowance overages will be permitted except by Change Order, and any Allowance overages must be approved in writing by the affected party.
- (c) "Beneficial Occupancy" means the condition after Substantial Completion but prior to Final Completion of the Project at which time the Project, or portion thereof, is sufficiently complete and systems operational such that Virginia Tech could, after obtaining the permission of Carilion (which shall not be unreasonably withheld) occupy and utilize the space for its intended use, which occupancy shall expressly include full rights of ingress and egress on all Carilion private streets, roadways, and alleyways so designated for vehicular and/or pedestrian traffic, and parking. Carilion shall also obtain all necessary approvals and certificates for completion and occupancy. In the event of Beneficial Occupancy by Virginia Tech prior to Final Completion and conveyance of the Project property to Virginia Tech, Virginia Tech shall do so at its own risk.

Once Skanska and AECOM certify that the facility is Substantially Complete and ready for occupancy, Virginia Tech will submit an Application for Certificate of Occupancy, along with copies of the State Fire Marshal's Final Inspection and other required operations permits to the Building Official. The Building Official, when satisfied that the Project and/or portion of the Project is, in fact, Substantially Complete will issue a Certificate of Occupancy to occupy the

Project, or applicable portion thereof, subject to any conditions or stipulations stated. Virginia Tech shall not occupy the facility until the certification from the State Fire Marshal that the Project complies with the fire safety requirements and applicable codes and the Certificate of Use and Occupancy issued by the Building Official are received.

- (d) "Building Official" or "UBO" means the Virginia Tech University Building Official.
- (e) "Carilion's Share" means the agreed fair market value of Carilion's contribution of the Land to the Project in the amount of \$2,000,000, plus Carilion's contribution of cash towards the part of the TPC identified in Section 2 (x) as "Design, Construction & Other Costs" of the Project, in the amount of \$10,900,000, resulting in a total value of Carilion's Share in the amount of \$12,900,000. In no event shall Carilion's Share be increased without a Change Order to this Comprehensive Agreement executed by Carilion. Carilion is making no contribution to the cost of the portions of the TPC identified as Owner Contingency or Furnishings, Fixtures and Moveable Equipment (FF&E).
- (f) "Change Order" means a document that is issued on or after the Effective Date of the Comprehensive Agreement which is agreed to in writing by Carilion and approved in writing by Virginia Tech and which modifies this Comprehensive Agreement and authorizes an addition, deletion or revision in the Project, including any change in the FFCP, Carilion's Share, and/or adjustment of the Project Substantial Completion Date.
- (g) "Construction and Professional Services Manual (CPSM)" or "CPSM" means the Commonwealth of Virginia Construction and Professional Services Manual, 2016 edition. Virginia Tech and Developer agree that the CPSM is applicable insofar as those provisions of the CPSM that Virginia Tech and Carilion identify in good faith as applicable to the Project and Developer's performance hereunder, in a writing, mutually prepared by the parties, subsequent to the Effective Date and to be incorporated into the Construction Contract with Skanska once the guaranteed maximum price for the Work has been approved by Virginia Tech and Carilion, such that Carilion may identify the portions of the CPSM applicable to the Project in the A&E Contract and the Construction Contract. Without limiting the generality of the foregoing, the parties specifically acknowledge that the building efficiency provisions of the

CPSM, Section 6.1.2 (inclusive of subsections 6.1.2.1 through 6.1.2.4) are excluded from the definition of CPSM in this Agreement.

- (h) "Construction Contract" means Carilion's contract with the Project Contractor for the Project, where the basis of payment is the cost of the Work plus a fee with a guaranteed maximum price. The Construction Contract may contemplate performance of the Work in multiple phases.
- (i) "Construction Work" or "the Work" means the pre-construction services, construction-related services and construction required by this Agreement to be provided by Developer, including, but not limited to, furnishing labor and furnishing and incorporating materials and equipment into the construction, and has the same meaning as the "Work" as defined in the Construction Contract.
- (j) "Contract Documents" are the drawings, specifications, and all contract agreements (including without limitation the A&E Contract and the Construction Contract and change orders thereunder), Change Orders under this Agreement, and written modifications and amendments of any kind associated with this Agreement and the construction of the Project.
- (k) "Developer" means Carilion, which has contracted with Skanska as the "Project Contractor" and AECOM as the "Project Architect and Engineer of Record", pursuant to Virginia Tech's PPEA Guidelines, as provided in this Agreement.
- (l) "Design Professionals" means any of those architects, engineers, and consultants providing any services relating to the Project and any of the firms that employ any of them.
- (m) "Equipment" means a tangible resource, such as machinery, articles or apparatus, of a permanent or long-term nature, used in an operation or activity. The Equipment Responsibility Matrix, which may be changed only by written agreement of the parties, is attached as **Exhibit C**.
- (n) "Final Completion" means, when the Work is finally complete, including the final resolution of all defects to the satisfaction of Virginia Tech, the Work shall be finally accepted by Virginia Tech and final payment shall be made. Virginia Tech shall not unreasonably withhold its approval of the resolution of defects.

- (o) "Final Completion Date" means the date when Carilion delivers to Virginia Tech DGS forms CO-13.1 signed by the Project Design Professional and CO-13.2 signed by the Project Contractor, and an affidavit of payment of claims, pursuant to which the Project Contractor certifies to the Developer and Owner that all subcontractors and suppliers to the Project have been paid.
- "Firm Fixed Contract Price" or "FFCP" means that portion of Total (p) Project Costs that Virginia Tech is obligated to pay Carilion under this Agreement. The FFCP as of the Effective Date is equal to \$70,843,000, which is the sum of (i) Virginia Tech's contribution toward the Design, Construction and Other Costs of the Project in the amount of \$69,500,000 and (ii) \$1,343,000, being the amount of the Owner Contingency as set forth in Section 2 (x); provided, however, that any use of the Owner Contingency shall be reasonably agreed by Owner and Developer and unused Owner Contingency shall be credited from the FFCP. Except as hereinafter provided, Virginia Tech will procure, pay 100% of the cost of, deliver to the Project site, and install all of the Furnishings and Moveable Equipment (FF&E), estimated as of the Effective Date to equal the amount set forth in Section 2 (x), all of which costs are outside of the FFCP. Therefore, Carilion has no obligation with respect to the procurement, payment of the cost of, delivery or installation of such FF&E under this Comprehensive Agreement, except to the extent the Work expressly includes the same. As of the Effective Date, as provided in the Equipment Responsibility Matrix (Exhibit C) and in Section 8(c) below, the Work includes rough-in of the facility for the installation of items of FF&E as specified in **Exhibit C** and also the installation of the security system. The FFCP is subject to revision, as documented by Change Order. All prices agreed to by the Developer and Skanska and AECOM, including total Project pricing and any pricing of early release packages, shall be subject to Virginia Tech audit and subsequent Virginia Tech and Carilion approval. Under no circumstances will Virginia Tech make payments to Carilion in excess of the FFCP, as adjusted pursuant to this Agreement. In the event that the costs of the portion of the Project covered by the FFCP are less than the FFCP, the cost savings will be retained by or returned to Virginia Tech or applied to the Project, as provided by this Agreement.
  - (q) "Project" is defined in recital R-1 above.

- (r) "Project Agreements" means this Comprehensive Agreement, supplements and addendum specifically identified herein, including without limitation those set forth in Section 44 (f) of this Agreement.
- (s) "Project Contractor" or "Skanska" means Skanska USA Building, Inc., which entity will be the "Contractor" under and as defined in the Construction Contract.
- (t) "Project Design Professional" means AECOM Technical Services, Inc. ("AECOM"), which is the "Architect" under and as defined in the A&E Contract.
- (u) "Punchlist Items" means details of construction and mechanical and electrical adjustments which are minor in character and do not materially interfere with Virginia Tech's use or enjoyment of the Project or designated portion thereof for its business operations, and may also include landscaping and other items which do not materially affect Virginia Tech's use of the Project, but which cannot be immediately completed because of weather or other events or circumstances for which one or more of the Project Contractor or Project Design Professional is entitled to an extension of time.
- (v) "Substantial Completion" means the condition when Virginia Tech agrees in its reasonable discretion that the Work, or a specific portion thereof, is sufficiently complete, in accordance with the Contract Documents, so that it can be utilized by Virginia Tech for the purposes for which it was intended.
- (w) "Substantial Completion Date" means the date on which the Project Design Professionals deliver to Virginia Tech: (i) the DGS Form CO-13.2a, Certificate of Substantial Completion by Contractor; (ii) the Punchlist associated with the Certificate of Substantial Completion; (iii) the DGS Form CO-13.1a, Certificate of Substantial Completion by Architect/Engineer, certifying that the Work has been Substantially Completed within the definition of "Substantial Completion" set forth herein; and (iv) assisted Virginia Tech in obtaining the Certificate of Occupancy issued by the Building Official.
- (x) "Total Project Costs" or "TPC" means all costs incurred by the Project including design, construction, project management, construction inspections, auditing expenses, furnishings and equipment, and land acquisition. The amount of the Total Project Cost is estimated to equal the sum of the following:

Design, Construction & Other Costs		80,400,000
Furnishings, Fixtures and Moveable Equipment (FF&E)		6,122,000
Owner Contingency	\$	1,343,000
Land Acquisition		2,000,000
Total Project Costs	\$	89,865,000

The TPC will be reviewed and modified as necessary (consistent with the requirements of Section 7(c)) at the following design stages and will be subject to Virginia Tech's written approval:

- Schematic Design
- Preliminary Design (Design Development)
- Working Drawings

Because the Project is subject to the Commonwealth of Virginia Pool funding process, the Total Project Costs will also be reviewed and approved by the Commonwealth of Virginia Bureau of Capital Outlay Management (BCOM) at the completion of Preliminary Design.

Should the Total Project Costs be revised as a result of Virginia Tech's or BCOM's foregoing reviews, the FFCP and the scope of the Project shall be modified accordingly by Change Order as further described in Section 8(b) below.

If the parties mutually agree to reduce the scope of the Project, pursuant to Section 8(b) below, in a manner that reduces the quality or quantity, or both, of the Carilion Premises (as defined in Section 37), then the parties agree to amend this Agreement to equitably reduce the cash portion of Carilion's Share.

Of the Total Project Cost, Virginia Tech shall be responsible under this Agreement to pay Carilion the FFCP, as defined above. Virginia Tech will also pay for the above-referenced FF&E outside of the FFCP.

Carilion shall be responsible, without reimbursement from Virginia Tech, for Carilion's Share, as defined above, the cash portion thereof to be applied to the portion of the TPC identified as

"Design, Construction and Other Costs" of the Project and the remainder of Carilion's Share in the form of its in-kind contribution of the Land to the Project.

# 3. General Scope.

- (a) Under this Agreement, Developer will be providing to Virginia Tech, site design and development services, design services, and construction to locate, design, and build the Project. Except for the limited purpose with respect to the description of staffing in **Exhibit A**, as set forth in Section 20 hereof, Virginia Tech and Carilion acknowledge and agree that the conceptual stage proposal in **Exhibit A** and and detailed stage proposal in **Exhibit B** have been replaced and superceded in their entirety by the terms and conditions of this Agreement, and **Exhibits A** and **B** are attached merely as background with respect to compliance with the PPEA procedures until execution of this Agreement as of the Effective Date, and as of the Effective Date the Project is described solely by reference to this Agreement and the other Project Agreements and Exhibits A and B have no bearing thereon. Developer will generally be providing services for Virginia Tech consisting of Site Design and Development, Design of Project, and Construction. As more specifically set forth in this Agreement and subject to the terms of this Agreement, the Developer will complete the Project for the amount of the FFCP, plus the amount of Carilion's Share, which Carilion will contribute in part in cash and in part inkind, as provided in this Agreement.
- (b) Virginia Tech has determined that the Project serves the public purpose of the PPEA because:
  - (1) There is a public need for and a benefit derived from this Project; and
  - (2) The Total Project Cost is a reasonable cost for the type of facility; and
  - (3) Carilion's plans will result in the timely design, construction, improvement, equipping, and installation of the Project.

#### 4. Changes to the Work

Virginia Tech may request additions, deletions or revisions to the Project. Such changes will be accomplished by Change Order in accordance with the procedures described herein.

# 5. Comprehensive Project Schedule

Carilion shall, within thirty (30) days after execution of this Agreement, cause the Project Contractor to develop a comprehensive Project schedule to include the site design and development tasks, the design services, and the construction services as well as any additional related services that are requested by Virginia Tech. This schedule, in the form of a critical path method ("CPM") schedule, shall show all milestone dates, such as delivery dates of tasks and phases, completion of contemplated reviews by different agencies, response and resubmittal time for additional reviews as may be required, key meetings with Virginia Tech and others. The CPM schedule shall be in the time sealed precedence format and will identify total float and free float. The CPM will be aligned with the cost of each activity as indicated in the schedule of values. The parties agree that the Construction Contract will require the Project Contractor to achieve Substantial Completion by November 30, 2019 and to achieve Final Completion by December 31, 2019, which dates are subject to adjustment in accordance with this Agreement and which are subject to Virginia Tech giving Carilion a Notice to Proceed with the Project on or before October 20, 2017.

#### 6. Site Design and Development.

- (a) <u>Services</u>: Developer will cause the Project Design Professional to provide the following site design and development services to Virginia Tech within the scope of this Agreement:
- (1) <u>Task 1</u>--Review any existing reports regarding the sites, including, without limitation, subsurface tests, soil tests, borings, water surveys, wetlands studies, topographical surveys, sewage disposal surveys and drainage determinations. Determine what additional services and reports are required to be done for the site, which are necessary in order to provide for the development of the site contemplated in this Agreement within the scope of Carilion's Work required hereunder. Any additional services beyond the scope of Carilion's Work required hereunder shall be subject to written change order approved by Virginia Tech and

Carilion. Provide, as part of Carilion's scope of work hereunder, an Environmental Impact Report, which Virginia Tech will submit to the Virginia Department of Environmental Quality.

- (2) <u>Task 2</u>--Manage the site design and site development for the Project and have all site work done necessary to prepare the site for the Project, including without limitation, preparing site plan and obtaining the approval thereof, clearing, grubbing, and grading, doing storm water management, utilities, curb and gutter, landscaping, and doing on-site road improvements, including the submission and approval of an Erosion and Sediment Control Plan and narrative to the Virginia Department of Conservation and Recreation, Division of Erosion and Sediment Control.
- (3) <u>Task 3</u>--Provide all permitting and obtain all approvals for Project that are required for site work, construction, and occupancy, including but not limited to a flood plain waiver, approval by the Roanoke Redevelopment and Housing Authority, proof of all applicable existing and vacated easements, documentation regarding Brownfield development, and required subdivision; Virginia Tech will assist in expediting such approvals and provide University signatures when required.

#### 7. Design Services.

- (a) Carilion has entered into the A&E Contract with the Project Design Professional (which is subject to further modification or restatement for consistency with this Agreement) and will enter into the Construction Contract with the Project Contractor for the Project promptly upon approval of the amount allocated to the Project by BCOM and the parties approval of the guaranteed maximum price for the Construction Contract.
- (b) Virginia Tech does not provide to Developer any warranty, express or implied, regarding any services or design performed by its consultants, agents or employees for the Project, except that Virginia Tech warrants and represents to Carilion that the person it designates as the Building Official is qualified and competent to provide the services of the Building Official under this Agreement.
  - (c) The design process will proceed generally as follows:
- (1) Carilion, Virginia Tech, and the Design Professionals shall meet routinely to develop and refine the drawings, and the Design Professionals will next develop the specifications for the Project, which shall be submitted to Virginia Tech by XXX, 2017 and

reviewed and approved by Virginia Tech within thirty (30) consecutive calendar days from receipt by Virginia Tech and become a part of the Contract Documents.

- (2) Carilion will cause the Project Design Professional to prepare Schematic Design Phase Drawings and Basis of Design for the Project and intends to submit them to Virginia Tech by XXX, 2017 for review, comment and approval within thirty (30) consecutive calendar days from receipt by Virginia Tech.
- (3) After Virginia Tech has approved the Schematic Design Phase Drawings and Basis of Design for the Project, Carilion shall cause the Project Design Professional to prepare Preliminary Design Phase Drawings and Specifications for the Project and submit to Virginia Tech for review, comment and approval within thirty (30) consecutive calendar days from receipt by Virginia Tech.
- (4) Concurrently with the Design Development Phase, Carilion shall cause the Project Design Professional to develop and submit a Site Design package, which shall include erosion and sediment control and storm water management plans to be submitted to the Virginia Department of Conservation and Recreation and the appropriate office(s) of the City of Roanoke having jurisdiction over the site design for the Project for review and approval. Upon approval of the Site Design package, Carilion shall cause the Project Design Professional to prepare and issue a Site Preparation package and a Foundation Preparation package as well as any other early design packages so as to allow the applicable construction work to commence in accordance with the Project schedule.
- (5) Developer shall then cause the Project Design Professional to produce a Skin/Roof/Structure Package and a 100% Construction Drawings and Specifications Package (Working Drawings and Specifications) and submit the same to Virginia Tech for review, comment and approval. Virginia Tech shall approve such documents within thirty (30) consecutive calendar days from receipt by Virginia Tech.

Carilion and Virginia Tech agree to develop a mutually agreed-upon design, and to develop and mutually agree upon scope and cost reduction ideas to the extent necessary to assist Carilion in designing and constructing the Project for the sum of the FFCP and the cash portion of Carilion's Share, provided that the FF&E will be procured directly by Virginia Tech, outside of the FFCP and Carilion's Share, so Carilion will have no responsibility for budgeting or

acquiring the same, other than Carilion's rough-in and installation obligations for certain FF&E to the extent provided in Section 2 (p) and **Exhibit C**. Virginia Tech's approval of all of the above plans, drawings, specifications and schedules ("Scope Documents") shall not be unreasonably withheld, conditioned or delayed, and Virginia Tech shall not be entitled to condition its approval of such Scope Documents upon the inclusion of any design specifications that are materially inconsistent with the agreed upon scope or budget of the Project.

- (d) So that Virginia Tech will have reasonable knowledge and understanding of the concepts and design components, Virginia Tech will be invited to participate in weekly design and construction team meetings where up-to-date descriptions of concepts, materials, equipment and systems which are being considered for each aspect of the Project will be discussed. Progress drawings, cut sheets, verbal descriptions, etc., regarding the advantages and/or disadvantages, the economic considerations, and the justifications as to why certain materials, equipment, and systems are being considered or used will be discussed.
  - (e) The design of the Project shall reflect the following standards:
    - Virginia Uniform State Building Code
    - Virginia Tech Design Standards (2006)
    - Virginia Tech Signage Standards
    - Virginia Tech Gender Neutral Bathroom Standards
    - Virginia Tech Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management
    - VT Network Infrastructure & Services Design and Construction Standards
    - Commonwealth of Virginia Construction and Professional Services Manual, subject, however, to the modifications and exclusions from the CPSM as agreed by the parties or to be agreed by the parties as provided herein.

#### 8. Construction Services.

(a) A "preconstruction" meeting shall be held prior to the scheduled start of construction on the Project.

- (b) The Design, Construction and Other Costs components of the TPC, and application of Owner Contingency, together with corresponding changes to the FFCP, may be changed pursuant to Change Order by reason of (i) agreement of the parties during the design and/or construction processes to reflect scope changes and/or to reflect the available level of Commonwealth of Virginia funding, which will be finalized by BCOM subsequent to their review and at completion of the Preliminary Design, recognizing that the scope of the Work may be increased or decreased by mutual agreement of the parties, (ii) a Force Majeure event, (iii) change order due to Virginia Tech Delay, (iv) Weather Delay, (v) as provided in Section 2 (x), or (vi) the results of VT audits.
- (c) Virginia Tech reserves the right to coordinate certain work in connection with its providing Equipment for the Project. Carilion will reasonably ensure that the design and construction of the Project provides for conduit, rough-in, mechanical, electrical and other features to accommodate any Equipment to be furnished by Virginia Tech and will coordinate reasonably with Virginia Tech and any of its contractors to ensure that the design and construction of the Project accommodate such Equipment. Carilion may rely on information furnished by Virginia Tech. Virginia Tech's contractors shall be allowed reasonable access to the Project to install such Equipment as Virginia Tech desires prior to completion of the Construction Work.
- Equipment under its own direction and at its own expense and risk, and will not unreasonably interfere with the progress of construction by Carilion. Carilion is responsible for taking reasonable precautions to protect Virginia Tech's furnished items of Equipment from damage during storage and handling by Carilion or its contractors, including damage from exposure to the elements; provided, however, Virginia Tech must cooperate with Carilion and the Project Contractor to time the delivery thereof, and Virginia Tech or its carriers or contractors will be responsible for any storage, transportation, delivery and installation of such items of Equipment performed by Virginia Tech, its carriers or contractors, until such time as such Carilion or the Project Contractor has taken control of such items of Equipment. If Virginia Tech's furnished items of Equipment are damaged as a result solely of Carilion's negligence and not the result of Virginia Tech's failure to take reasonable precautions for such items of Equipment, Carilion

shall repair or replace them to the extent of funds received by Carilion in the nature of insurance proceeds or from claims paid under the Contract Documents. If damage to Virginia Tech's furnished items of Equipment is caused solely by Carilion's willful misconduct, Carilion shall be responsible to repair or replace such items of Equipment, if, as and to the extent the cost of such repairs or replacements are not paid by the proceeds of any insurance policy.

- (e) Carilion shall use its commercially reasonable and diligent efforts to achieve Final Completion within thirty (30) days after the Substantial Completion Date provided that if any Punchlist Items cannot reasonably be completed within such 30-day period due to weather, longer lead times for ordering replacements or other similar reasons, Carilion shall be afforded additional time to achieve Final Completion for such Punchlist Item so long as Carilion diligently pursues such Final Completion.
- (f) In addition to its inspection rights, Virginia Tech also has the right to retain and pay for (outside of the TPC) Virginia Tech's staff and consultants to inspect from time to time the progress of the Construction Work on behalf of Virginia Tech. Certain of Virginia Tech's out-of-pocket project management expenses, audit costs, and the costs of UBO reviews and inspections may be paid through the FFCP from available Owner Contingency. Virginia Tech's staff, its consultants and other designees of Virginia Tech shall be afforded access to the Project construction site.
- (g) Carilion's out-of-pocket expenses, in the form of special inspections, commissioning, cleaning at project close-out, software expenses for G.C. pay, utility hook-ups, permits, and premiums for surety bonds and premiums for any insurance coverage required to be maintained by Carilion under this Agreement and in excess of those that Carilion would have incurred but for the Project, will be reimbursable to Carilion from Carilion's Share or the FFCP.
- (h) Except as set forth in subsections (f) and (g), each of Carilion and Virginia Tech, as applicable, will bear its own expenses for in-house personnel or staff for project management and project oversight, and other self-performed services, which amounts shall not be part of the TPC, but the foregoing shall not limit Carilion's right to be reimbursed by Virginia Tech as part of the FFCP or Carilion's Share for any such services performed or provided by the Design Professionals, consultants of the Design Professionals, the Project Contractor, or subcontractors of the Project Contractor.

#### 9. Plan of Finance.

Virginia Tech intends to finance the costs of the Project in a manner acceptable to Virginia Tech in its sole discretion that results in the availability of funds pursuant to Carilion's projected revenue needs. Subject to the provisions of Section 41 of this Agreement and the FFCP, Virginia Tech will include in its budget amounts reasonably necessary to finance the Project, including a reasonable contingency to address adjustments reasonably required, budgeted in the amount of the Owner Contingency shown in Section 2 (x) above.

# 10. <u>Delays/Force Majeure</u>.

- (a) A Virginia Tech Delay shall mean delays or hindrances in the Work caused by (i) the acts of Virginia Tech, its employees, invitees, contractors, subcontractors or agents, (ii) the acts or omissions of Virginia Tech in its performance of its obligations under the Project Agreements (other than Virginia Tech's obligation to provide approvals or disapprovals of submittals), to the extent such delays or hindrances are not cured within ten (10) days of Virginia Tech's receipt of written notice of such delays or hindrances from any of (1) Carilion, (2) the Project Contractor, or (3) Project Design Professional or other Project Designers; (iii) Virginia Tech's failure to respond and give approvals or disapprovals within ten (10) days after Virginia Tech has received the submittal; or (iv) failure of the UBO to act promptly, including in conducting its inspections or otherwise providing reviews, approvals, and feedback called for under this Agreement.
- (b) A Force Majeure Event shall mean "a cause outside of Carilion's control", such as a terrorist act, action or decrees of government bodies having jurisdiction (other than by Virginia Tech acting in either its sovereign or contractual capacity), material supply shortages, labor shortages, or any natural disaster or other events commonly known as "acts of God", which affects completion of the Project (each a "Force Majeure Event").
- (c) In the event of a Virginia Tech Delay, Weather Delay (pursuant to the General Conditions), or Force Majeure Event, Carilion shall seek to minimize the period of delay or hindrance by (i) if applicable, providing Virginia Tech (directly from Carilion or from the Project Contractor or Project Design Professional or other Project Designers) with ten (10) days' written notice that a Virginia Tech Delay, Weather Delay, or Force Majeure Event has occurred and is ongoing, and (ii) all other reasonable means, including but not limited to, seeking alternate

sources of labor or materials. If Carilion wishes to make a claim for an extension of the delivery date or increase in the Firm Fixed Contract Price by reason of a Virginia Tech Delay, Weather Delay or Force Majeure Event, including by reason of any request by Virginia Tech to accelerate the Work, Carilion shall give reasonably prompt notice (directly from Carilion or from the Project Contractor or Project Design Professional or other Project Designers) to Virginia Tech of such claim so that Virginia Tech is not unfairly disadvantaged by any delay in receiving notice of any such claim. If the cost of completing the Work is increased as a result of a Virginia Tech Delay, Weather Delay or Force Majeure Event, Carilion shall be entitled to either a Change Order increasing the FFCP or a reduction in the scope of the Work, to cover such increased costs caused by such Virginia Tech Delay, Weather Delay or Force Majeure Event, and Carilion and Virginia Tech agree to cooperate to evaluate and to select among these options.

## 11. Records, Record Copies and Plans.

Developer shall maintain in good order two (2) record copies of the plans, change orders and any other related documents, marked to record changes made during construction, one copy for Virginia Tech and one copy for Carilion. During the design and construction period, Virginia Tech shall have the right to review all Plans, change orders and other related documents during regular business hours. To ensure compliance, Developer will provide a Schedule of Value line item for "Record Documents." Virginia Tech may withhold funds for non-compliance, in the amount indicated in such Schedule of Values, until such Record Documents have been provided. Upon completion of the design and construction of the Project, Developer shall cause the Project Design Professional or Project Contractor, as applicable, to deliver to Virginia Tech the following:

- (1) a complete set of Record Drawings for the Project in electronic media, the latest copy of Autocad;
- (2) all written specifications as amended;
- (3) complete copies of all operations and maintenance manuals for all equipment installed in the facility; and
- (4) all warranties required pursuant to this Agreement and all warranties required by the Construction Contract.

#### 12. Warranties.

All the warranties indicated in the A&E Contract and the Construction Contract shall apply to the Project, it being the parties' intent that these warranties are to be construed to give Virginia Tech and Carilion the maximum protection consistent with their terms. Such warranties, including the warranties defined within each specification section of the Contract Documents, shall be assigned to Virginia Tech at Project Final Completion. All warranties set forth in the Contract Documents shall commence upon Substantial Completion of the Project and delivery of the book of warranties will occur on the Substantial Completion Date. Carilion makes no warranties, express or implied, with respect to the Work or its performance hereunder, and Virginia Tech and Carilion will rely exclusively on the representations and warranties made to them by the Project Design Professional (or other Design Professionals) and the Project Contract on the A&E Contract, the Construction Contract and other Contract Documents.

### 13. <u>Subcontractors</u>.

Carilion will require the Project Contractor to select its subcontractors from a competitive bidding process when reasonably practical, subject to any Small Business Procurement Plan as may be set forth, or referred to, in the Project Agreements and, further, subject to the exercise of Carilion's reasonable good faith business judgment, in considering factors such as past performance and local knowledge and experience, in selecting subcontractors. Carilion understands that any collusion by Carilion with subcontractors and others in bidding to raise bid prices will be a material breach of this Agreement and will also expose Carilion to statutory penalties under Virginia law.

#### 14. Payments.

(a) In connection with this Agreement, Carilion has provided an estimated cash draw down schedule of payments to assist Virginia Tech in determining financing needs. These projections are tentative and subject to change. Carilion shall notify Virginia Tech of changes in these projections in sufficient time so that Virginia Tech can adjust its financing to meet increases in requirements without incurring unnecessary additional financing costs. Updates to the schedule will be provided to Virginia Tech on a monthly basis. The parties will mutually agree in writing to develop an equitable process on which to base the payment schedule for Carilion's contribution of the cash portion of Carilion's Share towards costs incurred by

Carilion in the Project that are to be shared by the parties (namely, the part of the TPC identified in Section 2(x) as "Design, Construction & Other Costs").

- Regular progress payments shall be paid by Virginia Tech to Carilion less (b) retainage. Retainage will be held on construction "hard" costs only in the amount of 5% of the Firm Fixed Contract Price relative to construction "hard" costs. Moreover, 5% of the portion of the Firm Fixed Contract Price covering the total A/E fee to AECOM under the A&E Contract shall be withheld for the preparation of As-Built Documents at the end of the construction of the Project and paid when such As-Built Documents are delivered to and reasonably approved by Virginia Tech. Virginia Tech shall pay to Carilion the FFCP, subject to withholding of the 5% retainage for construction "hard" costs, in monthly progress payments on a percentage of completion basis, based on the percentage of the Project completed to date and the Project Schedule of Values to be provided by Carilion and reviewed/approved by Virginia Tech; however, no payments for construction "hard" costs will be made until the Environmental Impact Report has been submitted and approved by the Commonwealth of Virginia ("Environmental Impact Report Approval"). Virginia Tech will make final payment to Carilion of the balance remaining on the FFCP upon Project Final Completion, which will be contingent upon delivery and submission of approved Record Documents. Virginia Tech shall pay to Carilion the portion of the FFCP applicable to design costs (less retainage) in monthly progress payments via pay applications in the software program known as GC Pay ("GC Pay") according to the AECOM schedule for payment entered into GC Pay for payment to AECOM based on the percentage of completion for each category of their services completed, under and as provided in the A&E Contract. In no event shall total retainage under this Agreement exceed 5% of the FFCP.
- (c) Upon Substantial Completion of the Project, any retainage shall be paid to Developer, less a holdback for any uncompleted Punchlist Items in an amount equal to the estimated cost to complete such Punchlist Items, payable upon completion of such items.
- (d) If actual costs for Work covered by the FFCP are less than the FFCP, cost savings (after crediting any unused Owner Contingency from the FFCP) will accrue to Virginia Tech and such savings shall not be paid to Carilion but rather shall be returned to or retained by Virginia Tech.

(e) If Virginia Tech disputes in good faith any payment application by Carilion under this Agreement, Virginia Tech will identify with particularity the basis for its payment dispute and give Carilion notice thereof by the due date for such payment, in which event Carilion and Virginia Tech will cooperate and share information relevant to their effort to resolve the payment dispute during the 30 days subsequent to Virginia Tech's notice of the payment dispute, and, further, in such event Virginia Tech's cure period under Section 23 (h) of this Agreement for nonpayment of the amount disputed in good faith shall be 30 days and shall begin to run when the amount owed has been finally determined by mutual agreement of the parties or through the dispute resolution process applicable under the Project Agreements. In such event, Carilion may not exercise its termination right under Section 23 (h) for nonpayment of an amount disputed in good faith by Virginia Tech.

# 15. Payment Bonds, Performance Bonds, and Other Security.

To secure its performance of the portion of the Project to be covered by the Construction Contract, (1) Carilion has executed and delivered a Corporate Guarantee of Performance, in the form attached as **Exhibit G**, which guaranties to Virginia Tech completion of pre-construction services up to a maximum amount covered by Carilion's existing Pre-construction Services Agreement between Carilion and Skanska and any subsequent interim or preliminary construction contract(s) with Skanska related to the Project, which guaranty shall terminate at such time as Skanska obtains a payment and performance bond from a surety authorized to do business in the Commonwealth of Virginia, and in an amount equal to the guaranteed maximum price for the Work or the portion of the Work under the Construction Contract (in the event that the Construction Contract calls for the Work to be performed in two or more phases).

#### 16. Insurance.

- (a) At all times during the performance of the Work under this Agreement, Carilion shall be responsible for obtaining, providing and/or maintaining, which obligation Carilion may fulfill either directly by Carilion or by imposing such obligation on the Project Design Professional or Project Contractor in their respective A&E Contract and Construction Contract with Carilion (as applicable, the "Responsible Party"):
- (1) Form Accord 25 as a Certificate of Coverage verifying Workers' Compensation.
- (2) Commercial general liability insurance to include Premises/ Operations Liability, Products and Completed Operations Coverage, and Personal Injury Liability.
- (3) Business Automobile liability insurance which shall insure it against claims of personal injury, including death, as well as against claims for property damage.
- (4) The Project Design Professional or Project Contractor, as applicable, or Carilion if neither the Project Design Professional nor the Project Contractor is obligated by its A&E Contract or Construction Contract to carry the same, as part of the TPC, shall obtain and maintain in the names of Virginia Tech, the Commonwealth of Virginia and Carilion (including its affiliates) special form builder's risk insurance upon the entire Construction Work of this Agreement and upon all material in or adjacent thereto which is intended to be incorporated in the Work, to one hundred percent (100%) of the insurable value thereof. Such insurance may include up to a \$25,000 deductible, in which case the Responsible Party will be liable for such deductible amounts, whenever a claim arises. The loss, if any, is to be made adjustable with and payable to Carilion and Virginia Tech, in accordance with their interests, as they may appear. The Commonwealth of Virginia, Virginia Tech and their officers, employees and agents, shall be named as additional insureds in any policy of insurance issued to Carilion, and the Commonwealth of Virginia, Virginia Tech, and Carilion (including its affiliates) and their officers, employees and agents, shall be named as additional insureds in any policy of insurance issued to AECOM or Skanska and required by this Agreement to be maintained. Written evidence of the insurance shall be filed by the Responsible Party with Virginia Tech prior to the start of construction. A copy of any such policy of insurance shall be given to Virginia Tech

upon demand. The value of the builder's risk insurance shall exclude the costs of Virginia Tech's FF&E, demolitions, excavations, backfills, foundations, underground utilities and sitework.

- (b) Prior to the start of Work, Virginia Tech reserves the right, but not the obligation, to review and revise any insurance requirement, including but not limited to limits, sub-limits, deductibles, self-insured retentions, coverages and endorsements based upon insurance market conditions affecting the availability or affordability of coverage, or changes in the scope of work/specifications affecting the applicability of coverage, provided Virginia Tech compensates the Responsible Party for any additional costs incurred to obtain insurance criteria different from that specified herein.
- (c) Carilion agrees that the Responsible Party must provide Virginia Tech Certificates of Insurance evidencing that all coverages, limits and endorsements required herein are maintained and are in full force and effect. The Certificates of Insurance shall clearly indicate the Project name and Project number. Said Certificates of Insurance shall include a minimum thirty (30) day notice to Virginia Tech due to cancellation or non-renewal of coverage. The Certificate Holder address shall read:

Virginia Polytechnic Institute and State University Director of Contracts 90 Sterrett Facilities Complex (0129) Blacksburg, VA 24061

#### 17. Design Professionals.

Developer represents and warrants that the Design Professionals for the Project shall, without limitation, comply with the following:

(a) The Project Design Professional responsible for the design portion of the Construction Work shall obtain and maintain in force during the contract period and for a period of 5 years after the final completion of the Construction Work professional liability and errors and omission insurance in the amount of \$2,000,000 per claim occurrence and \$6,000,000 aggregate combined claims limit. All such Design Professionals shall be required to indemnify Virginia Tech and Carilion against any errors or omissions, including without limitation, patent and copyright infringement, and Developer also agrees that its A&E Contract with the Project

Design Professional will require the Project Design Professional to directly indemnify Virginia Tech and Carilion for any errors or omissions by any of the Design Professionals as provided in Section 24 (a) hereof.

- (b) Carilion shall deliver to Virginia Tech copies, including reproducible copies, of the Plans and other related documents for information and reference in connection with Virginia Tech's use and occupancy of the Project. In the event of the termination of this Agreement by Virginia Tech for any reason, Carilion shall immediately deliver to Virginia Tech a full set of copies of the plans and other related documents then in the possession or control of Carilion or the Design Professionals retained by Carilion; and
- (c) Carilion shall ensure that the requirements of this Section 17 are incorporated into its contract with the Project Design Professional and that the Project Design Professional incorporates such requirements in its contracts with its Design Professionals and that they incorporate these same requirements into their subcontracts with other Design Professionals so that Virginia Tech and Carilion are able to enjoy the full benefits of this Section 17.

#### 18. Virginia Tech's Representations and Warranties.

Virginia Tech hereby represents and warrants to Carilion as follows:

- (a) Virginia Tech is an Agency of the Commonwealth of Virginia and has full power, right and authority to execute, deliver and perform its obligations under, in accordance with and subject to the terms and conditions of this Agreement.
- (b) Virginia Tech has taken or caused to be taken all requisite action to authorize the execution and delivery of, and the performance of its obligations under, this Agreement and the other related documents to which Virginia Tech is a party.
- (c) Each person executing this Agreement on behalf of Virginia Tech is duly authorized to execute each such document on behalf of Virginia Tech.
- (d) Neither the execution and delivery by Virginia Tech of this Agreement and any other documents executed concurrently herewith to which Virginia Tech is a party, nor the consummation of the transactions contemplated hereby or thereby, is in conflict with or will result in a default under or violation of any other agreements or instruments to which it is a party or by which it is bound.

- (e) There is no action, suit, proceeding, investigation or litigation pending and served on Virginia Tech which challenges Virginia Tech's authority to execute, deliver or perform, or the validity or enforceability of, this Agreement and the other related documents to which Virginia Tech is a party, or which challenges the authority of the Virginia Tech official executing this Agreement or the other related documents, and Virginia Tech has disclosed to Carilion any pending and unserved or threatened action, suit, proceeding, investigation or litigation with respect to such matters of which Virginia Tech is aware.
- (f) Virginia Tech certifies that all representations, information and data it provided in support of, or in connection with, the proposal for the Project are true and correct to the best of its knowledge.
- (g) The representations and warranties of Virginia Tech contained herein shall survive expiration or termination of this Agreement.

### 19. Carilion's Representations and Warranties.

Carilion hereby represents and warrants to Virginia Tech as follows:

- (a) Carilion is a duly organized and validly existing entity created under the laws of the Commonwealth of Virginia, has the requisite power and has or will obtain all required licenses to carry on its present and proposed activities, and has full power, right and authority to execute and deliver this Agreement and the other related documents to which Carilion is a party and to perform each and all of the obligations of Carilion provided for herein and therein.
- (b) Carilion has taken or caused to be taken all requisite action to authorize the execution and delivery of, and the performance of its obligations under, this Agreement and the other related documents to which Carilion is a party.
- (c) Each person executing this Agreement or any other related document on behalf of Carilion has been or will at such time be duly authorized to execute each such document on behalf of Carilion.
- (d) Neither the execution and delivery by Carilion of this Agreement and the other related documents to which Carilion is a party, nor the consummation of the transactions contemplated hereby or thereby, is in conflict with or will result in a default under or a violation

of the governing instruments of Carilion or any other agreements or instruments to which it is a party or by which it is bound.

- (e) There is no action, suit, proceedings, investigation or litigation pending and served on Carilion which challenges Carilion's authority to execute, deliver or perform, or the validity or enforceability of, this Agreement and the other related documents to which Carilion is a party, or which challenges the authority of the Carilion official executing this Agreement or the other related documents; and Carilion has disclosed to Virginia Tech any pending and unserved or threatened action, suit, proceeding, investigation or litigation with respect to such matters of which Carilion is aware.
- (f) To the best of its knowledge, Carilion is in material compliance with all Laws, regulations and ordinances applicable to Carilion insofar as its activities in connection with this Agreement and the other related documents.
- (g) Carilion certifies that all representations, information and data provided in support of, or in connection with, the proposal for the Project are true and correct to the best of its knowledge.
- (h) The representations and warranties of Carilion contained herein shall survive expiration or termination of this Agreement.

#### 20. Staffing.

Carilion shall use the Project Team as indicated in the Conceptual Proposal (**Exhibit A**). No subsequent changes to management shall be made to which Virginia Tech reasonably objects, except for changes that are outside the control of Carilion (such as a person leaving its employ for any reason).

#### 21. Periodic Reporting.

Carilion or the Project Contractor shall file with Virginia Tech, upon request of Virginia Tech, periodic status reports that incorporate a description of the impact of the Project on the Commonwealth. Such reports shall be filed in accordance with the procedures provided in the request from Virginia Tech, and quarterly reports of expenditures with Small, Women, and Minority Contractors sufficient to enable Virginia Tech to comply with Executive Order 29, dated July 2, 2002, and the subsequent requirements. In addition, Carilion shall prepare and submit as soon as practicable a plan outlining Carilion's goals and expectations for utilization of Small, Women, and Minority Contractors in the Project, as defined/certified by the Virginia

Department of Minority Business Enterprises, provided that such information shall be provided within thirty (30) days after the commencement of construction.

# 22. <u>Inspections.</u>

Virginia Tech retains the right to inspect the Project at any time to ensure that Carilion's activities are acceptable to Virginia Tech and in accordance with this Agreement.

#### 23. Termination of Agreement.

(a) If Carilion defaults or fails or neglects to carry out its obligations in accordance with this Agreement, Virginia Tech may give written notice that Virginia Tech intends to terminate this Agreement, which notice shall contain a reasonably detailed explanation of the reasons for the proposed termination. Carilion shall correct the default, failure or neglect within thirty (30) days after being given such notice; provided, however, if (i) the nature of such default, failure or neglect is such that they are not reasonably capable of being corrected within such 30-day period and (ii) Carilion notifies Virginia Tech of a reasonable alternative period reasonably acceptable to Virginia Tech within fifteen (15) days of receipt of such notice, Carilion shall be allowed such reasonable alternative period to correct the default, failure or neglect so long as Carilion promptly commences and diligently pursues such corrections to completion. If Carilion fails to make such corrections within the 30-day period or fails to commence and diligently pursue to completion such corrections within the alternative period, then Virginia Tech may, at its sole discretion and without prejudice to any other remedy, terminate this Agreement and take possession of the Project and of all materials, equipment, tools and construction equipment and machinery thereon owned by Carilion, and, if Virginia Tech so chooses, finish construction of the Project by whatever method Virginia Tech may deem expedient. Upon termination hereunder, (i) those contracts for the design and construction of the Project designated by Virginia Tech shall be assigned to Virginia Tech for Virginia Tech to use at Virginia Tech's option to complete the Construction Work, and (ii) Carilion will promptly provide Virginia Tech all plans, specifications and other documents relevant to the Construction of the Project that have been done to date, regardless of whether they are complete. Carilion shall cause to be included in its contracts and in the subcontracts of those with whom it and its subcontractors contract, provisions that ensure smooth continuity of services and the ability to assign contracts to carry out this Section's requirements in the event of such termination and

shall use its good faith efforts to ensure that the design and construction of the Project continues smoothly without interruption if a termination occurs before Final Completion of Construction Work for Project.

- (b) Virginia Tech may terminate this Agreement for material breach without any need for providing Carilion notice and an opportunity to cure (i) for any collusive bidding, (ii) for commission by Carilion or its agents of actual fraud or a crime that is a felony, or (iii) if Carilion declares bankruptcy or is involuntarily placed into bankruptcy.
- (c) If not sooner terminated pursuant to subsection (a) or (b) above, or by mutual agreement, the Agreement shall terminate when all terms and conditions of all the Contract Documents have been satisfied.
- (d) Upon termination of this Agreement by Virginia Tech, regardless of the reason for termination, and so long as Virginia Tech has made payment as provided in subsection (e), Carilion shall transfer all ownership interest in the Project (in both real and personal property) held by Carilion (or its affiliates holding title) to Virginia Tech if and as provided in subsection (f), in which event the deed of conveyance for the Land or other instrument of transfer shall be delivered to Virginia Tech at no cost to Virginia Tech. However, the parties agree that the Land will be valued at the fair market value of the Land prior to construction and improvement, which the parties agree equals \$2,000,000, which amount shall be credited against Carilion's Share. Carilion agrees to execute all documents reasonably requested by Virginia Tech to effect or formalize such transfers.
- (e) Upon termination of this Agreement, Virginia Tech will make payment to Carilion for all amounts reasonably due.
- (f) Notwithstanding anything to the contrary in this Agreement, (1) in the event of termination of this Agreement before commencement of construction of the Project, for any reason, Carilion (or its affiliate holding title) shall have no obligation to convey the Project property to Virginia Tech, and Virginia Tech will pay to Carilion Virginia Tech's reasonably allocated share of all design and pre-construction expenses incurred by Carilion and payable to any of the Project Designers and/or the Project Contractor, and (2) in the event of termination of this Agreement by Virginia Tech after commencement of construction of the Project, for any reason, Carilion (or its affiliate holding title), as grantor, will convey the Project property to

Virginia Tech subject to a covenant in the deed of conveyance that Virginia Tech must finish construction of the Project and achieve Substantial Completion on or before the date that is reasonably achievable by a competent construction firm under the circumstances for a project of the same type, scope and location as the Project in its state of completion existing as of termination and so long as Virginia Tech (through its designated construction firm, being the Project Contractor or a replacement contractor) is diligently prosecuting the Work to completion, and failing such timely completion by Virginia Tech, as documented by a writing executed by Carilion (the "Reversion Notice") and recorded in the land records where the Land is located, at Carilion's option but not obligation, title to the Project property will revert to the grantor on the date that the Reversion Notice is so recorded.

- (g) Virginia Tech acknowledges that Carilion's rights of joint use or lease of space in the Project property will continue in accordance with the separate agreements governing the same notwithstanding the termination of this Agreement for any reason except that in the event of Carilion's breach, default or nonperformance Virginia Tech may condition commencement of such lease on the payment of all damages caused by Carilion and reasonably due and payable to Virginia Tech arising under this Agreement, and the parties' obligations to enter into such agreements shall survive termination of this Agreement.
- (h) Virginia Tech acknowledges that Carilion's performance under this Agreement is conditioned on Virginia Tech's payment and performance as required by this Agreement. If Virginia Tech defaults in payment or otherwise fails to perform under this Agreement, after fifteen (15) days' notice to Virginia Tech and opportunity to cure ("Default Notice"), Carilion may suspend performance under this Agreement until Virginia Tech cures such default or nonperformance and, further, Carilion may terminate this Agreement on written notice to Virginia Tech if Virginia Tech does not cure such default or nonperformance (including payment default) after an additional period of thirty (30) days from Carilion's Default Notice; provided, however, if (i) the nature of such default or nonperformance (other than payment default) is such that it is not reasonably capable of being corrected within such additional thirty (30)-day period and (ii) Virginia Tech notifies Carilion of a reasonable alternative period reasonably acceptable to Carilion within fifteen (15) days of receipt of such Default Notice, Virginia Tech shall be allowed such reasonable alternative period to correct the default or

nonperformance (other than payment default) so long as Virginia Tech promptly commences and diligently pursues such corrections to completion. Notwithstanding the foregoing, this Agreement shall be automatically reinstated after termination by Carilion for Virginia Tech's payment default if Virginia Tech cures its payment default within an additional fifteen (15)-day cure period commencing on the date of Virginia Tech's receipt of Carilion's termination letter.

## 24. <u>Indemnification; Limitation of Liability; Protections of the Commonwealth</u>.

(a) Provisions to be Included in Design and Construction Contracts. Carilion agrees to include in each of the A&E Contract and the Construction Contract a provision pursuant to which the Project Design Professional and the Project Contractor each agrees to indemnify and hold harmless Virginia Tech and Carilion from claims arising out of the Project, on commercially reasonable terms and having a scope of coverage no less than that which AECOM and Skanska have agreed to in prior arrangements for Carilion's development of projects for Virginia Tech, and such contracts will provide that Virginia Tech shall be a third party beneficiary of such indemnification provisions, permitting Virginia Tech to make a claim directly against the Project Design Professional and the Project Contractor under any such provisions. Virginia Tech agrees to exhaust all of its legal and equitable remedies as against the Project Design Professional and Project Contractor under the Contract Documents before pursing any claim against Carilion other than a claim alleging willful misconduct against Carilion, as set forth in subsection (b).

(b) Carilion's Indemnification of Virginia Tech. Carilion (the "Indemnifying Party") will indemnify and hold Virginia Tech (the "Indemnified Party") harmless from any and all claims, actions, liability and expense including costs of judgments, settlements, court costs and attorney's fees (the "Claim") brought by a third party, caused by or resulting from, the willful misconduct of any member, employee or agent of the Indemnifying Party, but only if the Claim is not caused by or resulting from, negligent or intentional acts or omissions or willful misconduct of any member, employee or agent of the Indemnified Party, the Project Design Professional or any of the other Design Professionals, the Project Contractor, or any of their consultants or subcontractors (of any tier). The Indemnified Party agrees to promptly notify the Indemnifying Party in writing of any claim asserted against the Indemnified Party shall submit to

the Indemnifying Party any appropriate court document or other document relative to or in relation to such claim. The Indemnifying Party shall control the investigation, trial and defense of such lawsuit or action (including all negotiations to effect a settlement) and any appeal arising therefrom and shall employ or engage attorneys of its own choice. The Indemnified Party may, at its own cost, participate in such investigation, trial and defense of such lawsuit or action and any appeal arising therefrom. The Indemnified Party shall provide full reasonable cooperation to the Indemnifying Party at all times during the pendency of the claim including, without limitation, providing the Indemnifying Party with all available information concerning the claim. The Indemnified Party may not effect a settlement of or enter into any other agreement involving the claim for which it is seeking indemnification hereunder without the written consent of the Indemnifying Party.

(c) Limitation of Carilion's Liability. Notwithstanding anything to the contrary in this Agreement or in any other Project Agreements, to the fullest extent allowed under Virginia law, Carilion shall have no liability to Virginia Tech hereunder or under any of the Project Agreements, arising in contract, tort, or otherwise, except (A) for damages arising from Carilion's failure to contribute in-kind the Land (as called for by this Agreement) or to convey the Project property to Carilion as required by this Agreement or (B) for damages as follows: (i) for sums owed arising from Carilion's failure to pay Carilion's Share, (ii) for indemnification claims under subsection (b) above which arise from the willful misconduct of the Indemnifying Party, (iii) in an amount equal to Virginia Tech's proportionate share of damage to the Project property or 100% share of damage to property owned solely by Virginia Tech if, as and only to the extent covered and paid as proceeds of insurance collected by Carilion from any insurance policy required to be maintained by a Responsible Party pursuant to the provisions of Section 16 above, (iv) for amounts in payment of claims arising out of Carilion's participation in collusion in bidding, (v) for sums owed to third parties arising out of Carilion's failure to make any payment due under the A&E Contract or Construction Contract if, as and only to the extent that Virginia Tech has made payment to Carilion as provided in this Agreement, (vi) the deductible on builder's risk insurance under Section 16(a)(4), or (vii) in an amount equal to (x) Virginia Tech's proportionate share of any amounts that Carilion collects, directly from the Project Design Professional or Project Contractor or indirectly (through any surety or lower tier

consultant or contractor of either of them) arising from the uncured breach, default or nonperformance under the Contract Documents by the Project Design Professional and Project Contractor, or either of them, or those for whose performance either of them is responsible, less (y) Carilion's actual costs of collection, including without limitation reasonable attorneys' fees, court costs, alternative dispute resolution fees, witness fees and expenses for all levels of proceedings, including at all levels of trials and appeals. As used herein, "Virginia Tech's proportionate share" means a fraction, the numerator of which is the amount of the FFCP (excluding unused contingency), and the denominator of which is an amount equal to the sum of the FFCP (excluding unused contingency) plus the cash portion of Carilion's Share.

- (d) *Sovereign Immunity of the Commonwealth of Virginia*. No person performing Work pursuant to this Agreement shall be deemed an employee of the Commonwealth of Virginia. Nothing contained herein shall be deemed an expressed or implied waiver of the sovereign immunity of the Commonwealth of Virginia.
- (e) *No Third Party Beneficiaries*. The provisions of this Agreement are solely for the benefit of Virginia Tech, including the Commonwealth of Virginia, and Carilion (including its affiliates), and are not enforceable by any third party to this Agreement.

#### 25. Resolution of Disputes, Claims and Other Matters.

Disputes, claims and other matters in question between the parties shall be resolved in compliance with Virginia Code § 2.2-4363.

#### 26. Department's Right to Inspect Records.

(a) Carilion's, Skanska's and AECOM's records relevant to the Project, which shall include but not be limited to accounting records, written policies and procedures, change order files (including documentation covering negotiated settlements), (all the foregoing hereinafter referred to as "records") shall be open to inspection and subject to audit and/or reproduction, during normal working hours, by Virginia Tech's agents or authorized representatives to the extent necessary to adequately permit evaluation and verification of any requests for change orders submitted by Carilion, Skanska or AECOM. In addition, the Carilion FFCP proposal, and Carilion's incurred costs at the Project's mid-point and at completion shall be subject to audit by Virginia Tech or its agents. Such records subject to examination shall also include, but not be limited to those records necessary to evaluate and verify direct and indirect

costs (including overhead allocations) as they may apply to costs associated with requests for Change Orders and total incurred costs under this Agreement.

- (b) For the purpose of such audits, inspections, examinations and evaluations, Virginia Tech's agent or authorized representative shall have access to said records at the location of the records from the effective date of this Agreement, for the duration of the Agreement, and until two (2) years after the termination of this Agreement.
- (c) Virginia Tech's agents or its authorized representatives shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this Section 26. Virginia Tech's agents or its authorized representatives shall give Carilion reasonable advance notice of intended audits.
- (d) Carilion shall require the Project Contractor to mandate that all subcontractors, insurance agents, and material suppliers (payees) to comply with the provisions of this Section 26 by insertion of the requirements hereof in a written contract agreement between the Project Contractor and each such payee. If there are actual damages to Virginia Tech, failure by the Project Contractor to obtain such written contracts that include such provisions shall be reason to exclude some or all of the related payees' costs from amounts payable to Carilion pursuant to this Agreement. If an audit, inspection, or examination in accordance with this Section 26 discloses overcharges of any nature by Carilion to Virginia Tech in excess of five percent (5%) of the total billings by Carilion to Virginia Tech, the actual cost of Virginia Tech's audit shall be paid by Carilion.

## 27. Nondiscrimination.

Carilion covenants and agrees that during the performance of this Agreement:

- (a) Carilion shall conduct its activities in connection with the Project in compliance with all requirements imposed pursuant to Title 2.2, Chapter 42, Sections 4200 *et seq.* of the *Code of Virginia*; Sections 2.2-4310 and 2.2-4311 of the *Code of Virginia*; Titles VI and VII of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973, as amended; the Americans with Disabilities Act of 1990, as amended; and all applicable rules and regulations. Carilion agrees that during the performance of this Agreement:
- (b) Carilion will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or other basis

prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of Carilion. Carilion agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

- (c) Carilion, in all solicitations or advertisements for employees placed by or on behalf of Carilion, will state that it is an equal opportunity employer.
- (d) Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this Section 27.
- (e) Carilion will require the Project Contractor to include the provisions of the foregoing Sections (a), (b), (c), and (d) in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

## 28. <u>Drug-Free Workplace</u>.

(a) During the performance of this Agreement, Carilion agrees to the following and further agrees to require Skanska and AECOM to agree to (i) provide a drugfree workplace for their employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in Developer's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of Carilion, AECOM, or Skanska that they maintain a drug-free Project workplace as shall Virginia Tech; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor. For the purposes of this Section 28, "drug-free workplace" means "a site for the performance of work done in connection with a specific contract awarded to a contractor in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract."

Attachment N

(b) Carilion shall also establish, maintain and enforce policies which prohibit

the following acts by all contractor, subcontractor and supplier personnel at the Project:

(1) the manufacture, distribution, dispensation, possession, or use of

alcohol, marijuana or other drugs, except possession and medically prescribed use of prescription

drugs; and

(2) the impairment of judgment or physical abilities due to the use of

alcohol, marijuana or other drugs, including impairment from prescription drugs.

## 29. Notices.

All notices and demands by any party to any other shall be given in writing and sent by a nationally recognized overnight courier or by United States certified mail, postage prepaid, return receipt requested, and addressed as follows:

To Virginia Tech: Sherwood G. Wilson, Vice President for Operations

Virginia Polytechnic Institute and State University

Burruss Hall, Suite 201 Blacksburg, Virginia 24061 Facsimile No.: (540) 231-1401 Telephone No.: (540) 231-4416

With a copy to: Kay Heidbreder, Esq.

**University Counsel** 

Virginia Polytechnic Institute and State University

Burruss Hall, Suite 236 Blacksburg, Virginia 24061 Facsimile No.: (540) 231-6474 Telephone No.: (540) 231-6293

To Carilion: Curtis Mills

Sr. Vice President Carilion Clinic

2017 South Jefferson Roanoke, Virginia 24014

Facsimile No.: (540) 985-6910 Telephone No.: (540) 981-7240 With a copy to: Nicholas Conte

General Counsel Carilion Clinic

213 South Jefferson, Suite 1600

Roanoke, Virginia 24011

Facsimile No.: (540) 224-5792 Telephone No.: (540) 224-5063

Any party may, upon prior written notice to the others, specify a different address for the giving of notice. Notices shall be effective one day after sending if sent by overnight courier or three days after sending if sent by certified mail, return receipt requested.

## 30. Successors and Assigns.

- (a) Carilion may not voluntarily or involuntarily assign, convey, transfer, pledge, mortgage or otherwise encumber its rights or interests under this Agreement or the other Project Agreements, other than to a successor entity or subsidiary, without the prior written consent of Virginia Tech.
- (b) Virginia Tech may transfer and assign its interests in the Project, or any portion thereof, this Agreement and any other agreement involving the Project to any other public entity as permitted by law, provided that the successor or assignee has assumed all of Virginia Tech's obligations, duties and liabilities under this Agreement and has provided Carilion with reasonable assurance of its legal authority and financial ability to honor and perform the same.
- (c) If either party changes its name, such party agrees to promptly furnish the other party with written notice of change of name and appropriate supporting documentation.
- (d) Except as expressly otherwise provided, this Agreement may not be assigned without the prior written consent of the parties to this Agreement.
- (e) All of the terms, covenants and conditions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

## 31. <u>Time of the Essence</u>.

The time within which Carilion agrees to complete construction of the Project is of the essence of this Agreement. Carilion shall proceed expeditiously with adequate forces and

make diligent efforts to keep the Project on schedule, and Carilion shall achieve Substantial Completion of the entire project by November 30, 2019 if Virginia Tech gives its notice to proceed no later than October 20, 2017, which date scheduled for Substantial Completion is subject to adjustment as provided in this Agreement. However, Virginia Tech may not give a notice to proceed any sooner than the later of (i) October 2, 2017 and (ii) the date of Environmental Impact Report Approval. The Project schedule shall be automatically extended to account for any delay arising from receipt of the Environmental Impact Report Approval. Virginia Tech will do all within its power to expedite any review or other decision making process that could result in any delay to the critical path schedule of the Project. Virginia Tech is obligated to comply with the Virginia Prompt Pay Act, Virginia Code Section 2.2-4350, with respect to its payment obligations under this Agreement.

## 32. <u>Independent Contractor</u>.

It is expressly understood and agreed by the parties hereto that Carilion, in performing its obligations under this Agreement, shall be deemed an independent contractor and not an agent, employee or partner of Virginia Tech.

## 33. No Waiver.

- (a) The failure of a party to insist upon the strict performance of any provisions of this Agreement, the failure of a party to exercise any right, option or remedy hereby reserved, or the existence of any course of performance hereunder shall not be construed as a waiver of any provision hereof or of any such right, option or remedy or as a waiver for the future of any such provision, right, option or remedy or as a waiver of a subsequent breach thereof. The consent by one party to any act by the other party requiring such consent shall not be deemed to render unnecessary the obtaining of consent to any subsequent act for which consent is required, regardless of whether similar to the act for which consent is given.
- (b) No act, delay or omission done, suffered or permitted by one party or its agents shall be deemed to waive, exhaust or impair any right, remedy or power of such party under this Agreement, or to relieve the other party from the full performance of its obligations under this Agreement.
- (c) No waiver of any term, covenant or condition of this Agreement shall be valid unless in writing and signed by the obligee party.

(d) The acceptance of any payment or reimbursement by a party shall not: (i) waive any preceding or then-existing breach or default by the other party of any term, covenant or condition of this Agreement, other than the other party's prior failure to pay the particular amount or part thereof so accepted, regardless of the paid party's knowledge of such preceding or then-existing breach or default at the time of acceptance of such payment or reimbursement; or (ii) continue, extend or affect (A) the service of any notice, any suit, arbitration or other legal proceeding or final judgment, (B) any time within which the other party is required to perform any obligation or (C) any other notice or demand.

## 34. <u>Cooperation</u>.

The parties agree to cooperate to achieve the objectives of this Agreement and to use reasonable and good faith efforts to resolve all disputes and disagreements that may arise hereunder. Each party agrees to designate representatives with the authority to make decisions binding upon such party (subject to those matters requiring an appropriate vote of the party's board of visitors or board of directors, as applicable) so as to not unduly delay the Project schedule.

## 35. Facility Use, Operation, and Maintenance Agreement.

The parties agree to develop and execute a Facility Use, Maintenance, and Operation Agreement not later than at the completion of the Working Drawing Design Phase that establishes the rights, and obligations of the parties with regard to use, operation, payments, and maintenance of the facility subsequent to the Substantial Completion Date. The Facility Use, Maintenance, and Operation Agreement will address issues such as but not limited to:

Phone Service

Data Service

Taxes

Insurance

Utilities

Maintenance

**Custodial Service** 

Security Service

Landscaping Service

## 36. Land Acquisition

As part of the Project, Carilion will be providing the land commonly known as #4 Riverside Circle S.W., City of Roanoke, Virginia, designated by the City of Roanoke, Virginia as Tax Number 1032214 (the "Land"). The Land and all improvements thereon (the "Project property") shall be conveyed to Virginia Tech at Final Completion or sooner arising from termination of this Agreement, if required in Section 23. For purposes of the Total Project Costs, the value of the Land has been established at its agreed fair market value, as specified in the TPC as provided in Section 2 (x), which amount shall be credited against Carilion's Share.

## 37. Carilion's Leasehold Interest

Upon Final Completion and conveyance of the Project property to Virginia Tech, Carilion shall have a long-term leasehold interest (such term to be agreed by the parties, based on the value of Carilion's Share) in the portion of the Project improvements designed for Carilion's use, presently estimated at ±8,000 square feet ("Carilion Premises"), rent-free, and otherwise in accordance with the terms of a deed of lease on commercially reasonable terms to be established by the parties and the terms of the Facility Use, Operation, and Maintenance Agreement governing each party's use of the Project upon Final Completion. Further, the parties agree to negotiate a joint use agreement for any portion of the Carilion Premises or other portions of the Project that will be subject to periodic time-sharing with Virginia Tech. The forms of these agreements will be agreed upon by the parties when the form of the Facility Use, Operation, and Maintenance Agreement is agreed upon by the parties, as set forth in Section 35.

## 38. Counterparts.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but both of such counterparts together shall be deemed to be one and the same instrument. It shall not be necessary in making proof of this Agreement or any counterpart hereof to produce or account for the other counterpart.

## 39. Entire Agreement.

- THIS AGREEMENT (INCLUDING THE EXHIBITS AND (a) DOCUMENTS INCORPORATED BY REFERENCE HERETO) CONSTITUTES THE ENTIRE AND EXCLUSIVE AGREEMENT BETWEEN THE PARTIES RELATING TO THE SPECIFIC MATTERS COVERED HEREIN. ALL PRIOR OR **CONTEMPORANEOUS ORAL** OR WRITTEN AGREEMENTS, UNDERSTANDINGS, REPRESENTATIONS AND/OR PRACTICES RELATIVE TO THE FOREGOING ARE HEREBY SUPERSEDED, REVOKED AND RENDERED INEFFECTIVE FOR ANY PURPOSE. THIS AGREEMENT MAY BE ALTERED, AMENDED OR REVOKED ONLY BY AN INSTRUMENT IN WRITING SIGNED BY EACH PARTY HERETO, OR ITS PERMITTED SUCCESSOR OR ASSIGNEE. NO ORAL AGREEMENT OR IMPLIED COVENANT SHALL BE HELD TO VARY THE TERMS HEREOF, ANY STATUTE, LAW OR CUSTOM TO THE CONTRARY NOTWITHSTANDING.
- (b) If any provisions of this Agreement are rendered obsolete or ineffective in serving their purpose by change in law, passage of time, financing requirements or other future events or circumstances, the parties agree to negotiate in good faith appropriate amendments to or replacements of such provisions in order to restore and carry out the original purposes thereof to the extent practicable; provided, however, that neither party is obligated to agree to any amendment or replacement which would reduce its rights or enlarge its responsibilities under this Agreement in any material respect.

## 40. Limitation on Carilion's Contracting Powers.

Other than Project Agreements and Contract Documents authorized by this Agreement, Carilion shall have no right or authority to enter into, deliver or perform any contracts or agreements pertaining to the Project which purport to bind Virginia Tech or the

Commonwealth of Virginia or which are contrary to the terms of the Project Agreement without the express prior written consent of Virginia Tech. Virginia Tech may withhold or condition its consent in its sole and absolute discretion.

## 41. Disclosures; Non-Waiver; Limitations.

- (a) Carilion understands and acknowledges that Virginia Tech is an agency of the Commonwealth of Virginia and with respect to tort liability for acts or occurrences involving the Project, including product liability, the Commonwealth and Virginia Tech are either (i) constitutionally immune (or partially immune) from suit, judgment or liability, (ii) insured, or (iii) covered by a financial plan of risk management that is in the nature of self-insurance, all as determined by applicable laws, government policies and practices.
- (b) Carilion understands and acknowledges that Virginia Tech has not agreed to provide any indemnification or save harmless agreements running to Carilion. No provision, covenant or agreement contained in this Agreement shall be deemed to be a waiver of the sovereign immunity of the Commonwealth of Virginia, or of Virginia Tech, from tort or other liability.
- (c) This Agreement shall be governed by, and construed according to, the laws of the Commonwealth of Virginia. The parties choose the City of Roanoke, Virginia, as the venue for any action instituted pursuant to the terms of this Agreement.
- (d) Notwithstanding any provisions contained herein, the FFCP shall not exceed the funding limitations stipulated by the 2008 Acts of the Assembly, without additional and prior authorization by the Governor and/or the General Assembly; provided, however, if Carilion is otherwise entitled under this Agreement to an increase in the Firm Fixed Contract Price in excess of such funding limitations, Carilion shall not be obligated to incur any such additional cost unless and until such funding authorization is obtained.

## 42. Financial Statements.

Carilion agrees to provide Virginia Tech with copies of its complete and current financial statements on an annual basis.

## 43. <u>Public Records</u>.

Any work product Virginia Tech owns pursuant to the Comprehensive Agreement or otherwise, and any document of which Virginia Tech obtains a copy, may be considered public records under the Virginia Public Records Act, Va. Code § 42.1-76 through § 42.1-91, or official records under the Virginia Freedom of Information Act, Va. Code § 2.2-3700 through § 2.2-3714, and as such may be subject to public disclosure. Virginia Tech recognizes that certain work product Virginia Tech owns pursuant to this Agreement and certain documents of which Virginia Tech obtains a copy may contain information exempt from disclosure under Va. Code § 2.2-3705, may constitute trade secrets as defined in Va. Code § 59.1-336, and may include confidential information which is otherwise subject to protection from misappropriation or disclosure. Should such records become the subject of a request for public disclosure, Virginia Tech shall respond as follows:

- (a) Virginia Tech shall use reasonable efforts to immediately notify Carilion of such request and the date by which it anticipates responding.
- (b) Carilion must then assert in writing to Virginia Tech any claim that such records contain proprietary information that is exempt from disclosure under Va. Code § 2.2-3705, or is subject to protection pursuant to Va. Code § 59.1-339, or other State law so that Virginia Tech may consider such assertion in responding to the requester.
- (c) If Carilion fails to make such assertion within ten consecutive calendar days after the date Virginia Tech notifies Carilion of its intended response, Virginia Tech shall have the right to make such disclosure.
- (d) If Carilion makes a timely assertion that the requested records contain proprietary information, trade secrets or confidential information, and thus are exempt from disclosure or otherwise protected under state law, upon consultation with Carilion to agree upon a reasonable effort and legal cost, at Carilion's expense, Virginia Tech and Carilion shall seek judicial declaration of the rights of the parties. Until such declaration is made, Virginia Tech will maintain the confidentiality of such records.
- (e) In no event shall Virginia Tech be liable to Carilion as a result of any disclosure of such records by Virginia Tech.

- (f) If Virginia Tech's denial of a request for disclosure of records is challenged in court and Virginia Tech agrees to a request by Carilion to defend its position, Carilion shall assist Virginia Tech in its defense and shall indemnify Virginia Tech for any and all damages assessed and costs (including the fees and costs of Virginia Tech's attorneys) Virginia Tech incurs in such defense, including any attorneys' fees lawfully assessed against Virginia Tech.
- (g) If Carilion believes that any work product or any document subject to transmittal to or review by Virginia Tech under the terms of this Agreement or any other Project Agreement contains proprietary or confidential information or trade secrets that are exempt or protected from disclosure pursuant to the Code of Virginia, Carilion shall use its best efforts to identify such information prior to such transmittal or review and it and Virginia Tech shall confer on appropriate means of ensuring compliance with applicable laws prior to transmittal or review. Carilion shall comply with the requirements of Va. Code § 2.2-3705.6(11) with regard to any such information. Upon the written request of either party, Carilion and Virginia Tech shall mutually develop a protocol for the transmittal, review and disclosure of work product or other documents produced or obtained by Carilion so as to avoid violations of any applicable law.

## 44. Construction and Interpretation of Agreement

- (a) The language in all parts of this Agreement shall in all cases be construed simply, as a whole and in accordance with its fair meaning and not strictly for or against any party. The parties hereto acknowledge and agree that this Agreement has been prepared jointly by the parties and has been the subject of arm's length and careful negotiation over a considerable period of time, that each party has been given the opportunity to independently review this Agreement with legal counsel, and that each party has the requisite experience and sophistication to understand, interpret and agree to the particular language of the provisions hereof. Accordingly, in the event of an ambiguity in or dispute regarding the interpretation of this Agreement, this Agreement shall not be interpreted or construed against the party preparing it.
- (b) If any term or provision of this Agreement, the deletion of which would not adversely affect the receipt of any material benefit by either party hereunder, shall be held by

a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and each other term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. It is the intention of the parties to this Agreement, and the parties hereto agree, that in lieu of each clause or provision of this Agreement that is illegal, invalid or unenforceable, the parties in good faith shall supply as a part of this Agreement an enforceable clause or provision as similar in terms to such illegal, invalid or unenforceable clause or provision as may be possible.

- (c) The captions of the articles, sections and subsections herein are inserted solely for convenience and under no circumstances are they or any of them to be treated or construed as part of this instrument.
- (d) References in this instrument to this "Agreement" mean, refer to and include this instrument as well as any riders, exhibits (subject to the exclusion of **Exhibits A** and **B** to the extent provided in Section 3(a) above), addenda and attachments hereto (which are hereby incorporated herein by reference) or other documents expressly incorporated by reference in this instrument. Any references to any covenant, condition, obligation and/or undertaking "herein," "hereunder" or "pursuant hereto" (or language of like import) mean, refer to and include the covenants, conditions, obligations and undertakings existing pursuant to this instrument and any riders, exhibits (subject to the exclusion of Exhibits A and B to the extent provided in Section 3(a) above), addenda, attachments or other documents affixed to or expressly incorporated by reference in this instrument. All terms defined in this instrument shall be deemed to have the same meanings in all riders, exhibits (subject to the exclusion of **Exhibits A** and **B** to the extent provided in Section 3(a) above), addenda, attachments or other documents affixed to or expressly incorporated by reference in this instrument unless the context thereof clearly requires the contrary. Unless expressly provided otherwise, all references to Sections refer to the Sections set forth in this Agreement. Unless otherwise stated in this Agreement (including documents incorporated by reference), words which have wellknown technical or construction industry meanings are used in this Agreement in accordance with such recognized meaning.

- (e) As used in this Agreement and as the context may require, the singular includes the plural and vice versa, and the masculine gender includes the feminine and vice versa.
- (f) The Project Agreements, as set forth below, are intended to be complementary and consistent with each other and shall, to the maximum extent possible, be construed according to such intent. In the event of any conflict among the Project Agreements, the provisions of the document having higher priority as set forth below shall control:

## Comprehensive Agreement

Construction Contract (initially the Preconstruction Services Agreement between Carilion and Skanska, to be replaced by a form of Contract between Owner and Construction Manager "At Risk" – Construction Phase Services (DGS CO-9CM), to be entered into by Owner and Project Contractor as the design and GMP for early work packages or separate phases of the Project are finalized and approved)

General Conditions of the Construction Manager "At Risk" Construction Contract (DGS CO-7CM) version dated 5/15, in the form attached hereto but modified by mutual agreement of Carilion and Virginia Tech after the Effective Date, with edits necessary to reflect that Carilion will be the Owner party under the Construction Contract and to accomplish the intent and purpose of this Comprehensive Agreement ("General Conditions")

Supplemental General Conditions in the form attached hereto but modified after the Effective Date as mutually agreed agreement by of Carilion and Virginia Tech ("Supplementary Conditions")

Terms and Conditions of the A/E Contract (DGS C0-3a) version dated 5/15 Carilion's Plan for Compliance with Small, Women, and Minority-Owned Business Efforts

The Plans and Specifications prepared by the Project Designers, as developed and approved under the Comprehensive Agreement

The Authority to Initiate Capital Outlay Project form (HECO-2) attached as  $\underline{\text{Exhibit H}}$  to the Comprehensive Agreement

## 45. Financing.

Virginia Tech hereby confirms to Carilion that it has authority to issue evidence of indebtedness (the "Obligations") by and through the Virginia General Assembly's 2008 Acts of Assembly and the in amounts sufficient for Virginia Tech to meet its obligations hereunder. Carilion recognizes and agrees that the sole source of payment by Virginia Tech and/or the Commonwealth hereunder shall be from the proceeds of such Obligations transferred to Virginia

Tech from time to time as stated in the drawdown schedule for payment of costs associated with the Project and updated as requested and/or required under financing arrangements for the Project by Virginia Tech.

## 46. Exhibits.

Subject to limitations on the applicability of  $\underline{\mathbf{Exhibits A}}$  and  $\underline{\mathbf{B}}$  to this Agreement as set forth in Section 3(a), he following exhibits are hereby deemed to be part of this Agreement:

Exhibit A – Carilion conceptual proposal dated 4/28/17

Exhibit B – Carilion detailed proposal dated 7/14/17

**Exhibit C** – Equipment Responsibility Matrix

**Exhibit D** – Carilion Projected Partial Payment Schedule

**Exhibit E** – Public Notice of Negotiation of Comprehensive Agreement

Exhibit F – Virginia Tech PPEA Guidelines, December 2007

Exhibit G - Corporate Guarantee by Carilion, to be replaced by the required

Payment and Performance Bond when issued by the Project Contractor

Exhibit H – HECO-2, Authority to Initiate Capital Outlay Project form

**Exhibit I** – General Conditions of the Construction Manager "At Risk" Contract (as defined above in Section 44(f))

<u>Exhibit J</u> – Supplemental Conditions to the Construction Contract (as defined above in Section 44(f))

**Exhibit K** – Terms and Conditions of the A/E Contract (as defined above in Section 44(f))

[SIGNATURES AND EXHIBITS FOLLOW]

**IN WITNESS WHEREOF**, the parties have executed this Comprehensive Agreement as of the day and year first above written.

By:	
Name:	
Title:	
Carilion Clinic	
Carilion Clinic  By:	

Virginia Polytechnic Institute and State University

# Financial Performance Report - Operating and Capital FINANCE AND RESOURCE MANAGEMENT COMMITTEE

July 1, 2016 to June 30, 2017

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 commitments to buy goods and services as encumbrances when obligated and as an expenditure 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 Resource Management 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 June 2016-17 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 2016-17

Dollars in Thousands

Educational and General Programs           University Division           Revenues         \$163,395         \$163,395         \$0         \$166,480         \$163,395         \$-3,085 (9)           Tuition and Fees         478,010         478,450         -440         480,035         478,450         -1,585 (10)           All Other Income         35,561         42,280         -6,719 (1)         41,544         42,280         736 (11)           Total Revenues         \$676,966         \$684,125         \$-7,159         \$688,059         \$684,125         \$-3,934           Expenses         ***		July 1,	July 1, 2016 to June 30, 2017			Annual Budget for 2016-17			
National Programs					-				
Resemble   Secretimes   Secre	Educational and General Programs								
General Fund	<u>University Division</u>								
Tutlion and Fees 478,010 478,450 440 480,035 478,460 736 (1) 1,1544 4,260 736 (1) 1									
All Other Income   35,561   42,280   6,719   1 41,544   42,280   736   (1)     Total Revenues   \$676,966   \$684,125   \$7,159   \$686,059   \$684,125   \$3,393     Revenues   \$676,966   \$684,125   \$7,159   \$686,059   \$684,125   \$3,393     Academic Programs   \$432,630   \$246,737   167   \$260,003   \$246,737   \$1,206     Total Expenses   \$479,209   \$684,125   \$484,856   \$686,059   \$684,125   \$3,396   (81,011)     NET   \$2,303   \$0   \$52,303   \$0   \$0   \$0   \$0     NET   \$2,303   \$0   \$52,303   \$0   \$0   \$0     Revenues   \$679,209   \$688,300   \$0   \$0   \$0     Revenues   \$660,300   \$60,300   \$0   \$0   \$0     Pederal Appropriation   \$567   \$15,840   \$6.073   (4)   \$15,840   \$15,840   \$0   (1)     Pederal Appropriation   \$9,567   \$15,840   \$6.073   (4)   \$15,840   \$15,840   \$0   (1)     All Other Income   \$1,122   \$1,068   \$89   \$933   \$1,068					. ,				
Total Revenues			•		,	·	. , ,		
Academic Programs									
Support Programs   2-46,630   2-46,797   167   2-60,003   2-46,797   13,206   Total Expenses   \$-679,269   \$-684,125   \$-3,334 (8)10,11)	Expenses								
Total Expenses		\$-432,639	\$-437,328	\$4,689 (2)	\$-428,056	\$-437,328	\$-9,272		
NET   \$-2,303   \$0   \$-2,303 (3)   \$0   \$0   \$0   \$0   \$0   \$0   \$0   \$	Support Programs	-246,630	-246,797	167	-260,003	-246,797	13,206		
Revenues	Total Expenses	\$-679,269	\$-684,125	\$4,856	\$-688,059	\$-684,125	\$3,934 (9,10,11)		
Revenues	NET	\$-2,303	\$0	\$-2,303 (3)	\$0	\$0	\$0		
Ceneral Fund	CE/AES Division								
Federal Appropriation	<u>Revenues</u>								
All Other Income   1,152   1,063   89   933   1,063   130 (18)   Total Revenues   \$80,109   \$86,093   \$-5,984   \$86,874   \$86,093   \$-781									
Total Revenues		· ·	·			•			
Academic Programs									
Academic Programs	Expenses								
Support Programs		\$-79,074	\$-79,265	\$191	\$-80,047	\$-79,265	\$781		
NET		-6,454	-6,827	373	-6,827	-6,827	0		
Revenues   \$326,579   \$325,049   \$1,530 (6)   \$320,175   \$325,049   \$4,874 (6)   Expenses   \$-324,742   \$-339,432   \$14,690 (6)   \$-311,278   \$-339,432   \$-28,154 (6)   Reserve Drawdown (Deposit)   \$-1,837   \$14,383   \$-16,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$14,383   \$23,220 (6)   \$-8,897   \$-1,466,784   \$-1,242   \$-8,897   \$-8,897   \$-1,469,789   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660   \$-8,897   \$-1,481,189   \$-22,660	Total Expenses	\$-85,528	\$-86,093	\$565	\$-86,874	\$-86,093	<u>\$781</u> (12,13)		
Revenues   \$326,579   \$325,049   \$1,530 (6)   \$320,175   \$325,049   \$4,874 (6)   Expenses   324,742   339,432   14,690 (6)   -311,278   339,432   -28,154 (6)   Reserve Drawdown (Deposit)   -1,837   14,383   -16,220 (6)   -8,897   14,383   32,280 (6)   NET   \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$	NET	\$-5,419	\$0	\$-5,419 (5)	\$0	\$0	\$0		
Expenses   -324,742   -339,432   14,690 (6)   -311,278   -339,432   2,28,154 (6)   Reserve Drawdown (Deposit)   -1,837   14,383   -16,220 (6)   -8,897   14,383   23,280 (6)   NET   \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$0 \$ \$	Auxiliary Enterprises								
Reserve Drawdown (Deposit)   -1,837   14,383   -16,220 (6)   -8,897   14,383   23,280 (6)     NET	Revenues	\$326,579	\$325,049	\$1,530 (6)	\$320,175	\$325,049	\$4,874 (6)		
NET	•	· ·	·						
Revenues   \$302,925   \$341,952   \$-39,027 (7)   \$341,952   \$341,952   \$0     Expenses   -282,798   -341,952   59,154 (7)   -341,952   -341,952   0     Reserve Drawdown (Deposit)   -20,127   0   -20,127   0   0   0     NET   \$0	, ,								
Revenues   \$302,925   \$341,952   \$-39,027 (7)   \$341,952   \$341,952   \$0     Expenses   -282,798   -341,952   59,154 (7)   -341,952   -341,952   0     Reserve Drawdown (Deposit)   -20,127   0   -20,127   0   0   0     NET   \$0	NE I	\$0	\$0	\$0	\$0	\$0	\$0		
Expenses   -282,798   -341,952   59,154 (7)   -341,952   -341,952   0   0   0   0   0   0   0   0   0	Sponsored Programs								
Reserve Drawdown (Deposit)   -20,127   0   -20,127   0   0   0   0   0   0   0   0   0				. , , , ,					
NET			,		,	•			
Revenues   \$1,416,658   \$1,466,784   \$-50,126   \$1,468,026   \$1,466,784   \$-22,060   Revenues   \$1,416,058   \$1,460,784   \$-22,060   Reserve Drawdown (Deposit)   \$-25,580   \$14,405   \$-39,985   \$-8,897   \$14,405   \$23,002									
Revenues         \$22,830         \$23,173         \$-343         \$21,713         \$23,173         \$1,460 (14,15)           Expenses         -22,834         -23,177         343         -21,713         -23,177         -1,464 (14,15)           Reserve Drawdown (Deposit)         4         4         0         0         4         4 (16)           NET         \$0         \$0         \$0         \$0         \$0         \$0           All Other Programs *           Revenue         \$7,249         \$6,392         \$857         \$9,253         \$6,392         \$-2,861 (17)           Expenses         -3,629         -6,410         2,781 (8)         -9,253         -6,410         2,843 (17)           Reserve Drawdown (Deposit)         -3,620         18         -3,638 (8)         0         18         18 (17)           NET         \$0         \$0         \$0         \$0         \$0         \$0         \$0           Total University           Revenues         \$1,416,658         \$1,466,784         \$-50,126         \$1,468,026         \$1,466,784         \$-1,242           Expenses         -1,398,800         -1,481,189         82,389         -1,459,129         -1,481,189         -22,060		φυ	φυ	φυ	φυ	φυ	φυ		
Expenses		¢22.020	<b>#22 172</b>	f 242	¢24.742	<b>#22 172</b>	¢1.460 (44.45)		
Reserve Drawdown (Deposit)         4         4         4         0         0         4         4 (16)           NET         \$0         \$0         \$0         \$0         \$0         \$0         \$0           All Other Programs *           Revenue         \$7,249         \$6,392         \$857         \$9,253         \$6,392         \$-2,861 (17)           Expenses         -3,629         -6,410         2,781 (8)         -9,253         -6,410         2,843 (17)           Reserve Drawdown (Deposit)         -3,620         18         -3,638 (8)         0         18         18 (17)           NET         \$0         \$0         \$0         \$0         \$0         \$0         \$0           Total University           Revenues         \$1,416,658         \$1,466,784         \$-50,126         \$1,468,026         \$1,466,784         \$-1,242           Expenses         -1,398,800         -1,481,189         82,389         -1,459,129         -1,481,189         -22,060           Reserve Drawdown (Deposit)         -25,580         14,405         -39,985         -8,897         14,405         23,302									
All Other Programs *  Revenue \$7,249 \$6,392 \$857 \$9,253 \$6,392 \$-2,861 (17) Expenses -3,629 -6,410 2,781 (8) -9,253 -6,410 2,843 (17) Reserve Drawdown (Deposit) -3,620 18 -3,638 (8) 0 18 18 (17) NET \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0  Total University  Revenues \$1,416,658 \$1,466,784 \$-50,126 \$1,468,026 \$1,466,784 \$-1,242 Expenses -1,398,800 -1,481,189 82,389 -1,459,129 -1,481,189 -22,060 Reserve Drawdown (Deposit) -25,580 14,405 -39,985 -8,897 14,405 23,302			·		·				
Revenue         \$7,249         \$6,392         \$857         \$9,253         \$6,392         \$-2,861 (17)           Expenses         -3,629         -6,410         2,781 (8)         -9,253         -6,410         2,843 (17)           Reserve Drawdown (Deposit)         -3,620         18         -3,638 (8)         0         18         18 (17)           NET         \$0         \$0         \$0         \$0         \$0         \$0         \$0           Total University           Revenues         \$1,416,658         \$1,466,784         \$-50,126         \$1,468,026         \$1,466,784         \$-1,242           Expenses         -1,398,800         -1,481,189         82,389         -1,459,129         -1,481,189         -22,060           Reserve Drawdown (Deposit)         -25,580         14,405         -39,985         -8,897         14,405         23,302	NET	\$0	\$0	\$0	\$0	\$0	\$0		
Expenses	All Other Programs *								
Reserve Drawdown (Deposit)         -3,620         18         -3,638 (8)         0         18         18 (17)           NET         \$0<									
NET         \$0         \$0         \$0         \$0         \$0         \$0         \$0           Total University           Revenues         \$1,416,658         \$1,466,784         \$-50,126         \$1,468,026         \$1,466,784         \$-1,242           Expenses         -1,398,800         -1,481,189         82,389         -1,459,129         -1,481,189         -22,060           Reserve Drawdown (Deposit)         -25,580         14,405         -39,985         -8,897         14,405         23,302									
Total University           Revenues         \$1,416,658         \$1,466,784         \$-50,126         \$1,468,026         \$1,466,784         \$-1,242           Expenses         -1,398,800         -1,481,189         82,389         -1,459,129         -1,481,189         -22,060           Reserve Drawdown (Deposit)         -25,580         14,405         -39,985         -8,897         14,405         23,302									
Revenues       \$1,416,658       \$1,466,784       \$-50,126       \$1,468,026       \$1,466,784       \$-1,242         Expenses       -1,398,800       -1,481,189       82,389       -1,459,129       -1,481,189       -22,060         Reserve Drawdown (Deposit)       -25,580       14,405       -39,985       -8,897       14,405       23,302		ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ		
Expenses       -1,398,800       -1,481,189       82,389       -1,459,129       -1,481,189       -22,060         Reserve Drawdown (Deposit)       -25,580       14,405       -39,985       -8,897       14,405       23,302		¢1 /16 650	¢1 466 704	¢ 50 406	¢1 460 006	¢1 466 704	¢ 1 242		
Reserve Drawdown (Deposit) <u>-25,580</u> <u>14,405</u> <u>-39,985</u> <u>-8,897</u> <u>14,405</u> <u>23,302</u>									
NET \$-7,722 \$0 \$-7,722 \$0 \$0									
	NET	\$-7,722	\$0	\$-7,722	\$0	\$0	\$0		

 $<sup>^{\</sup>star} \, \text{All Other Programs include federal work study, alumni affairs, surplus property, and unique military activities.}$ 

## **OPERATING BUDGET**

- 1. Lower than Projected revenues in Continuing Education programs due to lower than anticipated Language and Culture Institute business volume and the timing of Continuing Education Activities.
- 2. Academic program expenditures lower than projected due lower than projected activity levels in continuing education programs and growth in equipment program reimbursements.
- 3. While the Commonwealth requires that revenue and expenses be balanced for Educational and General Programs, year-end balances are possible for continuing education programs.
- 4. The budget for federal revenue is established to match projected allotments from the federal government that are expected to be drawn down during the state fiscal year. 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 less than the projected budget due to the timing of federal drawdowns.
- 5. While the Commonwealth requires that revenue and expenses be balanced for Educational and General Programs, variances in federal funds are possible due to the timing differences between drawdowns and expenses.
- 6. Quarterly and projected annual variances are explained in the Auxiliary Enterprises section of this report.
- 7. 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. Total sponsored research revenues are 1.6% less than 2015-16 levels due to lower federal grant and contract activity, while research expenditures are 1.7% greater than 2015-16 levels due to the extraordinary facility project expenditures in 2016-17.
- 8. Expenses for All Other Programs were less than projected due to timing of surplus property expense activity and timing of projects.
- 9. The General Fund revenue budget was reduced \$2.7 million primarily due to the removal of the General Fund share of the planned compensation program and reduced \$400,000 due to the state's withholding of E&G Nongeneral fund interest earnings. The General Fund revenue budget was increased \$19,280 for technical adjustments to the central fund estimate. The corresponding expenditure budgets have been adjusted accordingly.
- 10. The annual budget for Tuition and Fees has been decreased \$5.7 million for the finalization of the budgets for tuition and E&G fees, driven primarily by a refinement in projected enrollment growth and increased \$4.2 million in the third quarter for stronger than projected spring retention and earmarked fee revenue. The corresponding expenditure budgets have been adjusted accordingly.
- 11. The All Other Income revenue budget for the University Division has been increased \$935,800 for budget finalizations in Sales and Services and Continuing Education, \$450,000 for Equine Medical Center Revenues, \$63,772 for Va Racing Revenue, \$110,000 for stronger than projected milk sales, and \$148,000 for revenue associated with the establishment of the Campus to Campus shuttle (between Blacksburg and the Northern Capital Region) and the Executive Briefing Center ancillary. The Veterinary Teaching Hospital revenues were decreased \$932,000 due to the closure of the Roanoke Referral Clinic and \$20,000 due to lower than projected cattle sales. The corresponding expenditure budgets have been adjusted accordingly.
- 12. The General Fund revenue budget was decreased \$911,264 primarily due to the removal of the General Fund share of the planned compensation program. The corresponding expenditure budgets have been adjusted accordingly.
- 13. The self-generated revenue budget increased \$130,000 for greater than projected self-generated revenues. The corresponding expenditure budgets have been adjusted accordingly.
- 14. The General Funds revenue and expense budgets for Student Financial Assistance were increased \$301,490 for the Two-Year College Transfer Grant and \$79,649 for the VA Military Survivors and Dependent Program based on a projection of annual activity. The revenue and expense budgets were increased \$20,000 for the Cybersecurity Public Service Scholarship Program for students pursuing an education in programs specifically designed for careers in cybersecurity defense.
- 15. The Student Financial Aid revenue and expense budgets for Non-General Funds were increased \$770,000 during budget finalizations and \$289,823 for a technical accounting change.
- 16. Due to the timing of General Fund Student Financial Aid disbursements and the timing of expenses, \$4,030 of unexpected funds from prior fiscal years were utilized during 2016-17 for College Transfer Grant, Military Survivors and Soil Scientist programs.
- 17. The projected annual budgets for All Other Programs was decreased \$3.4M to finalize budgets and realignment of Alumni Affairs. The expense budgets were increased \$511,174 for outstanding 2015-16 commitments that were initiated but not completed before June 30, 2016.

## UNIVERSITY DIVISION AUXILIARY ENTERPRISES

**Dollars in Thousands** 

	July 1, 2016 to June 30, 2017			Annual Budget for 2016-17			
	Actual	Budget	Change	Original	Adjusted	Change	
Residence and Dining Halls *							
Revenues Expenses	\$116,000 -113,211	\$115,983 -118,106	\$17 4,895 (1)	\$116,762 -111,989	\$115,983 -118,106	\$-779 (8) -6,117 (8,9,10,11	
Reserve Drawdown (Deposit) Net	<u>-2,789</u> \$0	<u>2,123</u> \$0	<u>-4,912</u> (1)	<u>-4,773</u> \$0	<u>2,123</u> \$0	6,896 (8,9,10,11) \$0	
Parking and Transportation	•		, ,	• •	•		
Revenues	\$13,292	\$13,654	\$-362 (2)	\$13,858	\$13,654	\$-204 (12)	
Expenses Reserve Drawdown (Deposit)	-12,278 -1,014	-13,770 116	1,492 (2)	-13,585 -273	-13,770 116	<b>-185</b> (9,10,11,	
Net	<u>-1,014</u> \$0	\$0	<u>-1,130</u> (2) \$0	<u>-273</u>	\$0	389 (9,10,11,	
	φυ	φυ	ΦΟ	ΦΟ	φU	ΦΟ	
Telecommunications Services	<b>#00.070</b>	<b>#00.70</b> 5	<b>#</b> 400	<b>#40.400</b>	<b>*</b> 00 <b>7</b> 0 <b>5</b>	<b>#4.007</b> (12)	
Revenues Expenses	\$20,672 -20,882	\$20,795 -21,963	\$-123 1,081 (3)	\$19,498 -18,494	\$20,795 -21,963	\$1,297 (13) -3,469 (9,10,11,	
Reserve Drawdown (Deposit)	210	1,168	<b>-958</b> (3)	-1,004	1,168	2,172 (9,10,11,	
Net	\$0	\$0	\$0	\$0	\$0	\$0	
University Services * **							
Revenues	\$46,854	\$46,695	\$159	\$46,680	\$46,695	\$15 (14)	
Expenses	-44,631	-47,812	3,181 (4)	-45,875	-47,812	<b>-1</b> ,937 (9,10,11,	
Reserve Drawdown (Deposit)	-2,223	1,117	-3,340 (4)	-805	1,117	<u>1,922</u> (9,10,11,	
Net	\$0	\$0	\$0	\$0	\$0	\$0	
ntercollegiate Athletics *							
Revenues	\$74,298	\$71,089	\$3,209 (5)	\$66,146	\$71,089	\$4,943 (15)	
Expenses Reserve Drawdown (Deposit)	-80,476 6,178	-80,205 9,116	-271 -2,938	-65,848 -298	-80,205 9,116	-14,357 (9,10,11, 9,414 (9,10,11,	
Net	\$0	\$0	\$0	\$0	\$0	\$0	
Electric Service *	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ0	
Revenues	\$33,100	\$34,274	\$-1,174 (6)	\$34,627	\$34,274	\$-353 (16)	
Expenses	-30,310	-32,091	1,781 (6)	\$-34,067	-32,091	1,976 (9,10,11,1	
Reserve Drawdown (Deposit)	-2,790	-2,183	<u>-607</u> (6)	-560	-2,183	<b>-1,623</b> (9,10,11,1	
Net	\$0	\$0	\$0	\$0	\$0	\$0	
nn at Virginia Tech/Skelton Conf. Center							
Revenues	\$11,809	\$11,728	\$81	\$11,728	\$11,728	\$0	
Expenses	-12,039	-11,933	-106	-11,638	-11,933	-295 (9,10,11)	
Reserve Drawdown (Deposit) Net	<u>230</u> \$0	<u>205</u> \$0	<u>25</u> \$0	<u>-90</u> \$0	<u>205</u> \$0	<u>295</u> (9,10,11)	
Other Enterprise Functions ***	φυ	Φυ	ΦΟ	φО	φU	ΦΟ	
·	¢10 554	¢10 921	¢ 277 (7)	¢10.976	¢10 921	¢ 45 (47)	
Revenues Expenses	\$10,554 -10,915	\$10,831 -13,552	\$-277 (7) 2,637 (7)	\$10,876 -9,782	\$10,831 -13,552	\$-45 (17) -3,770 (9,10,11,	
Reserve Drawdown (Deposit)	361	2,721	-2,360 (7)	-1,094	2,721	3,815 (9,10,11,	
Net	\$0	\$0	\$0	\$0	\$0	\$0	
OTAL AUXILIARIES							
Revenues	\$326,579	\$325,049	\$1,530	\$320,175	\$325,049	\$4,874	
Expenses	-324,742	-339,432	14,690	-311,278	-339,432	-28,154	
Reserve Drawdown (Deposit)	-1,837	14,383	-16,220	-8,897	14,383	23,280	
Net	\$0	\$0	<u>\$0</u>	\$0	\$0	<u>\$0</u>	

<sup>\*</sup> University Systems include Dormitory and Dining Hall System, University Services System, Intercollegiate Athletics System, and Electric Service System. The Systems were created to provide assurance to bond holders that system revenues are pledged for the payment of debt service and to allow for dedicated repair and replacement that are not subject to liens of any creditor of the university.

<sup>\*\*</sup> University Services System includes Career Services, Center for the Arts, Health Services, Recreational Sports, Student Centers & Activities, Student Organizations, and the VT Rescue Squad.

<sup>\*\*\*</sup> Other Enterprise Functions include Golf Course, Hokie Passport, Library Café, Library Photocopy, Licensing & Trademark, Little Hokie Hangout, New Student and Family Programs, Pouring Rights, Printing Services, Software Sales, Student Athlete Academic Support Services (SAASS), Tailor Shop and Clearing Accounts.

## **AUXILIARY ENTERPRISE BUDGET**

- 1. Expenses in Residence and Dining Halls are lower than projected due to timing of operating expenses, one-time facility improvement projects, and replacement of furniture and equipment normally scheduled during the summer months.
- 2. Revenues and expenses in Parking and Transportation Services are lower than projected due to lower than forecasted Fleet Services business volume. Expenses are also lower than projected due to timing of operating expenses.
- 3. Expenses in Telecommunications Services are lower than projected due to the timing of special projects related to telecommunication projects.
- 4. Expenses for the University Services System are lower than projected due to the timing of expenses and union facility projects scheduled for summer months.
- 5. Revenues for Intercollegiate Athletics are higher than projected due to higher than forecasted ACC revenue and a one-time NCAA distribution.
- 6. Revenue and expenses for the Electric Service auxiliary are lower than projected due to lower than anticipated electricity consumption as well as timing of items ordered but not yet received thus not paid at fiscal year-end.
- 7. Revenues and expenses for Other Enterprise Functions are lower than projected due to lower than forecasted Printing Services business volume. Expenses are also lower than projected due to timing of operating expenses.
- 8. The projected annual revenue, expense, and reserve budgets for Residence and Dining Halls were adjusted for increased facility use agreement revenues, decreased Steger Center fall enrollment, decreased meal plan sales and food costs of \$640,000, and increased \$354,000 for Innovation and Creativity dorm planning expenses.
- 9. The projected annual expense budget for Auxiliary Enterprises was adjusted for \$10.6 million in outstanding 2015-16 commitments and projects that were initiated but not completed before June 30, 2016. This amount includes \$703,512 for Athletics, \$3.6 million for Residence Halls, \$2.6 million in Dining Hall commitments and projects, and \$598,048 for Electric Service. The remainder is spread across the other auxiliary programs.
- 10. The projected annual expense and reserve budgets for the Auxiliary Enterprises were decreased \$596,057 to reduce the placeholder budgets for compensation and fringe benefits to final amounts.
- 11. The projected annual expense and reserve budgets for the Auxiliary Enterprises were increased \$693,484 for the auxiliary share of the state's assessment of a one-time Virginia Retirement System (VRS) investment in 2015 which lowered future VRS actuarial rates.
- 12. The projected annual revenue, expense, and reserve budgets for Parking and Transportation Services were decreased for reduced parking permit volume and self-generated revenue as well as a reduced Blacksburg Transit contract expense. The expense and reserve budgets were adjusted for increased parking facility maintenance.
- 13. The projected annual revenue, expense, and reserve budgets for Telecommunications Services were increased \$1.3 million for infrastructure projects and the expense budget was increased \$1.8 million for network equipment refreshment.
- 14. The projected annual revenue, expense, and reserve budgets for the University Services System were adjusted for increased Rescue Squad revenues, an additional counselor position in the Cook Counseling Center, expanded student center wage support and Cultural Center renovations, career services mentoring position, additional student health counseling space, increased alcohol education business volume, and increased \$190,000 for Rescue Squad ambulance replacement.
- 15. The projected annual revenue budget for Intercollegiate Athletics was increased \$4.9 million to accommodate additional revenue of \$791,000 for the football team's participation in the Belk Bowl and ACC Football Championship, \$93,000 for football revenue, \$462,000 self-generated revenue, \$3.3 million in private fundraising for Indoor Practice Facility, and \$338,000 Baseball Facility private gifts. Annual expense and reserve draw budgets were increased \$13.6 million to accommodate \$2.7 million for coaching staff transitions, athletic contracts, and competitive compensation, \$2.2 million for ACC Football Championship and Belk Bowl expenses, \$1.5 million for sports expenses, \$1.1 million for operating expenses, \$338,000 for debt service expenses, and \$5.6 million for capital projects including Rector Field House and Indoor Practice Facility.
- 16. The projected annual revenue, expense, and reserve budgets for the Electric Services auxiliary were adjusted for decreased 2016-17 cost of wholesale electricity, unrelated business income tax credit, associated reduction in customer rates, and planned reserve restoration. The expense budget was increased for additional personnel needs.
- 17. The projected annual revenue, expense and reserve budgets for Other Enterprise Functions were increased for internal financings, scholarship expenses in Licensing and Trademark, Library Photocopy equipment, and decreased for lower than expected activity level in Hokie Camp, Tailor Shop, and Printing Services

## CAPITAL OUTLAY PROJECTS AUTHORIZED AS OF JUNE 30, 2017

#### Dollars in Thousands

		CURRENT YEAR			TOTAL PROJECT BUDGET					
	PROJECT INITIATED	ORIGINAL ANNUAL BUDGET	REVISED ANNUAL BUDGET	YTD EXPENSES	STATE SUPPORT	NONGENERAL FUND	REVENUE BOND	TOTAL BUDGET	CUMULATIVE EXPENSES	
Educational and General Projects										
Educational and General Maintenance Reserve										
Maintenance Reserve	On-going	9,100	7,500	5,407	10,578	0	0	10,578	5,407 (1)	)
Design Phase										
Improve Kentland Facilities	Sep 2013	4,500	500	208	8,618	0	0	8,618	890 (2)	)
Corps Leadership & Military Science Building	Dec 2015	1,920	706	649	0	2,100	0	2,100	1,374 (3)	)
Renovate Undergraduate Science Laboratories	Jul 2016	0	600	423	0	10,000	0	10,000	423 (4)	)
Agriculture Production Facilities	Oct 2016	1,120	200	21	22,136	0	0	22,136	21 (5)	
Chiller Plant Phase II	Oct 2016	2,000	200	55	31,024	0	9,797	40,821	55 (6)	)
Health Sciences & Technology	Oct 2016	3,380	200	0	48,307	17,765	23,793	89,865	0 (7)	)
Holden Hall Renovation	Oct 2016	3,670	2,000	901	44,386	0	17,500	61,886	901 (8)	)
Gas-Fired Boiler at the Central Steam Plant	Apr 2017	0	0	0	0	6,800	0	6,800	0 (9)	)
Planning: Intelligent Infrastructure and Construction Complex	Apr 2017	0	0	0	0	6,000	0	6,000	0 (10	ጋ)
Construction Phase										
Academic Buildings Renewal	Sep 2013	13,500	5,000	3,344	27,389	4,466	0	31,855	5,774 (11	1)
Address Fire Alarm Systems and Access	Jun 2014	2,751	1,600	1,199	4,891	0	0	4,891	3,225 (12	2)
Biocomplexity Data Center	Sep 2015	4,800	4,800	4,425	0	5,900	0	5,900	4,750 (13	3)
Eastern Shore AREC Storage Building	Apr 2016	26	425	154	0	535	0	535	154 (14	4)
Close-Out										
Classroom Building	Dec 2012	8,530	10,641	9,591	42,652	0	0	42,652	41,602 (15	5)
Property Acquisition: West Roanoke Street	Nov 2016	0	550	550	0	550	0	550	550 (16	
TOTAL		55,297	34,922	26,928	239,981	54,116	51,090	345,187	65,125	
101712		55,257	0-1,02Z	20,020	200,001	04,110	31,000	5 70, 107	55,125	

#### **CAPITAL OUTLAY BUDGET**

## **Educational and General Projects**

- The total project budget amount reflects the balance of maintenance reserve appropriation carried forward from fiscal year 2016
  and the state's fiscal year 2017 allocation of \$9.038 million of Maintenance Reserve funds. The budget was adjusted in the third
  quarter to reflect expected cash outflows for fiscal year 2017.
- 2. This project is to provide a metabolism research laboratory, an applied reproduction facility, and a building for animal demonstration, handling, and holding spaces. The state authorized design funding effective July 2013 and construction funding effective July 2015. An early site package for the Applied Reproduction Facility is complete and working drawings are complete for the remainder of the project. The project design is being modified and rebid a second time because of cost overruns with bids expected in October 2017.
- 3. This project planned a new 75,460 gross square foot Corps Leadership and Military Science Building to be located in the northern portion of the existing Upper Quad near Lane Hall. The facility envisions a centralized and consolidated home to the wide range of Corps of Cadets and ROTC programs currently dispersed around the northern area of campus. Preliminary Design is complete, and the project will be put on hold pending completion of its funding plan.
- 4. This project is to plan for the renovations of seven laboratories within Derring Hall and Hahn Hall that are needed to accommodate the increased demand for introductory undergraduate science laboratory classes in biology, chemistry, physics, and microbiology. Preliminary designs are complete and construction is expected to begin fall 2017.
- 5. This project is for the first of two phases to renew the existing facilities for the livestock and poultry programs. This first phase includes an approximate total scope of 126,000 gross square feet of new and renovated facilities at the Blacksburg campus and three nearby university production and research farms. Schematic design is underway.
- 6. This project continues the strategic infrastructure advancements initiated by the Chiller Plant, Phase I project. This Phase II project includes the upgrade of campus utility systems and addresses several strategic needs for shifting the campus to a lower resource consuming cooling service with improved redundancies. Schematic design was completed in June and preliminary design is underway.
- 7. This project calls for a Public Private Partnership delivery located adjacent to the existing Virginia Tech-Carilion Research Institute facility in Roanoke, Virginia. The 139,000 gross square foot building will serve as a fully operational and contained biomedical research and education facility. The budget was adjusted earlier in the year to reflect expected cash outflows for fiscal year 2017.
- 8. This project is for the renovation and expansion of Holden Hall to accommodate the instruction and research programs of Materials Science and Engineering, Mining and Minerals Engineering, and Computer Science Engineering. The final project would be 101,000 gross square feet of engineering instruction and research space. Schematic design is nearly complete.
- 9. This project was approved by the Board of Visitors at the April 2017 meeting and will design, purchase, and install a new Gas-Fired Boiler within the Central Steam Plant. The A/E (Architecture and Engineering) selection process is underway.
- 10. This project was approved by the Board of Visitors at the April 2017 meeting and will plan the Intelligent Infrastructure and Human-Centered Communities Destination Area. The first capital project within the area is the Intelligent Infrastructure and Construction complex which will include Hitt Hall, the Fusion Laboratories, and the Smart Dining Center.
- 11. This project is for 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. The state authorized design funding effective July 2013 and construction funding effective July 2015. The state appropriated \$3.174 million of equipment funding effective July 1, 2017, and this funding will be implemented fall 2017. The project is under construction with substantial completion expected in summer 2018.
- 12. This project will support progress on fire alarm systems and accessibility improvements for several E&G buildings. The implementation plan calls for improvements to be executed in multiple packages, and construction funding is released on a package-by-package basis. The State has appropriated \$4.89 million of General Fund resources for the total project budget of which \$4.58 million has been committed to the following projects underway or completed: Food Science and Technology Building, Architecture Annex, Wallace Annex, War Memorial Hall, Lane Hall, Whittemore Hall, Patton Hall, Randolph Hall, and Norris Hall.
- 13. This project is for a new high performance data center within the existing Biocomplexity Institute's facilities. Construction is complete and the data center has been turned over to the program.
- 14. This project is for a new equipment maintenance building for the Eastern Shore Agriculture Research and Extension Center (AREC). The facility's program provides space to store and secure modern research equipment on-site. Construction is complete and the facility has been turned over to the program.
- 15. The project is complete and has been occupied since August 2016. The project may be closed and financial accounts terminated when final invoices are received and paid and completion of the authorized scope has been verified by the Chief Facilities Officer.
- 16. The transaction was completed in March 2017, and the project was closed June 30, 2017.

#### Dollars in Thousands

		CURRENT YEAR			TOTAL PROJECT BUDGET					
	PROJECT INITIATED	ORIGINAL ANNUAL BUDGET	REVISED ANNUAL BUDGET	YTD EXPENSES	STATE SUPPORT	NONGENERAL FUND	REVENUE BOND	TOTAL BUDGET	CUMULATIVE EXPENSES	
Auxiliary Enterprises Projects										
Auxiliary Maintenance Reserve Maintenance Reserve	On-going	7,000	7,000	7,459	0	7,459	0	7,459	7,459	(1)
<u>Design Phase</u> Planning: Student Wellness Services Planning: Creativity & Innovation District Residence Hall	Jun 2016 Oct 2016	2,000 0	400 304	526 255	0	0 0	2,785 26,818	2,785 26,818	526 255	
Construction Phase Unified Communications & Network Renewal Upper Quad Residential Facilities Lane Substation Expansion O'Shaughnessy Renovation Athletic Facilities Improvements	Apr 2012 May 2013 Sept 2015 Apr 2016 Aug 2016	3,386 24,905 4,000 1,720 2,700	1,350 19,700 500 1,720 5,000	968 18,563 290 2,229 5,374	0 0 0 0	9,564 35,671 2,000 8,867 37,500	6,944 53,729 4,500 12,633 0	16,508 89,400 6,500 21,500 37,500	14,871 83,096 727 2,231 6,097	(5) (6) (7)
Close-Out Parking Blanket Authorizations Balance Airport Hangar East Eggleston Renovation Residential Door Access Improvements	Jul 2002 Apr 2015 Aug 2015 Dec 2015	0 514 0 3,368	0 100 0 3,600	0 95 0 3,595	0 0 0 0	0 2,520 2,500 7,735	16,547 0 0 0	16,547 2,520 2,500 7,735	0 1,838 2,196 6,978	(10)
On Hold and Not Funded Phase IV of Oak Lane Community (Houses 2 - 5) TOTAL	Aug 2010	49,593	39,674	39,354	0	113,816	17,518	17,518	126,273	(13)
GRAND TOTAL		\$ 104,890	\$ 74,596	\$ 66,282	\$ 239,981	\$ 167,932	\$ 192,564	\$ 600,477	\$ 191,399	

566,411

## 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, 2016 through June 30, 2017 and the Capital Outlay report be accepted.

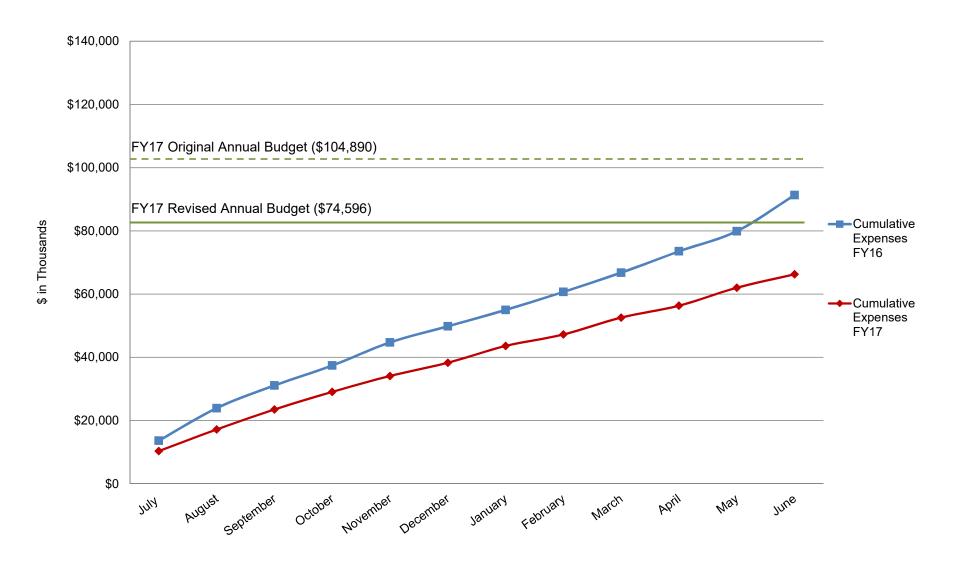
September 11, 2017 8

## **Auxiliary Enterprises Projects**

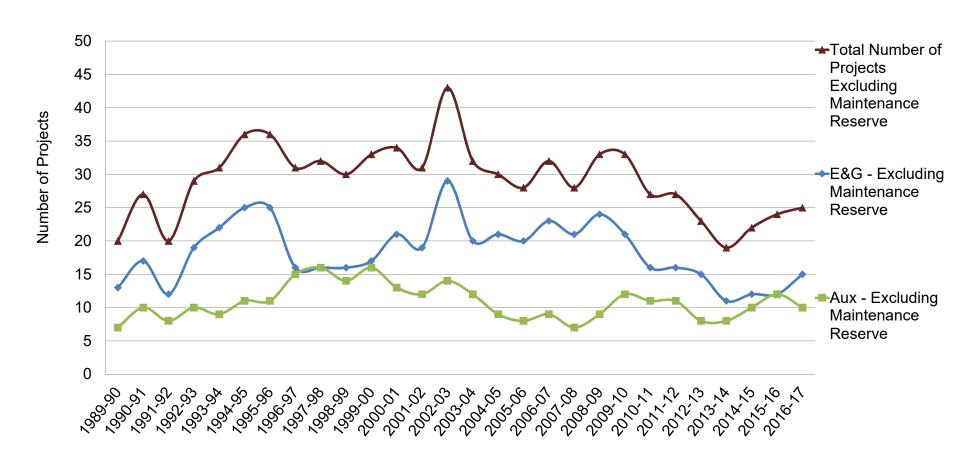
- 1. Projects are scheduled and funded by the auxiliary enterprises during the annual Auxiliary Enterprise budgeting process. The units prepare five-year plans that outline their highest priority deferred maintenance needs. The annual budget and total budget reflect the spending plans of the auxiliary units on scheduled maintenance reserve work for fiscal year 2017. The auxiliary maintenance reserve program covers 104 assets with a total replacement value of \$1.1 billion. Year-to-date expenses exceeded the annual budget because expenses expected in fiscal year 2018 were invoiced in fiscal year 2017. Resources were available and sufficient to cover the additional cash outflow. The annual and total project budgets were adjusted accordingly.
- 2. This project, as authorized at the March 2016 Board of Visitors meeting, is to explore alternatives and prepare design documents for an expanded, comprehensive student wellness services solution to meet student expectations. Year-to-date expenses exceeded the annual budget because expenses expected in fiscal year 2018 were invoiced in fiscal year 2017. Resources were available and sufficient to cover the additional cash outflow and the project remains within the total authorized budget.
- 3. The original project was over budget and has been on hold for several years while the university explored alternatives. A programing study is underway for a new residential hall in the living-learning community model focused on academic collaborative spaces to support creativity and innovation activities and the athletics program. The programming study will include a review of required utilities, mechanical, electrical, and plumbing components, and a cost review. The authorization will need adjustment based on the results of the programing study.
- 4. 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. This project is being implemented in phases and is anticipated to be complete in spring 2018. The total expected costs are \$16.5 million.
- 5. This project replaces Rasche and Brodie with two new residential facilities and razes Thomas and Monteith, effectively modernizing 1,000 beds in the residential inventory. The first building, Pearson Hall, was occupied in November 2015. The second building is complete and will be in service for fall semester 2017.
- 6. This project will expand the Lane Substation on Innovation Drive. The project includes the purchase and installation of two 28,000 kilovolt-amps (kVA) transformers, two circuit switchers, six distribution reclosers with space for an additional four reclosers, a control house and associated relay, and control equipment. Delivery of the transformers is expected fall 2017 and work is underway in the new control house to install controls panels, batteries, and station service. The entire project should be complete in late 2017 with an expected total cost of \$6.5 million.
- 7. This project will update O'Shaughnessy Hall's interior; mechanical, electrical, and plumbing systems; elevators; address other deferred maintenance items as needed; and install air conditioning. Improvements include converting O'Shaughnessy into a living-learning community to modernize the residential program within the building. Construction started late spring 2017 with occupancy expected fall 2018. Year-to-date expenses exceeded the annual budget because expenses expected in fiscal year 2018 were invoiced in fiscal year 2017. Resources were available and sufficient to cover the additional cash outflow and the project remains within the total authorized budget.
- 8. This project includes four high priority Athletic facility improvements: Rector Field House, Baseball Facilities, athletic nutrition center, and Tennis Facilities. Construction for Rector Field House and Baseball Facilities is underway with completion of both expected late spring of 2018. Feasibility studies are underway for an athletic nutrition center and Tennis Facilities improvements. Year-to-date expenses exceeded the annual budget because expenses expected in fiscal year 2018 were invoiced in fiscal year 2017. Resources were available and sufficient to cover the additional cash outflow and the project remains within the total authorized budget.
- This project has been on hold for several years with the last subproject completed in 2011. The State reverted the unallocated balance of the project effective July 1, 2017 and the project will be closed.
- 10. This project is substantially complete and was occupied in April 2016. The total cost is expected to be \$2.3 million. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer and all expenses moved to the capital project. The budget was adjusted in the first quarter to reflect expected cash outflows for fiscal year 2017.
- 11. The project was closed in October 2016. The total cost was \$2.196 million and the authorization was underspent.
- 12. This project is substantially complete. The total cost is expected to be \$6.983 million. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer and all expenses moved to the capital project.
- 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.

## CAPITAL PROGRAM ANNUAL PERFORMANCE Cumulative Monthly Expenditures

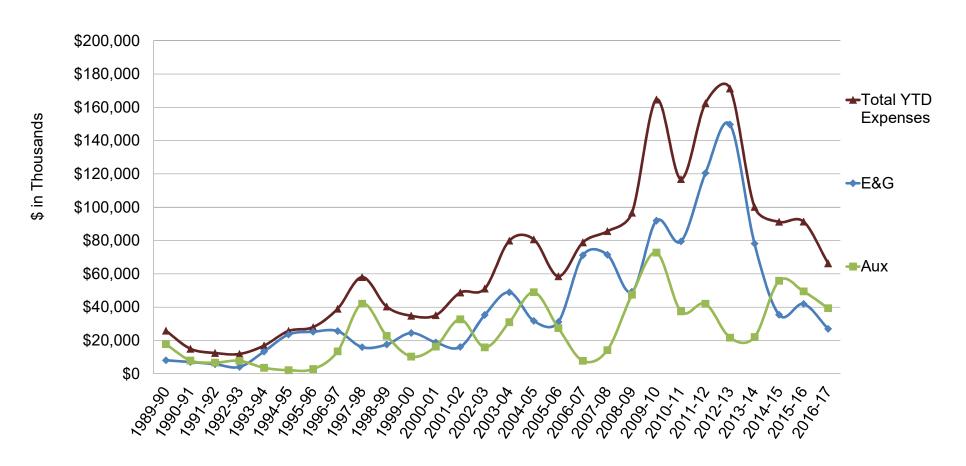
## Fiscal Year 2016 and YTD Fiscal Year 2017



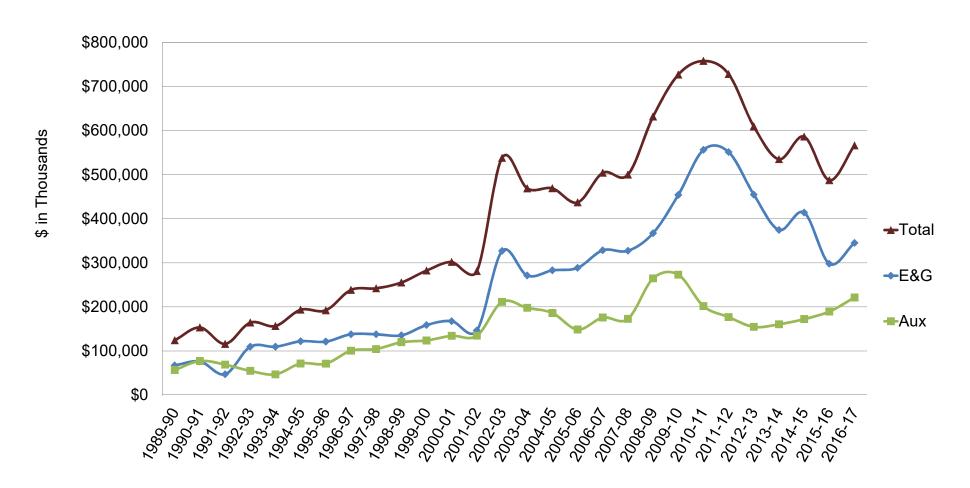
# CAPITAL PROGRAM PROJECTS <u>Total Number of Active Capital Projects</u> Fiscal Year 1990 - Fiscal Year 2017



# CAPITAL PROGRAM EXPENDITURE TREND <u>Total Annual Expenditures for Active Capital Projects</u> Fiscal Year 1990 - Fiscal Year 2017



# CAPITAL PROGRAM TOTAL BUDGET <u>Total Budget Level of Active Projects</u> Fiscal Year 1990 - Fiscal Year 2017







# Financial Performance Report Fourth Quarter 2016-17

Tim Hodge, Assistant Vice President for Budget and Financial Planning

September 11, 2017



## 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





## **Educational & General Programs**

- Commonwealth of Virginia requirement to balance the revenue and expenses for E&G programs for the fiscal year
- Successfully closed fiscal year in both University Division and Cooperative Extension/Agricultural Experiment Station (CE/AES). E&G Funds were fully utilized except permitted exceptions:
  - bottom line of (\$2.3M) in University Division is attributed to Continuing Education
  - bottom line of (\$5.4M) in CE/AES division due to timing of federal fund drawdowns



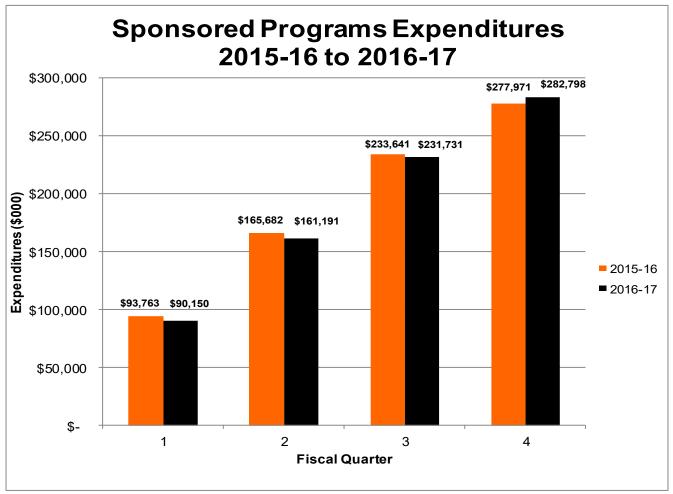


# **Educational & General Programs**

- **University Division** 
  - Lower than projected revenues in Continuing Education due to lower Language and Culture Institute business volume and timing of Continuing Education program activities.
- Cooperative Extension/Agricultural Experiment Station (CE/AES)
  - Federal funds less than projected due to timing of drawdowns











## **Auxiliary Enterprises**

- Electric Services: \$1.1M lower business volume, \$1M income tax credit
- Athletics: Higher than projected revenue resulting in lower than planned draw from reserves
  - \$3.2M from higher ACC revenue
  - NCAA distribution
  - self generated revenue
- Expenses: Temporary year end savings due to timing of projects and payments in process (carryover)
  - Residential & Dining \$4M anticipated related facility projects
  - Others ~ \$3M anticipated





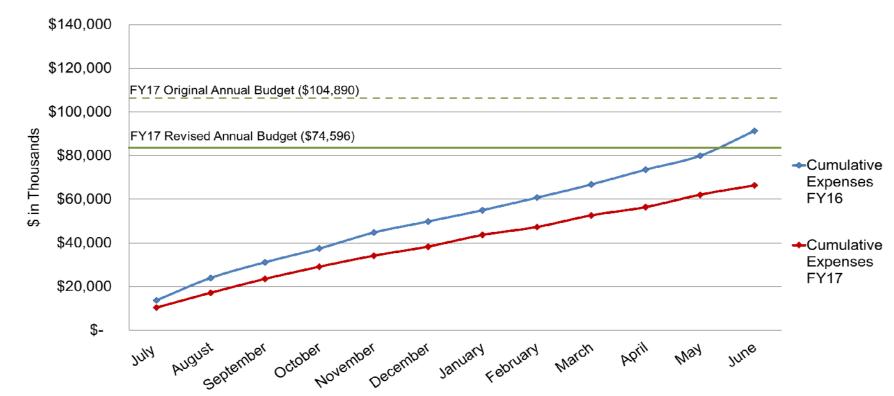
# Capital Outlay

- Total capital program level currently authorized
  - \$600.5 million over multiple years
- **Cumulative program expenses** 
  - \$191.4 million inception-to-date
- **Major Construction Underway** 
  - **Academic Buildings Renewal**
  - Fire Alarm Systems and Access
  - Biocomplexity Data Center Expansion
  - **Upper Quad Residential Facilities**
  - O'Shaughnessy Renovation
  - Lane Substation Improvements
  - Athletic Facilities Improvements





## CAPITAL PROGRAM ANNUAL PERFORMANCE **Cumulative Monthly Expenditures** Fiscal Year 2016 and Fiscal Year 2017







# Questions?



# Approval of Virginia Tech Carilion Research Institute Biosciences Addition 9(d) Debt Financing

### FINANCE AND RESOURCE MANAGEMENT COMMITTEE

### August 14, 2017

The Virginia Tech Carilion Research Institute Biosciences Addition (Capital Outlay Project #18269) has been authorized by the state to be financed pursuant to Article X, Section 9(d) of the Constitution of Virginia for up to \$23.793 million plus amounts needed to fund issuance costs, reserve funds, and other financing expenses. The name of the project has evolved since inception and is now commonly known as the Virginia Tech Carilion Health Sciences and Technology building.

The project will construct a 139,300 gross square feet facility on land owned by the Carilion Clinic in the Riverside Center in Roanoke, Virginia. The project will be developed and constructed under a public-private partnership (PPEA) between Virginia Tech and the Carilion Clinic to provide approximately 105,000 gross square feet for health science and technology research, 16,800 gross square feet for comparative oncology research, and 17,500 gross square feet for professional development, training, and education. The total \$89.865 million project will be funded with \$23.793 million of debt, \$17.765 million of nongeneral funds and private gifts, and \$48.307 million of General Fund appropriations. All debt service will be paid from self-generated revenues from the research program.

The bonds will be issued through the Virginia College Building Authority (VCBA), and the university will enter into a loan agreement and promissory note with the Authority. The loan agreement and note are subject to the following parameters: (a) the principal amount shall not be greater than the amount authorized by the General Assembly of Virginia, (b) the aggregate principal amount shall not exceed \$23.793 million plus amounts needed to fund issuance costs and other financing expenses, (c) the interest rate payable shall not exceed a true interest cost more than 50 basis points higher than the interest rate for "AA" rated securities with comparable maturities, (d) the weighted average maturity of the principal payments shall not be in excess of 20 years, (e) the last principal payment date shall not extend beyond the expected economic life of the project, and (f) the actual amount, interest rates, principal maturities, and date of the note shall be approved by an Authorized Officer.

The resolution identifies (1) the Vice President for Finance and Chief Financial Officer, and (2) the University Treasurer as each being authorized to execute and deliver all certificates and instruments and to take all such further action as may be considered necessary or desirable in connection with the sale and issuance of the bonds.

# RESOLUTION ON VIRGINIA TECH CARILION RESEARCH INSTITUTE BIOSCIENCES ADDITION 9(d) DEBT FINANCING

WHEREAS, pursuant to and in furtherance of Chapter 3.2, Title 23 of the Code of Virginia of 1950, as amended (the "Act"), the Virginia College Building Authority (the "Authority") developed a program (the "Program") to purchase debt instruments issued by public institutions of higher education in the Commonwealth of Virginia ("Participating Institutions" and each a "Participating Institution") to finance or refinance projects of capital improvement ("Capital Projects" and each a "Capital Project") included in a bill passed by a majority of each house of the General Assembly of Virginia (the "General Assembly");

**WHEREAS**, under the Program the Authority from time to time issues its Educational Facilities Revenue Bonds (Public Higher Education Financing Program) ("Pooled Bonds") to finance the purchase or refunding of debt instruments issued by Participating Institutions to finance or refinance Capital Projects;

WHEREAS, if a Participating Institution desires to finance or refinance a Capital Project through the Program it must enter into a loan agreement with the Authority, under which: (i) the Participating Institution will issue its promissory note pursuant to Chapter 3, Title 23 of the Code of Virginia of 1950, as amended, to evidence a loan to it by the Authority; (ii) the Authority will agree to issue Pooled Bonds and use proceeds thereof to purchase the promissory note; (iii) the Participating Institution will agree to use proceeds of Pooled Bonds, loaned to it and received in exchange for its promissory note, to finance or refinance the Capital Project and to not take actions that may jeopardize any federal tax-exempt status of interest on Pooled Bonds allocable to financing or refinancing the Capital Project; and (iv) the Participating Institution will agree to make payments under the promissory note in sums sufficient to pay, together with certain administrative and arbitrage rebate payments, the principal of, premium, if any, and interest due on such Pooled Bonds;

WHEREAS, the Board of Visitors (the "Board") of Virginia Polytechnic Institute and State University (the "Institution") from time to time desires to finance or refinance Capital Projects for the Institution as a Participating Institution under the Program, and now proposes that the Institution issue its promissory note or notes (collectively, the "Note") to be sold to the Authority in accordance with a loan agreement or loan agreements between the Institution and the Authority (collectively, the "Loan Agreement"), under which proceeds of Pooled Bonds will be loaned to and received by the Institution in exchange for the Note, to finance or refinance costs of the following Capital Project authorized for bond financing by the General Assembly: the Construct VT Carilion Research Institute Biosciences Addition – Capital Outlay Project Number 18269 (the "Project"); and

**WHEREAS** the Board desires to designate certain Institution officers (i) delegated the authority to approve the forms of and to execute and deliver the Loan Agreement, the Note and any amendments thereto, and any other documents necessary or desirable in connection with financing or refinancing costs of the Project through and participation in the Program; and (ii) responsible for monitoring post-issuance compliance with covenants of the Institution related to maintaining any federal tax-exempt status of interest on Pooled Bonds.

# NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF VISITORS OF VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY:

**Section 1.** The Project is hereby designated to be undertaken and financed or refinanced by the Authority and, accordingly, the Vice President for Finance and Chief Financial Officer, and the University Treasurer (the "Authorized Officers") are each hereby delegated and invested with full power and authority to approve the forms of the Loan Agreement, the Note and any amendments thereto (in connection with any refunding of Pooled Bonds financing or refinancing the Project or otherwise), and any pledge to the payment of the Note and any amendment thereto of total gross university sponsored overhead, unrestricted endowment income, tuition and fees, indirect cost recoveries, auxiliary enterprise revenues, general and nongeneral fund appropriations and other revenues not required by law or previous binding contract to be devoted to some other purpose, restricted by a gift instrument for another purpose or excluded from such pledge as provided in the Loan Agreement, subject to the provisions of Section 3 hereof.

Section 2. Subject to the provisions of Section 3 hereof, the Authorized Officers are each hereby delegated and invested with full power and authority to execute, deliver and issue, on behalf of the Institution, (a) the Loan Agreement, the Note and any amendments thereto (in connection with any refunding of Pooled Bonds financing or refinancing the Project or otherwise), with approval of such documents in accordance with Section 1 hereof evidenced conclusively by the execution and delivery of the respective document, and (b) any other documents, instruments or certificates as may be deemed necessary or desirable to finance or refinance costs of the Project through and participate in the Program, and to further carry out the purposes and intent of this resolution. The Authorized Officers are authorized and directed to take such steps and deliver such certificates in connection with delivery of the Note, and any amendment thereto, as may be required under any existing obligations, including bond resolutions relating to any outstanding general revenue pledge bonds, and to notify Virginia Department of Treasury representatives serving as Authority staff at least 60 days in advance of a pledge of any amounts pledged to the payment of the Note in accordance with Section 1 hereof to, or as security for, the payment of any other Institution obligations issued or entered into after the date hereof for so long as the Note and any amendments thereto remain outstanding.

The authorizations given above as to the approval, execution, delivery and Section 3. issuance of the Loan Agreement, the Note and any amendments thereto (in connection with any refunding of Pooled Bonds financing or refinancing the Project or otherwise) are subject to the following parameters: (a) the principal amount to be paid under the Note allocable to any component of the Project, together with the principal amount of any other indebtedness with respect to such component, shall not be greater than the amount authorized for such component by the General Assembly plus amounts needed to fund issuance costs, original issue discount, other financing (including without limitation refunding) expenses and any other increase permitted by law; (b) the aggregate principal amount of the Note shall in no event exceed \$23,793,000 as the same may be so increased; (c) the aggregate interest rate payable under the Note shall not exceed a "true" or "Canadian" interest cost more than 50 basis points higher than the interest rate for "AA" rated securities with comparable maturities, as reported by Thomson Municipal Market Data (MMD) or another comparable service or index, as of the date that the interest rates are determined, taking into account any original issue discount or premium; (d) the weighted average maturity of the principal payments due under the Note shall not exceed 20 years after the original issue date of the Note; (e) the last principal payment date under the Note shall not extend beyond the reasonably expected economic life of the Project; and (f) subject to the foregoing, the actual amount, interest rates, principal maturities, and date of the Note shall be approved by an Authorized Officer, as evidenced by the execution thereof.

**Section 4.** The Board acknowledges that if there is a failure to make, as and when due, any payment of the principal of, premium, if any, and interest on any promissory note issued by the Institution as a Participating Institution to the Authority under the Program, including without limitation the Note and any amendments thereto, the State Comptroller is authorized under the Program and Section 23-30.29:3 of the Code of Virginia of 1950, as amended, to charge against appropriations available to the Institution all future payments of principal of, premium, if any, and interest on such promissory note when due and payable and to make such payments to the Authority or its designee, so as to ensure that no future default will occur on such promissory note.

**Section 5.** The Board agrees that if the Authority determines the Institution as a Participating Institution shall be subject to continuing disclosure obligations under Rule 15c2-12 of the federal Securities and Exchange Commission with respect to any Pooled Bonds, (a) an Authorized Officer shall, and is hereby authorized and directed to, enter into a continuing disclosure undertaking in form and substance reasonably satisfactory to the Authority, and (b) the Institution will comply with the provisions and disclosure obligations contained therein.

**Section 6.** The Board designates the University Treasurer to be responsible for implementing procedures to monitor post-issuance compliance with covenants in any loan agreement between the Institution as a Participating Institution and the Authority, including the Loan Agreement and any amendments thereto, related to maintaining tax-exempt status for federal income tax purposes of interest on any Pooled Bonds, including without limitation monitoring the use of any portion of all Capital Projects for the Institution financed or refinanced with such Pooled Bonds and compliance with any applicable federal income tax remedial action requirements in connection with certain changes in such use. Such officer shall review such post-issuance compliance at least annually for so long as such Pooled Bonds remain outstanding.

### **RECOMMENDATION:**

That the above resolution authorizing the issuance of 9(d) bonds through the Virginia College Building Authority on behalf of the university for the VT Carilion Research Institute Biosciences Addition – Capital Outlay Project Number 18269 be approved.

### Capital Project Resolution for the Applied Projects Building

# JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

### August 1, 2017

The Office of the Vice President for Research and Innovation (OVPRI) supports the university community and its missions by fostering quality research and scholarship, enhancing the ability to respond to national research priorities, encouraging and directing inquiry into new and emerging fields, promoting solutions to problems and advances of basic knowledge in diverse disciplines, and interdisciplinary cooperation.

The university's research portfolio of work in applied projects in Blacksburg, VA includes work being conducted in a leased facility. The research program is growing, and OVPRI has determined a permanent facility is needed to accommodate the program's current and future activities. The university completed an internal space study in spring 2017 which shows approximately 45,000 gross square feet of office, laboratory, and applied projects research space is needed to co-locate university faculty, staff, and students who support a wide range of extramural funded research and experiential learning programs in the areas of economic, homeland, and national Security.

The university evaluated several options to acquire permanent space including purchasing and renovating the existing leased building, purchasing and renovating a nearby facility, constructing a new building on campus, and constructing a new building in the Virginia Tech Corporate Research Center (CRC). The most effective and economical solution is the construction of a new 45,000 gross square foot building in the CRC. The university worked with the CRC on a facility feasibility study, which shows a facility that meets the program needs with all necessary upfits and certifications, can be completed for total project cost of \$8.4 million.

The plan to implement this solution calls for the Virginia Tech Foundation (Foundation) to deliver a building (Applied Projects Building) to be located in the CRC with financing from the Foundation. The university will enter a long-term lease with the Foundation for the entire facility at a rate sufficient to retire the debt and financing costs and cover normal operating expenses.

The university is ready to proceed with the project, and has developed an entirely nongeneral fund resource plan sufficient to cover the \$8.4 million of project costs. 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 funding of nongeneral fund capital outlay projects. This request is for authorization to move forward with a capital lease for the Applied Projects Building.

#### RESOLUTION OF A CAPITAL LEASE FOR THE APPLIED POJECTS BUILDING

**WHEREAS,** Virginia Tech's vision to expand research activities includes work in a wide range of extramural funded research programs in the areas of economic, homeland, and national security; and,

**WHEREAS,** Virginia Tech requires approximately 45,000 gross square feet of office, laboratory, and applied projects space located in the Virginia Tech Corporate Research Center (CRC) to support the research program; and,

**WHEREAS**, the plan to implement this solution calls for the Virginia Tech Foundation (Foundation) to deliver a 45,000 gross square foot building located in the CRC, inclusive of necessary upfits and certifications for a total cost of \$8.4 million, with financing from the Foundation; and,

**WHEREAS**, the university will enter a long-term lease for the entire facility at a rate sufficient to retire the debt and financing costs and cover normal operating expenses; and.

WHEREAS, the lease rates will be based on a break-even arrangement with the rates reverting to usual and customary property carrying costs after the facility costs are retired; and,

**WHEREAS**, Virginia Tech has developed a nongeneral fund resource plan sufficient to support the full costs of the lease; 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, debt issuance, and overall funding of nongeneral funded major capital outlay projects, including capital leases.

**NOW, THEREFORE, BE IT RESOLVED**, that Virginia Tech be authorized to enter into a capital lease with the Virginia Tech Foundation for the development of approximately 45,000 square feet of office, laboratory, and applied projects space inclusive of upfits and certifications.

### **RECOMMENDATION:**

That the above resolution authorizing Virginia Tech to enter into a capital lease with the Virginia Tech Foundation for the Applied Projects Building be approved.

### Capital Project Resolution for the Intern Park Facility

# JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

### August 1, 2017

The Virginia Tech Transportation Institute (VTTI) is one of seven research institutes created by Virginia Tech. VTTI focuses on research projects that saves lives, time, and money, and has effected significant change in public policies for driver, passenger, and pedestrian safety. VTTI is advancing the design of vehicles and infrastructure to increase safety and reduce environmental impact. The VTTI portfolio of projects includes more than 300 active sponsored research projects totaling approximately \$40 million of expenditures annually.

VTTI's activities include significant research and development projects and collaborations with industry. These projects provide exceptional opportunities for a hands-on/minds-on approach to learning for students. VTTI has developed an intern program under which an automotive company sponsors a project that involves up to eight undergraduate student interns working in teams. The projects are defined and overseen by corporate sponsors in collaboration with faculty mentors, and the students report to industry sponsors as employees throughout their internship. The intern experience allows students to develop valuable skills to complement their academic instruction, which enhances employability.

To expand support for students and build upon relationships with industry sponsors, VTTI is requesting an approximately 15,000 gross square feet building on its existing campus located at 3500 Transportation Research Plaza, Blacksburg, Virginia. The building (Intern Park Facility) is envisioned as an interdisciplinary advanced-learning facility focused on accelerating practical skill development and would include flexible studio space multiple garages, and shop facilities equipped with state-of-the-art tooling.

The plan to implement the Intern Park Facility calls for the Virginia Tech Foundation (Foundation) to deliver the Intern Park Facility with financing from the Foundation. The budget for the total project cost is \$2.5 million, and the university will enter a long-term lease with the Foundation for the Intern Park Facility at a rate sufficient to retire the debt and financing costs and cover normal operating expenses.

The university is ready to proceed with the Intern Park Facility, and has developed an entirely nongeneral fund resource plan sufficient to cover the \$2.5 million of project costs. 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 funding of nongeneral fund capital outlay projects. This request is for authorization to move forward with a capital lease for the Intern Park Facility.

### **RESOLUTION OF CAPITAL LEASE FOR THE INTERN PARK FACILITY**

**WHEREAS,** Virginia Tech's vision for a hands-on/minds-on approach to learning and to expand research and development under the Virginia Tech Transportation Institute (VTTI) is a strategic initiative for the future of the institution; and,

**WHEREAS,** VTTI requires approximately 15,000 gross square feet of garage and studio space for an Intern Park Facility envisioned as an interdisciplinary advanced learning laboratory focused on accelerating practical skill development; and,

**WHEREAS,** VTTI desires that the proposed building be located on its existing campus located at 3500 Transportation Research Plaza, Blacksburg, Virginia; and,

**WHEREAS,** the plan to implement this facility calls for the Virginia Tech Foundation (Foundation) to deliver a 15,000 gross square feet building for a total cost of \$2.5 million with financing from the Foundation; and,

**WHEREAS**, the university will enter a long-term lease for the Intern Park Facility at a rate sufficient to retire the debt and financing costs and cover normal operating expenses; and,

WHEREAS, the lease rates will be based on a break-even arrangement with the rates reverting to usual and customary property carrying costs after the facility costs are retired; and,

**WHEREAS,** Virginia Tech has developed a nongeneral fund resource plan sufficient to support the full costs of the lease; 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, debt issuance, and overall funding of nongeneral funded major capital outlay projects, including capital leases.

**NOW, THEREFORE, BE IT RESOLVED**, that Virginia Tech be authorized to enter into a capital lease with the Virginia Tech Foundation for the development of the Intern Park Facility.

### **RECOMMENDATION:**

That the above resolution authorizing Virginia Polytechnic Institute and State University to enter into a capital lease with the Virginia Tech Foundation to construct the Intern Park Facility be approved.

### Capital Project Resolution for the Dietrick First Floor and Plaza Renovation

## JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

July 27, 2017

Dietrick Hall was built and placed in service in 1970 with its most recent renovation in 2004 for major improvements to the second floor food service venues and support infrastructure. The dining center is centrally located in the south residential core of campus providing "all-you-care-to-eat" breakfast, lunch, and dinner on the second floor. The first floor of the facility provides "grab and go" food service and café options at DXpress and Deet's Place. The first floor also includes a convenience store, offices, and conference rooms.

The first floor of Dietrick Hall was last renovated in 1999 and has reached an age and condition that requires improvements to meet the service expectations of the students. Based on a feasibility study completed in September 2016, the university included a project to renovate and expand Dietrick Hall on the 2018-2024 Six Year Capital Outlay Plan, approved by the Board of Visitors on April 3, 2017, as part of a strategy to refurbish the first floor and to expand dining services to meet student demand during peak meal times. The envisioned first floor renovation includes inserting a modern food service venue and adding 200 indoor seats to the building by enclosing 6,400 gross square feet of overhang, reorganizing office space for efficiency, and relocating the convenience store to space currently occupied by offices, a sitting area, and a conference room. The project scope includes improvements to the outdoor plaza in front of Dietrick Hall to create additional outdoor seating for dining customers, serve as informal gathering spaces for the campus community, improve campus circulation, and support special event activities.

The total project costs for the building renovations and plaza improvements is \$7 million. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of this project. The total project funding is \$7 million and calls for the use of debt which may be serviced from Dining Programs 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 estimated total debt issuance. 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 \$7 million authorization to complete the Dietrick First Floor and Plaza Renovation project.

# RESOLUTION OF A CAPITAL PROJECT FOR DIETRICK FIRST FLOOR AND PLAZA RENOVATION PROJECT

**WHEREAS,** Dietrick Hall, built in 1970, is the largest food service facility located in the south residential core of campus; and,

**WHEREAS**, the first floor of Dietrick Hall was last renovated in 1999 and requires improvements to meet student expectations and demand for dining services; and,

**WHEREAS**, based on a feasibility study completed in September 2016, the university proposes to update the first floor and expand dining capacity by adding a food service venue, creating 200 additional indoor seats by enclosing 6,400 gross square feet of overhang, and reorganizing offices and the convenience store space; and,

**WHEREAS**, the proposed scope of work includes improvements to the outdoor plaza to create additional outdoor seating for dining customers, serve as informal gathering spaces for the campus community, improve campus circulation, and support special event activities; and,

**WHEREAS,** the university has developed a 100 percent nongeneral fund resource plan sufficient for the total project budget of \$7 million; 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 Resource Management 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.

**NOW, THEREFORE BE IT RESOLVED,** that the university be authorized to move forward with a \$7 million authorization to complete the Dietrick First Floor and Plaza Renovation 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 \$7 million total project costs, plus related issuance costs and financing expenses.

### **RECOMMENDATION:**

That the resolution authorizing Virginia Tech to complete the Dietrick First Floor and Plaza Renovation project be approved.

### RESOLUTION OF APPRECIATION HONORING JAMES L. CHAPMAN, IV

**WHEREAS,** Mr. James L. Chapman, IV was appointed by Governor Bob McDonnell to the Board of Visitors of Virginia Polytechnic Institute and State University in July 2013; and,

**WHEREAS**, a former member of the Virginia Tech Corps of Cadets, Mr. Chapman graduated from Virginia Tech in 1979 with a B.A. degree in history and continued his education at the Washington and Lee School of Law where he earned a Juris Doctorate in 1982; and,

WHEREAS, Mr. Chapman went on to serve his country as a Captain in the United States Army Judge Advocate General Corps, and received the United States Army Meritorious Service Medal; and,

**WHEREAS,** Mr. Chapman has dedicated significant time and effort in support of the Board of Visitors, serving as Rector, Vice Rector, and chair of the Finance and Audit Committee and the Executive Committee; and,

**WHEREAS**, a highly regarded attorney and senior partner in the Norfolk, Virginia, law firm of Crenshaw, Ware & Martin, Mr. Chapman's legal experience, with particular expertise in business law, admiralty and maritime law, and railroad and transit law, has served the university well; and,

**WHEREAS,** Mr. Chapman's extensive community engagement includes service as a director and officer of diverse non-profit and professional organizations at the local, regional and national level, including Rotary, the Navy League of the United States, the Southeastern Admiralty Law Institute, the Future of Hampton Roads, and the Sorensen Institute for Political Leadership; and,

**WHEREAS,** Mr. Chapman comes from a family of Hokies, including his four siblings, his wife, and two daughters; and,

**WHEREAS**, the members of the Board have thoroughly enjoyed getting to know Jim and his wife, Sue (Class of 1982), and have enjoyed their company at Board meetings, football games, and other university events;

**NOW, THEREFORE, BE IT RESOLVED** that the members of the Board of Visitors of Virginia Polytechnic Institute and State University hereby extend their sincere appreciation to Mr. James L. Chapman, IV for his outstanding loyalty and devoted service, and for his faithful dedication to the university and its missions.

#### **RECOMMENDATION:**

That the resolution recognizing James L. Chapman, IV for his service as a member and Rector of the Board of Visitors be approved.

#### RESOLUTION OF APPRECIATION HONORING DR. J. THOMAS RYAN

**WHEREAS**, Dr. J. Thomas Ryan was appointed by Governor Bob McDonnell to the Board of Visitors of Virginia Polytechnic Institute and State University in July 2013; and,

**WHEREAS,** Dr. Ryan graduated from Virginia Tech in 1968 with a B.S. degree in biology and went on to earn an M.D. degree from the Medical College of Virginia at Virginia Commonwealth University, and an M.S. degree in health administration from VCU; and

**WHEREAS,** Dr. Ryan is the former executive vice president and chief medical officer of Mary Washington Healthcare in Fredericksburg, Virginia, and a family medicine practitioner; and,

WHEREAS, Dr. Ryan's many leadership positions in the health care industry and his expertise in planning the development of new medical facilities has been extremely valuable to the Board of Visitors, particularly in his role representing the Board on the Virginia Tech Carilion Integration Steering Committee that is planning the integration of the Virginia Tech Carilion School of Medicine into Virginia Tech; and,

**WHEREAS,** Dr. Ryan has served on many community and industry boards, including those for the Fredericksburg Regional Chamber of Commerce, VHA Central Atlantic, and the Virginia Hospital and Healthcare Association; and,

**WHEREAS**, in addition to serving as a member and chair of the Academic Affairs Committee and a member of the Executive Committee of the Board of Visitors, Dr. Ryan has provided valuable service to Virginia Tech as a member of the College of Science Roundtable and the Alumni Association Board of Directors; and,

**WHEREAS**, the members of the Board have thoroughly enjoyed getting to know Tom and his wife, Susan Bull Ryan, and have enjoyed their company at Board meetings, football games, and other university events;

**NOW, THEREFORE, BE IT RESOLVED** that the members of the Board of Visitors of Virginia Polytechnic Institute and State University extend their sincere appreciation to Dr. J. Thomas Ryan for his outstanding loyalty and devoted service, and for his faithful dedication to the university and its missions.

### **RECOMMENDATION:**

That the resolution recognizing Dr. J. Thomas Ryan for his service as a member of the Board of Visitors be approved.

### RESOLUTION OF APPRECIATION HONORING STEVE W. STURGIS

WHEREAS, Mr. Steve Sturgis has been a member of the Board of Visitors of Virginia Polytechnic Institute and State University for the past four years in his capacity as president of the Virginia Board of Agriculture and Consumer Services; and,

**WHEREAS**, Mr. Sturgis is an alumnus of the Class of 1982, having earned his bachelor's degree from the College of Agriculture and Life Sciences; and,

**WHEREAS,** an entrepreneur, Mr. Sturgis began his own farm in 1979, and took over the family farm, Tri-S Farms in Eastville, Virginia, in 2002, modernizing operations and doubling its size over the past 15 years; and,

**WHEREAS,** Mr. Sturgis served on both the Buildings and Grounds Committee and the Student Affairs and Athletics Committee of the Board of Visitors, bringing valuable insight to the Board in support of the university's land-grant mission and commitment to Virginia's agriculture industry; and,

**WHEREAS,** Mr. Sturgis has served the Commonwealth as a game warden for the Virginia Department of Game and Inland Fisheries and as a deputy for the Northampton County Sheriff's Department; and,

**WHEREAS,** Mr. Sturgis has served on many professional boards and civic organizations, including the Virginia Agribusiness Council, the Northampton County Farm Bureau, and the Eastville Volunteer Fire Company; and

**WHEREAS**, the members of the Board have thoroughly enjoyed getting to know Steve and his wife, Sherrill, and have enjoyed their company at Board meetings, football games, and other university events;

**NOW, THEREFORE, BE IT RESOLVED** that the members of the Board of Visitors of Virginia Polytechnic Institute and State University hereby extend their sincere appreciation to Mr. Steve W. Sturgis for his outstanding loyalty and devoted service, and for his faithful dedication to the university and its missions.

### **RECOMMENDATION:**

That the resolution recognizing Mr. Steve Sturgis for his service as a member of the Board of Visitors be approved.

### President's comments to the BOV Monday Full Board Session September 11<sup>th</sup>, 2017

Today is a day for reflection and action. We are remembering the victims and their families from September 11<sup>th</sup>, 2001, and we are mobilizing across the country and at Virginia Tech to assist in any way we can with the aftermath of Hurricane Harvey and Hurricane Irma, an unprecedented weather disaster that is raging as we meet.

At the same time, we are gearing up for what is almost certain to be a challenging year from the sociopolitical perspective. Without enumerating the long list of simmering controversies and crises, let me just say that there is both hope and opportunity ahead. When we are overtaken by a global, national, or local crisis, we have yet another opportunity to educate, to learn and to grow as a community.

And while we move into this challenging future, we do so with momentum and strength. Our Virginia Tech community is resilient, and our focus on inclusion is enhancing that resilience.

Part of that strength comes from the vision of what Virginia Tech could become in 30-years' time. Beyond Boundaries has raised the bar and sharpened our focus. After two years of visioning, we are making the transition into planning and implementation.

Realizing the Beyond Boundaries vision will take resources in an era when some of our most dependable sources of revenue are withering or at least growing more slowly. There are many bright spots though. The demand for a Virginia Tech education has never been higher. We have just welcomed our largest entering class ever. The vision we have developed on the foundation of our institution's historical strength is stimulating philanthropic support. With \$162M in new gifts and commitment for fiscal year 2017, we have doubled the giving rate of just two years ago. This new support is critical to access and affordability for our students. Since our last regular BOV meeting in June, we have welcomed the \$15M Clark Scholars gift that will provide an amazing opportunity for 40 construction and engineering students in steady state from now and into the future. Philanthropic support is also critical to attracting and retaining faculty talent in this globally competitive arena.

Our students ranked Virginia Tech #1 in the country in the category of "students love their schools" in the annual Princeton Review survey published last month. We were #5 in "Best Quality of Life." In August, Niche ranked Virginia Tech the 2<sup>nd</sup> best campus in America. Niche also has us as #2 in "Food," and #5 in the "Top Public Universities in America." Washington Monthly just placed us at #10 among public universities in their "Public Good" ranking. Many programs have recently distinguished themselves as top-10 programs. Architecture was ranked #4 in the country last week by Design Intelligence, HTM was ranked #8 in the world and #3 in the US by ARWU. In that same ranking, Aerospace Engineering placed #10 in the world. I could go on and on.

For all the angst about ranking systems and their inherently flawed methodologies, the big picture is that we have many top-10 programs, experiences and qualities, and this is helping make our case as a destination for talent in Virginia, the nation and the world.

Buckle up! The 2016-17 academic year is going to be challenging and exhilarating.

# RESOLUTION ON NAMING THE HYDROTHERAPY AREA IN THE HAHN HURST BASKETBALL PRACTICE CENTER OF VIRGINIA POLYTECHNIC INSTITUTE & STATE UNIVERSITY FOR MARK '80 AND MOLLY WHITEHOUSE

**WHEREAS**, Mark Whitehouse is a proud alumnus of Virginia Polytechnic Institute & State University, Class of 1980; and

WHEREAS, Mark Whitehouse along with his wife, Molly Whitehouse, have been enthusiastic and loyal supporters of Virginia Tech and its athletic programs; and

**WHEREAS**, Mark and Molly Whitehouse have been faithful members of the Virginia Tech Athletic Fund; and

**WHEREAS**, Mark and Molly Whitehouse are Ut Prosim Society Benefactors and Hokie Benefactors; and

**WHEREAS,** Mark and Molly Whitehouse recently pledged \$50,000 to the Men's Basketball program; and

**WHEREAS,** Mark and Molly Whitehouse have contributed \$157,560 to Virginia Tech Athletics;

**NOW, THEREFORE, BE IT RESOLVED,** that in appreciation to Mark and Molly Whitehouse for their generosity toward Virginia Tech and the Department of Athletics, the Hahn Hurst Hydrotherapy Area be known henceforth as the Mark and Molly Whitehouse Hydrotherapy Treatment Area.

### **RECOMMENDATION:**

That the above resolution naming the Mark and Molly Whitehouse Hydrotherapy Area be approved.

# RESOLUTION TO NAME THE CORPS OF CADETS FLAGPOLE PLAZA FOR PETER CALDWELL SNYDER '58

**WHEREAS**, Peter Caldwell Snyder graduated from Virginia Tech in 1958 with a Bachelor of Science degree in Building Construction from the College of Architecture and Urban Studies; and

**WHEREAS**, Peter C. Snyder was a member of the university's men's basketball team during his time as both a student and scholar; and

**WHEREAS,** Peter C. Snyder was a proud member of Company "G" in the Corps of Cadets, gaining valuable leadership skills and a foundation for creativity and ingenuity that would benefit him throughout his lifetime; and

**WHEREAS**, Peter C. Snyder personified the spirit of Ut Prosim throughout his time in the United States Army, providing valiant service to his country and fellow citizens; and

**WHEREAS**, Peter C. Snyder founded a successful and respected construction business in Blacksburg, Virginia, in 1965 before his passing in 1977; and

**WHEREAS,** Peter C. Snyder's widow, Georgia Anne Snyder-Falkinham, and her current husband, Professor Joseph O. Falkinham, have been recognized as members of the President's Circle of the Ut Prosim Society, the 1872 Society, and the Pylon Society for their philanthropy to the university to include considerable support to the Virginia Tech Corps of Cadets; and

WHEREAS, Georgia Anne Snyder-Falkinham and Joseph Falkinham have also made generous contributions to the College of Architecture and Urban Studies, the Department of Building Construction, the Athletics Department, the W. E. Skelton 4-H Educational Conference Center at Smith Mountain Lake, and the Department of Biological Sciences; and

**WHEREAS,** Georgia Anne Snyder-Falkinham, Joseph Falkinham, and the Snyder Family wish to honor the memory of Peter C. Snyder; and

**WHEREAS,** Georgia Anne Snyder-Falkinham, Joseph Falkinham, and the Snyder Family have been, and continue to be, valued members of the university community;

**NOW, THEREFORE, BE IT RESOLVED** that in acknowledgement of the service and generosity of Georgia Anne-Snyder Falkinham, Joseph Falkinham, and the Snyder Family and in recognition of past and future benefits to the university, the flagpole plaza *located between Pearson Hall and New Cadet Hall, at the top of the stairs from Alumni Mall and past the Addison Caldwell statue*, will be known as the Peter Caldwell Snyder Flagpole Plaza.

### **RECOMMENDATION:**

That the above resolution naming the Peter Caldwell Snyder Flagpole Plaza be approved.

### SUMMARY Emeritus/Emerita Faculty Resolutions (17)

### **September 10, 2017**

### College of Agriculture and Life Sciences (2)

Steven Blank Professor Emeritus of Agricultural and Applied Economics

Dan Taylor Professor Emeritus of Agricultural and Applied Economics

College of Architecture and Urban Studies (1)

Edward Dorsa Associate Professor Emeritus of Industrial Design

College of Engineering (1)

Fred Lee University Distinguished Professor Emeritus

of Electrical and Computer Engineering

College of Liberal Arts and Human Sciences (7)

Frederic Baumgartner Professor Emeritus of History

Theodore Fuller Professor Emeritus of Sociology

Kent Holliday Professor Emeritus of Music

Kathleen Jones Associate Professor Emerita of History

Eric McCollum Professor Emeritus of Human Development

Fred Piercy Professor Emeritus of Human Development

Barbara Ellen Smith Professor Emerita of Women's and Gender Studies

College of Science (2)

Ezra "Bud" Brown Alumni Distinguished Professor Emeritus of Mathematics

Khidir Hilu Professor Emeritus of Biological Sciences

Pamplin College of Business (2)

Deborah Cook Verizon Professor Emerita of Business Information Technology

John Pinkerton Professor Emeritus of Finance

### **University Libraries (2)**

Victoria Kok Professor Emerita Librarian for the Veterinary Medical Library

Carolyn Meier Associate Professor Emerita of the University Libraries

**WHEREAS**, beginning in 2012 and continuing for five years, Steven Blank, Ph.D. faithfully served Virginia Tech as a department head and faculty member in the Department of Agricultural and Applied Economics in the College of Agriculture and Life Sciences; and

**WHEREAS**, he made significant contributions to agricultural and applied economics by giving leadership to the department focusing on the department's teaching, research, extension, and outreach programs; and

WHEREAS, he ably served the community as a department head; and

WHEREAS, he supported the faculty and staff; and

WHEREAS, with dedication, he gave leadership to in delivering a wide variety of undergraduate and graduate courses ranging across the agricultural and applied economics curriculum, placing strong emphasis on standards and student learning; and

WHEREAS, he gave leadership to faculty in conducting research programs and advising students on master's thesis and doctoral dissertations, which helped the students develop successful careers in both academic and industrial settings; and

**WHEREAS**, he 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 Steven Blank, Ph.D. for his distinguished service to the university with the title Professor Emeritus of Agricultural and Applied Economics.

### **RECOMMENDATION:**

That the above resolution recommending Steven Blank, Ph.D. for emeritus status be approved.

**WHEREAS,** beginning in 1982 and continuing for 35 years, Daniel Taylor, Ph.D. faithfully served Virginia Tech as a faculty member in the Department of Agricultural and Applied Economics in the College of Agriculture and Life Sciences; and

**WHEREAS**, he made significant contributions to the Department of Agricultural and Applied Economics by teaching classes, conducting research, and advising students; and

**WHEREAS**, he ably served the community as a professor; and as a long-term chair of the university's Commencement Committee and

**WHEREAS**, he supported graduate and undergraduate students both within and outside the classroom; and

**WHEREAS**, with dedication, he delivered a wide variety of undergraduate and graduate courses ranging across the agricultural and applied economics curriculum, placing strong emphasis on standards and student learning; and

**WHEREAS**, he gave leadership in conducting research programs and advising students on master's thesis and doctoral dissertations, which helped the students develop successful careers in both academic and industrial settings; and

**WHEREAS**, he 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 Daniel Taylor, Ph.D. for his distinguished service to the university with the title Professor Emeritus of Agricultural and Applied Economics.

#### **RECOMMENDATION:**

That the above resolution recommending Daniel Taylor, Ph.D. for emeritus status be approved.

**WHEREAS,** beginning in 1998 and continuing for 19 years, Edward Dorsa faithfully served Virginia Tech as a faculty member in the Industrial Design Department, in the School of Architecture + Design, in the College of Architecture and Urban Studies (CAUS); and

**WHEREAS**, he made significant contributions to industrial design through his work in reforming design education as a valuable member of our faculty, a former vice president of education for the Industrial Designer's Society of America, and as an accreditation commissioner for the National Association of Schools of Art and Design (NASAD); and

**WHEREAS**, he was awarded the CAUS Lifetime Contribution Award in 2017, for his continued advancement of the Virginia Tech Industrial Design Program; and

**WHEREAS**, he was awarded Virginia Tech's 2012 XCaliber Award, given to an interdisciplinary team for their use of technology in advancing student success; and

**WHEREAS**, he was awarded the Excellence in Studio Teaching by the School of Architecture + Design Award; and

WHEREAS, he was the recipient of the university's Certificate for Teaching Excellence; and

**WHEREAS**, he was the recipient of the College of Architecture and Urban Studies Award for Excellence in Outreach; and

**WHEREAS**, he was a critical member of an interdisciplinary research team that was awarded a grant of nearly \$500,000; and

**WHEREAS,** he is recognized internationally for his specialty in industrial design Education and continues to hold workshops in China, Hong Kong, and Mexico; and

**WHEREAS**, he was named by Design Intelligence as "one of the 40 most admired industrial design educators of 2006"; and

WHEREAS, with dedication, he taught a wide variety of undergraduate and graduate courses ranging across Industrial Design curriculum, placing strong emphasis on standards and student learning; and

**WHEREAS**, he authored or co-authored over 16 refereed journal articles and conference papers; and

**WHEREAS**, he brought attention to Virginia Tech by chairing two educational symposiums sponsored by Eastman Chemical; and

**WHEREAS**, he provided many years of leadership as the assistant director of the School of Architecture + Design and chair of the Industrial Design Program; and

**WHEREAS,** he 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 Edward Dorsa for his distinguished service to the university with the title Associate Professor Emeritus of Industrial Design.

### **RECOMMENDATION:**

That the above resolution recommending Edward Dorsa for emeritus status be approved.

**WHEREAS**, Dr. Fred C. Lee faithfully served Virginia Tech for 40 years in the College of Engineering, beginning in 1977; and

**WHEREAS**, as a member of the faculty in the Bradley Department of Electrical and Computer Engineering (ECE), he pioneered the development of the power electronics curriculum and its research program and both are recognized among the best in the world; and

**WHEREAS**, he was the founder and Director of the Virginia Power Electronics Center (VPEC), a Technology Development Center for the Virginia Center for Innovative Technology (CIT) from 1987-97, he was responsible for promoting technology transfer and commercialization of VPEC's intellectual properties; and

WHEREAS, he served as the founder and director of the Center for Power Electronics Systems (CPES), a National Science Foundation Engineering Research Center (ERC), and the only one in the Commonwealth of Virginia. He initiated and led the development of novel integrated power electronics modules to facilitate systems integration and automated manufacturing for power electronics, in a manner similar to integrated circuits for microelectronics. During the 10-year period from 1998 to 2008, CPES, which secured over \$80M from NSF and industry, consisted of five universities and a consortium of 96 industry partners. To date, some of its major achievements are: 307 degrees awarded (117 Ph.D. and 190 M.S.); over 1,800 technical papers, theses, and dissertations; 51 patents and 384 licenses granted, 27 power electronics courses available for distance-learning access. CPES was cited by NSF as a model ERC for its Industry Collaboration and Technology Transfer Program as well as Education and Outreach Program; and

WHEREAS, he founded one of the largest university/industry partnership programs in the U.S. and developed an innovative process for moving technology and intellectual property out of academic laboratories and into the marketplace. The program attracted numerous industry sponsored research projects. In addition, the program has earned an annual gift support in excess of \$2.5M, which provides 35 graduate fellowships and supports its world-class research facilities. To date, more than 215 companies worldwide have benefited from this program. The total gift contributions exceed \$32M; and

**WHEREAS,** he is the world authority in high-frequency power conversion design, modeling and control. His pioneering works in soft-switching techniques have revolutionized and formed the core technologies of modern power electronics equipment and systems. Lee's novel multi-phase voltage regulator modules are used to power every microprocessor (CPU, GPU) and memory device used in smart phones, PCs and servers, and mobile devices in the world.

**WHEREAS**, he served as a major advisor of 93 master's and 84 Ph.D. students, and published over 290 journal papers, 710 referred conference papers, and 82 U.S. patents with an additional 22 patent applications pending. According to Microsoft H index, he was

ranked as one of the top three most cited people from over 1 million engineering authors; and

WHEREAS, he is a member of the U.S. National Academy of Engineering, an academician of the Taiwan's Academia Sinica and a foreign member of the Chinese Academy of Engineering. He is one of the founding members of the Board of Directors of the Virginia Academy of Science, Engineering and Medicine, a University Distinguished Professor, and an Inaugural member of the Virginia Tech Entrepreneur Hall of Fame; and

WHEREAS, he was awarded IEEE Fellow, IEEE William E Newell Power Electronics Award, IEEE Medal in Power Engineering, and the prestigious Ernst-Blickle Award of which he is one of only two US recipients. Three of his former students were elected as academic members - Dushan Boroyevich and Milan Jovanovic were elected as a members of the U.S. National Academy of Engineering and Bo Cho of the Seoul National University was elected as a member of the Korea Academy of Engineering.

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes Fred C. Lee, Ph.D. for his service to the university with the title of University Distinguished Professor Emeritus of Electrical and Computer Engineering.

### **RECOMMENDATION:**

That the above resolution recommending Fred Lee, Ph.D. for emeritus status be approved.

**WHEREAS**, beginning in 1976 and continuing for 40 years, Dr. Frederic J. Baumgartner has faithfully served Virginia Tech as a faculty member in the Department of History in the College of Liberal Arts and Human Sciences: and

**WHEREAS**, with dedication and skill, he taught numerous undergraduate and graduate courses, placing strong emphasis on maintaining standards and promoting student learning; and

**WHEREAS**, he advised numerous students on master's theses and helped them succeed in further graduate study and successful careers; and

**WHEREAS**, he developed an international reputation as a leading scholar of early modern France, military history, and the Reformation; and

**WHEREAS**, he authored nine books (including one that received the Charles Smith Book Prize from the Southern Historical Association), 17 journal articles, seven book chapters, 56 encyclopedia entries, and 49 book reviews; and

WHEREAS, his research was supported with numerous grants and fellowships that brought distinction to him and the university, including a Fellowship of Early Modern Studies from the Sixteenth Century Studies Conference, a Newberry Library Research Fellowship, several research grants from the American Philosophical Society, an NEH Travel-to-Collections Award, an NEH Summer Stipend, the Dudley Award in the History of Astronomy, and the Pollack Award in the History of Astronomy; and

**WHEREAS**, in recognition of his many and varied contributions to research and teaching, the Virginia Social Sciences Associations named him Historian of the Year in 2002; and

**WHEREAS**, he served the profession with dedication and distinction, including several positions in the Sixteenth Century Studies Conference, vice president and president of the Southern Historical Association-European Section, vice president and president of the American Catholic Historical Association; and

**WHEREAS**, he served as a manuscript reviewer for dozens of commercial and academic publishers, as well as numerous leading historical journals; and

**WHEREAS**, he served on a wide variety of committees, commissions, and organizations at Virginia Tech, including roles as vice president and president of the College of Arts and Sciences Faculty Association, chair of the Faculty Senate Committee on Faculty Ethics, and president of the Virginia Tech chapter of the American Association of University Professors;

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes Dr. Frederic J. Baumgartner for his distinguished services to the university and the profession with the title of Professor Emeritus of History.

#### RECOMMENDATION:

That the above resolution recommending Frederic J. Baumgartner for emeritus status be approved.

**WHEREAS,** beginning in 1978 and continuing for 39 years, Theodore Daniel Fuller, Ph.D. faithfully served Virginia Tech as a faculty member in the Department of Sociology in the College of Liberal Arts & Human Sciences; and

WHEREAS, he made significant contributions to the fields of demography, Third World urbanization, rural sociology, and the sociology of health; and

**WHEREAS,** he has published two books and numerous articles, chapters, and research reports; and

WHEREAS, he served as Senior Fulbright Scholar helping to promote the development of the social science research capability at Khon Kaen University, Thailand; and

WHEREAS, he successfully taught a wide variety of undergraduate and graduate courses; and

**WHEREAS**, he mentored and advised many undergraduate and graduate students and was honored with the Department of Sociology Outstanding Graduate Faculty Award; and

**WHEREAS**, he served on the college's Graduate Committee for many years and served as the department's Graduate Director for three years; and

**WHEREAS**, he provided many years of professional service to the program, department, college, university, and profession;

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes Theodore Daniel Fuller, Ph.D. for his service to the university with the title Professor Emeritus of Sociology.

### **RECOMMENDATION:**

That the above resolution recommending Theodore Fuller, Ph.D. for emeritus status be approved.

**WHEREAS**, beginning in 1974 and continuing for 43 years, Kent Holliday, Ph.D. faithfully served Virginia Tech as a faculty member in the Division of Performing Arts, the Department of Music, and the School of Performing Arts I Music I Theatre I Cinema in the College of Arts and Sciences and the College of Liberal Arts and Human Sciences; and

**WHEREAS**, he made significant contributions to music at Virginia Tech through his achievement of writing over 65 compositions during his tenure, which have been performed in hundreds of concerts on campus, in the region, at distinguished state and national conferences, and recorded in six different collections; and

WHEREAS, he achieved international renown as a composer by winning prizes such as the Aliener International Harpsichord Competition, the Barto Prize, First Prize at the Delaware New Music Conference Music Festival, First Prize at the Virginia Music Teachers Association Composition Competition five times between 1983-2009, and American Society of Composers, Authors and Publishers (ASCAP) Plus Awards ten times between 2003-2014; and

**WHEREAS**, with dedication and tremendous skill, he taught a wide variety of undergraduate courses across the full music curriculum, including piano, music literature, music theory, and composition, producing a legacy of strong student achievement; and

**WHEREAS**, he 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 Kent Holliday, Ph.D. for his distinguished service to the university with the title Professor Emeritus of Music.

### **RECOMMENDATION:**

That the above resolution recommending Kent Holliday, Ph.D. for emeritus status be approved.

**WHEREAS**, beginning in 1991 and continuing for 26 years, Kathleen Jones, Ph.D. has faithfully served Virginia Tech as a faculty member in the Department of History in the College of Liberal Arts and Human Sciences: and

**WHEREAS**, with great dedication and skill, she developed and taught five undergraduate and five graduate courses and developed numerous teaching innovations, including online teaching modules, student-produced class books, digital storytelling, and others; and

**WHEREAS**, she was a pioneer in the use of digital history for teaching and was the recipient of numerous grants supporting her innovative work in this area, including a National Endowment for the Humanities Exemplary Education Grant; and

**WHEREAS**, she served as chair or member of more than 50 M.A. or Ph.D. committees, offering thoughtful mentoring and unfailing support to each of her students; and

**WHEREAS**, as director of Graduate Studies in the Department of History for 10 years, she served with great distinction and skill, leading curriculum reform, creating new policies and procedures, and providing new professional development opportunities; and

WHEREAS, she received numerous awards for her teaching and mentoring, including the XCaliber Award for Exemplary Work by a Team in Teaching with Technology, the e-Learning Design Honorable Mention from the e-Learning Laboratory at the University of Kansas, the College of Liberal Arts and Human Sciences Award for Excellence in Graduate Advising, and the Alumni Award for Excellence in Graduate Advising; and

**WHEREAS**, she was a leading expert on the history of the child guidance movement in America and the history of youth suicide; and

WHEREAS, she authored a book published by Harvard University Press, one of the nation's leading academic publishers., 14 articles and book chapters, 11 reference work entries, and 26 book reviews and essays; and

WHEREAS, she received numerous research grants and fellowships that brought distinction to her and the university, including a National Humanities Center Fellowship and a National Library of Medicine Publication Grant; and

**WHEREAS**, her insightful blog, The Retiring Professor, attracted a large readership and led to a feature article in the Chronicle of Higher Education; and

**WHEREAS**, she generously and ably served the department, college, university, and profession in numerous capacities and with great distinction;

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes Dr. Kathleen Jones, Ph.D. for her distinguished service to the university and the profession with the title of Associate Professor Emerita of History.

### **RECOMMENDATION:**

That the above resolution recommending Kathleen Jones, Ph.D. for emerita status be approved.

**WHEREAS**, beginning in 1992 and continuing for 25 years, Eric E. McCollum, Ph.D., faithfully served Virginia Tech as a faculty member in the Department of Human Development in the College of Liberal Arts and Human Sciences; and

**WHEREAS**, he made significant contributions to the field of marriage and family therapy through his excellent teaching, scholarship, and clinical work on substance abuse, domestic violence and mindfulness meditation; and

**WHEREAS**, with great dedication, he taught a wide variety of graduate courses on marriage and family therapy models and techniques, domestic violence, substance abuse, ethics, and mindfulness, placing strong emphasis on standards and student learning; and

WHEREAS, he ably and generously served the community as an experienced and innovative clinician; and

**WHEREAS**, he served the field of marriage and family therapy as an outstanding clinical supervisor, receiving the American Association for Marriage and Family Therapy Training Award, and as a member of the Virginia Board for Counseling, as well as a contributing member of several therapy-related professional associations and editorial boards; and

WHEREAS, he advised master's theses and doctoral dissertations of numerous students and helped them develop successful careers in both academic and clinical settings; and

**WHEREAS**, he was principal and co-investigator on grants and contracts implementing and assessing the effectiveness of intervention programs for substance abuse, domestic violence, and at- risk families and children; and

**WHEREAS**, he provided many years of distinguished contributions to the Department of Human Development, College of Liberal Arts and Human Sciences, and the university through leadership roles as clinical director and program director of the Marriage and Family Therapy master's program in the National Capital Region; and

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Eric E. McCollum, Ph.D., for his distinguished service to the university with the title Professor Emeritus of Human Development.

### **RECOMMENDATION:**

That the above resolution recommending Eric E. McCollum, Ph.D. for emeritus status be approved.

**WHEREAS**, beginning in 2000 and continuing for 17 years, Fred P. Piercy, Ph.D., faithfully served Virginia Tech and the College of Liberal Arts and Human Sciences as head of the Department of Human Development, associate dean of Graduate Studies and Research, and as a faculty member in the Department of Human Development; and

**WHEREAS,** with dedication, Dr. Piercy taught undergraduate and graduate courses on addiction, professional writing, and marriage and family therapy, placing strong emphasis on student engagement; and

**WHEREAS**, he advised and mentored doctoral students, helping them prepare for successful careers in university and clinical settings, and has been recognized for his mentoring efforts with numerous university and national advising and mentoring awards; and

**WHEREAS,** he made significant contributions that advanced understanding of the lives of couples and families through his scholarship on marriage and family therapy education, substance abuse intervention, research methods in marriage and family therapy, and crossnational marriage and family therapy; and

**WHEREAS,** he authored or co-authored over 200 refereed journal articles, book chapters, and reviews, including outreach publications and presentations directed toward couples and families; and

**WHEREAS**, he received prestigious professional honors and awards, including the American Family Therapy Association Lifetime Achievement Award and the Outstanding Contribution to Marriage and Family Therapy Award from the American Association for Marriage and Family Therapy; and

**WHEREAS,** he held leadership positions in professional organizations, including the American Association for Marriage and Family Therapy, the Commission on Accreditation for Marriage and Family Therapy Education, and editor of the Journal of Marital and Family Therapy; and

**WHEREAS**, he provided many years of distinguished leadership and contributions to the department and the college through dedicated service on numerous committees, including serving as the director of College Diversity Initiatives for the College of Liberal Arts and Human Sciences;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Fred P. Piercy, Ph.D., for his distinguished service to the university with the title of Professor Emeritus of Human Development.

### **RECOMMENDATION:**

That the above resolution recommending Fred Piercy, Ph.D. for emeritus status be approved.

**WHEREAS,** beginning in 2005 and continuing for 12 years, Barbara Ellen Smith, Ph.D. faithfully served Virginia Tech as a faculty member in the Women's and Gender Studies Program in the Department of Interdisciplinary Studies and the Department of Sociology in the College of Liberal Arts & Human Sciences; and

**WHEREAS**, she made significant contributions to the fields of women's and gender studies, sociology, geography, and Appalachian studies, publishing four books and numerous academic articles and chapters; and

**WHEREAS**, she aided the transition of women's and gender studies to the Department of Sociology; and

WHEREAS, she served as director of the Women's and Gender Studies Program; and

**WHEREAS**, she successfully taught a wide variety of undergraduate and graduate courses; and

**WHEREAS,** she mentored and advised undergraduate and graduate students and was honored with the ASPECT Outstanding Faculty Award, the Department of Sociology Outstanding Graduate Faculty Award, and the Department of Sociology Undergraduate Teaching Excellence Award; and

**WHEREAS,** she provided many years of professional service to the program, department, college, and university;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Barbara Ellen Smith, Ph.D. for her service to the university with the title Professor Emerita of Women's and Gender Studies.

### **RECOMMENDATION:**

That the above resolution recommending Barbara Ellen Smith, Ph.D. for emerita status be approved.

**WHEREAS**, beginning in 1969 and continuing for 48 years, Ezra A. "Bud" Brown, Ph.D. faithfully served Virginia Tech as a faculty member in the Department of Mathematics in the College of Arts and Sciences and, later, in the College of Science; and

**WHEREAS**, he made significant contributions to number theory and related areas of mathematics; and

**WHEREAS**, he received six national writing awards from the Mathematical Association of America; and

**WHEREAS**, his dedicated and stimulating teaching was recognized with an ODK G. Burke Johnston Award, an Edward S. Diggs Teaching Scholar Award, a William E. Wine Award, and a Mathematical Association of America MD-DC-VA Section John M. Smith Award; and

**WHEREAS**, the beneficiaries of his mentoring included 22 colleagues who won awards for teaching, advising, or outreach, 17 undergraduate research students, 28 M.S. students, two Ph.D. students, several Honors Scholars, and over 50 Department of Defense summer interns; and

**WHEREAS**, his extensive university service, particularly in curriculum development and on leadership search committees, included eight years of service on and two years as chair of the Commission on Undergraduate Studies and Policies; and

**WHEREAS**, his extensive professional service was recognized by a Mathematical Association of America MD-DC-VA Section Sister Helen Christensen Service Award; and

**WHEREAS,** for all of these reasons and many others, he was named an Alumni Distinguished Professor:

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes Ezra A. "Bud" Brown, Ph.D. for his distinguished service to the university with the title Alumni Distinguished Professor Emeritus of Mathematics.

### **RECOMMENDATION:**

That the above resolution recommending Ezra A. "Bud" Brown, Ph.D. for emeritus status be approved.

**WHEREAS**, Khidir W. Hilu, Ph.D. faithfully served Virginia Tech for 36 years in the College of Science, beginning in 1981; and

**WHEREAS**, as a member of the faculty in the Department of Biological Sciences, he has taught our flagship undergraduate courses in plant taxonomy and plants and civilization and six additional courses including a summer course in the Swiss Alps; and

**WHEREAS**, he won teaching awards from the Department of Biological Sciences, the College of Science, and was a College of Science nominee for the Wine Award: and

**WHEREAS**, he held a Fulbright Scholarship to train graduate students and faculty in techniques of DNA fingerprinting at University of Bin Zuhor, Morocco and was an invited scientist at the Commonwealth Scientific and Industrial Research Organisation in Australia, the departments of genetics at Cairo University, and Estação Agronómica Nacional, Oerias, Portugal; and

**WHEREAS**, he was a member of the editorial boards for the South American Journal Kurtziana, the Journal of Systematics and Evolution, and the international review board of the Annals of Botany; and

**WHEREAS**, he served on multiple departmental, college, and university committees and served as a reviewer for multiple granting agencies and professional journals and served national and international professional societies in many capacities; and

**WHEREAS**, he mentored 24 graduate students, six post-doctoral appointees, some 60 undergraduates in research; and

**WHEREAS**, he authored and co-authored 116 peer reviewed publications including journal papers, book chapters and has been a party to some \$7M in federal, state, university, and foundation grant funds; and

**WHEREAS**, he presented multiple invited research talks at symposia and society meetings in the U.S. and in some 20 countries around the world;

**NOW THEREFORE**, be it resolved that the Board of Visitors recognizes Khidir W. Hilu, Ph.D. for his service to the university with the title of Professor Emeritus of Biological Sciences.

### **RECOMMENDATION:**

That the above resolution recommending Khidir W. Hilu, Ph.D. for emeritus status be approved.

**WHEREAS**, beginning in 1993 and continuing for 20 years, Deborah F. Cook, Ph.D. faithfully served Virginia Tech in the Pamplin College of Business; and

**WHEREAS**, as a member of the faculty in the Department of Business Information Technology, she was a dedicated teacher of a wide range of courses at the undergraduate and graduate levels, and having received the Pamplin College Certificate of Teaching Excellence and the University Certificate of Teaching Excellence; and

WHEREAS, she advised and counseled numerous graduate students in the Department of Business Information Technology during her career including service as chair of three doctoral dissertation committees and membership on 22 doctoral committees; and

**WHEREAS**, she made significant contributions in research in the field of operations and supply chain management authoring over 40 research articles in her career, and was recognized by an appointment to the Verizon Professorship of Business Information Technology in the college; and

**WHEREAS**, she dutifully served on over 30 departmental, college, and university commissions and committees; and

**WHEREAS**, she served in a number of important offices and on numerous professional committees including editor-in-chief of the *Production and Inventory Management Journal*;

**NOW, THEREFORE**, **BE IT RESOLVED** that the Board of Visitors recognizes Deborah F. Cook, Ph.D. for her service to the university with the title of Verizon Professor Emerita of Business Information Technology.

### **RECOMMENDATION:**

That the above resolution recommending Deborah F. Cook, Ph.D. for emerita status be approved.

#### **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS,** beginning in August 1977 and continuing for 40, John M. Pinkerton, Ph.D. faithfully served Virginia Tech as a faculty member in the Department of Finance, Insurance and Business Law in the Pamplin College of Business; and

**WHEREAS**, he made significant contributions to research through publications in outstanding journals that contributed to the stature of the department and the university, and brought international visibility to Virginia Tech; and

**WHEREAS**, with dedication, he taught more than 20 courses representing a variety of undergraduate and graduate instruction ranging across the finance curriculum, while placing strong emphasis on standards and student learning; and

WHEREAS, he advised numerous students on master's theses and doctoral dissertations and helped them develop successful careers in both academic and industrial settings; and

**WHEREAS**, he provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous commissions and committees:

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes John M. Pinkerton, Ph.D. for his distinguished service to the university with the title Professor Emeritus of Finance.

#### **RECOMMENDATION:**

That the above resolution recommending John Pinkerton, Ph.D. for emeritus status be approved.

#### **RESOLUTION FOR EMERITA STATUS**

**WHEREAS**, beginning in 1973 and continuing for 44 years, Victoria Kok faithfully served Virginia Tech as a faculty member in the University Libraries; and

**WHEREAS**, she made significant contributions to the veterinary medicine profession through her research focusing on libraries resources and support; and

**WHEREAS**, she ably served the veterinary medicine library global community in leadership positions such as the creator and moderator for veterinary medicine libraries listsery; and

**WHEREAS**, through her work in the veterinary medicine library community, she brought international visibility to Virginia Tech; and

**WHEREAS**, with dedication, she taught a wide variety of graduate courses focusing on research and library resources, placing strong emphasis on standards and student learning; 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 Victoria Kok for her distinguished service to the university with the title Professor Emerita Librarian for the Veterinary Medical Library.

#### **RECOMMENDATION:**

That the above resolution recommending Victoria Kok for emerita status be approved.

#### **RESOLUTION FOR EMERITUS STATUS**

WHEREAS, beginning in May 2006 and continuing for over 11 years, Carolyn Meier faithfully served Virginia Tech as a faculty member in the University Libraries; and

**WHEREAS**, she made significant contributions to undergraduate education through her extensive service and leadership on the University Curriculum Committee for General Education as member, vice-chair and chair, the library's efforts in the First Year Experience Program, her many years of service to selecting the Virginia Tech Common Book, and her extensive efforts to make connections between undergraduates and the University Libraries; and

**WHEREAS**, she ably served the community as the liaison to the students in university studies and concentrated on reaching out to underserved students; and in her time at the University Libraries created successful programs for the Corps of Cadets and the athletic department; and

**WHEREAS**, she supported the First Year Experience program as the First Year Experience Librarian from May 2011 for six years, and has both taught sessions herself for the University Studies classes, and helped all liaison librarians plan, design and assess their First Year Experience programs; and

**WHEREAS**, she supported assessment of both in-person and online instruction through her chairing of a committee that created the Information Literacy Competency Test still used by the First Year Experience program; and

WHEREAS, with dedication, she aided the transition of the University Libraries graduate course, GRAD 5124 from in-person to online instruction, placing strong emphasis on standards and student learning; created modules on evaluating information and plagiarism that were taught courses in psychology and business, taught several online library and information studies courses for the University of Buffalo, including the creation and teaching of a course; and

**WHEREAS**, she was co-principal investigator on grants researching instructional enhancement through building a community of practice; and

**WHEREAS,** she held leadership positions in professional organizations, including co-chair for the American Libraries Association Library Instruction Round Table Transition to College committees; and

**WHEREAS**, her work in an online course through the American Libraries Association on using iPads, tablets and gadgets in teaching, brought international visibility to Virginia Tech; and

**WHEREAS**, she co-edited two books and authored or co-authored seven refereed journal articles, book chapters, and reviews with a focus of using technology to enhance the student learning experience; and

**NOW, THEREFORE, BE IT RESOLVED,** that the Board of Visitors recognizes Carolyn Meier for her distinguished service to the university with the title Associate Professor Emerita of the University Libraries.

#### **RECOMMENDATION:**

That the above resolution recommending Carolyn Meier for emerita status be approved.

### ENDOWED PROFESSORSHIP Jean Ellen Shehan Professorship and Directorship

The Jean Ellen Shehan Professor and Directorship was established in 1966 through a gift to the Virginia Tech Foundation from Mrs. Jean Ellen Shehan of South Miami, Florida. Mrs. Shehan was a lifelong horsewoman of international stature and she was the niece of Mrs. Marion duPont Scott, whose generosity made possible the construction of the Equine Medical Center in Leesburg, Virginia. Mrs. Shehan was a longtime friend and supporter of the Equine Medical Center, serving as the chair of its advisory council for several years; and

Dr. Nathaniel A. White II was named as the Jean Ellen Shehan Professor and Director of the Marion duPont Scott Equine Medical Center from August 2004 until his retirement from the university in June 2013. Upon Dr. White's retirement, Dr. Michael D. Erskine was hired as the Director of the Marion duPont Scott Equine Medical Center, first on an interim basis from June 2013 through April 2015, then as the full-time Director on April 25, 2015.

Dr. Erskine is a two-time alumnus of Virginia Tech where he earned his Doctorate of Veterinary Medicine from Virginia-Maryland Regional College of Veterinary Medicine in 1988 and his undergraduate degree in biology in 1984. Dr. Erskine achieved Diplomate certification by the American Board of Veterinary Practitioners (Equine Practice) in 1996. He has been a veterinary practitioner owner for over 25 years and has been a strong supporter of the Equine Medical Center as both a referring clinician and a member of the EMC Council and Veterinary Advisory Board.

Dr. Erskine was elected President of the Maryland Veterinary Medical Association in 2000, becoming the first alum of the college to be chosen by his peers as head of a state association. He has also served as chair of the Maryland Veterinary Foundation. Un der his leadership, the Equine Medical Center has made substantial progress in implementing a new plan for transitioning the EMC to a sustainable business operation that meets the clinical service, educational, and research needs of the College.

#### **RECOMMENDATION:**

That Dr. Michael D. Erskine be appointed as the Jean Ellen Shehan Professor and Director, Marion duPont Scott Equine Medical Center effective September 11, 2017, with a salary supplement and operating budget as provided by the endowment and if available, with funds from the eminent scholars match program.

#### **EXCEPTION TO THE VIRGINIA CONFLICT OF INTERESTS ACT**

**WHEREAS**, the Code of Virginia section 2.2-3106, places prohibitions on an employee from supervising a member of his or her immediate family; and

**WHEREAS,** Dr. Matthew Holt has accepted the position as chair of the department of agricultural and applied economics in the College of Agriculture and Life Sciences and his spouse, Dr. Susan Chen, is a faculty member in the department of agricultural and applied economics; and

**WHEREAS,** Dr. Holt has agreed he will not participate in, nor have influence over, decisions related to Dr. Chen's annual evaluation, recommendation for merit increase, or other personnel related decisions;

**NOW, THEREFORE BE IT RESOLVED**, that Dr. Susan Chen be evaluated using the department's usual process, overseen by Dr. Matthew Hulver, head of the department of human nutrition, foods, and exercise, and that Dr. Chen's final evaluation will be reviewed and approved by dean of the College of Agriculture and Life Sciences and the executive vice president and provost.

#### **RECOMMENDATION:**

That an exception to the Conflict of Interests Act be granted by the Board of Visitors as provided by the Code of Virginia with appropriate safeguards for the supervision of Dr. Chen during the time in which her spouse serves as department chair.

#### **Faculty Personnel Changes Report**

## ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE AND FINANCE AND RESOURCE MANAGEMENT COMMITTEE

#### Quarter ending June 30, 2017

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	1
New Appointments to Tenure-Track or Continued Appointment-Track	21
New Appointments to Non-Tenure Track	0
Adjustments in Salary	4
One-time payments	0
Administrative and Professional Faculty	
New Appointments	11
Adjustments in Salary	47
One-time payments	2
One-time payments for Post-Season Sports Events	28

#### **RECOMMENDATION:**

That the Board ratify the Faculty Personnel Changes Report

### FACULTY PERSONNEL CHANGES September 11, 2017

#### **TEACHING AND RESEARCH FACULTY**

#### **NEW APPOINTMENTS**

					CURRENT ACTION			
					EFF DATE	% APPT	ANNUA	AL RATE
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Agriculture & Life Sciences								
Gross, Aaron	Assistant Professor	Entomology	Reg	9	10-Aug-17	100	\$ 80,000	
Lahne, Jacob	Assistant Professor	Food Science & Technology	Reg	9	10-Aug-17	100	\$ 82,000	
Architecture & Urban Studies								
Akanmu, Abiola	Assistant Professor	Myers Lawson School of Construction	Reg	9	10-Aug-17	100	\$ 93,000	
Hauptman, Jonas	Assistant Professor	School of Architecture + Design	Reg	9	10-Aug-17	100	\$ 76,000	
Roofigari-Esfahan, Nazila	Assistant Professor	Building Construction	Reg	9	10-Aug-17	100	\$ 92,000	
Engineering								
Courtuer-Delgosha, Olivier	Associate Professor	Aerospace and Ocean Engineering	Reg	9	10-Aug-17	100	\$ 112,000	
Domann, John	Assistant Professor	Biomedical Engineering and Mechanics	Reg	9	10-Aug-17	100	\$ 92,000	
Ghassemi, Mona	Assistant Professor	Electrical and Computer Engineering	Reg	9	10-Aug-17	100	\$ 94,000	
Hicks, Matthew	Assistant Professor	Computer Science	Reg	9	10-Aug-17	100	\$ 103,500	
Jian, Xun	Assistant Professor	Computer Science	Reg	9	10-Aug-17	100	\$ 100,000	
Madigan, Michael	Professor - Tenured	Industrial & Systems Engineering	Reg	9	10-Aug-17	100	\$ 155,000	
Meadows, Joseph	Assistant Professor	Mechanical Engineering	Reg	9	10-Aug-17	100	\$ 97,000	
Min, Changwoo	Assistant Professor	Electrical and Computer Engineering	Reg	9	10-Aug-17	100	\$ 101,000	
Pitterson, Nicole	Assistant Professor	Engineering Education	Reg	9	10-Aug-17	100	\$ 90,000	
Liberal Arts and Human Sciences								
Brantly, Aaron	Assistant Professor	Political Science	Reg	9	10-Aug-17	100	\$ 86,000	
<u>Natural Resources</u>								
Coates, Thomas	Assistant Professor	Forest Resources and Environmental Conservation	Reg	9	10-Aug-17	100	\$ 75,000	

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#### **TEACHING AND RESEARCH FACULTY**

#### **NEW APPOINTMENTS**

					CURRENT ACTION			
					EFF DATE	% APPT	ANNUA	AL RATE
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
<u>Science</u>								
Hari, Siddharth	Assistant Professor	Economics	Reg	9	10-Aug-17	100	\$ 106,000	
Langwig, Kate	Assistant Professor	Biological Sciences	Reg	9	10-Aug-17	100	\$ 81,000	
Miller, Melinda	Assistant Professor	Economics	Reg	9	10-Aug-17	100	\$ 106,000	
Pickrell, Alicia	Assistant Professor	School of Neuroscience	Reg	9	10-Aug-17	100	\$ 100,000	
Schulz, Michael	Assistant Professor	Chemistry	Reg	9	10-Aug-17	100	\$ 85,000	
Veterinary Medicine								
Morton, Paul	Assistant Professor	Biomedical Sciences & Pathobiology	Reg	9	10-Aug-17	100	\$ 85,000	

#### **TEACHING AND RESEARCH FACULTY**

					CURRENT ACTION			
					EFF DATE	% APPT	ANNU	AL RATE
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Agriculture & Life Sciences								
Bosch, Darrell	Professor	Agriculture & Applied Economics	Reg	12	25-May-17	100	\$ 141,635	
Veilieux, Richard	Professor	Horticulture	Reg	12	10-May-17	100	. ,	
•			3		,		, - ,	
Science								
Arnold, Rachel	Collegiate Assistant Professor	Department of Mathematics	Reg	9	10-Aug-17	100	\$ 67,000	
	• • • • • • • • • • • • • • • • • • •	F	11-9				,,	
Veterinary Medicine								
LeRoith, Tanya	Associate Professor	Biomedical Sciences	Reg	12	10-Apr-17	100	\$ 133,304	
,,,							, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

#### **ADMINISTRATIVE AND PROFESSIONAL FACULTY**

#### **NEW APPOINTMENTS**

						CTION		
					EFF DATE	% APPT		AL RATE
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Architecture & Urban Studies								
Blythe, Richard	Dean and Professor - Tenured	Architecture & Urban Studies	Reg	12	10-Oct-17	100	\$ 300,000	
Executive Vice President & Provost								
Havens, Luisa	Vice Provost for Enrollment Management	Provost - Administration	Reg	12	1-Aug-17	100	\$ 280,000	
<u>President</u>								
Elbin, Kurt	Assistant Coach, Baseball	Athletics	Reg	12	24-Jun-17	100	\$ 125,000	
Fecteau, Ryan	Assistant Coach, Baseball	Athletics	Reg	12	21-Jun-17	100	\$ 150,000	
Frayer, Jared	Assistant Coach, Wrestling	Athletics	Reg	12	10-Apr-17	100	\$ 85,000	
Haines, Corey	Director, Operations, Baseball	Athletics	Reg	12	19-Jun-17	100	\$ 50,000	
Molinaro, Frank	Assistant Coach, Wrestling	Athletics	Reg	12	10-Apr-17	100	\$ 85,000	
Simmons, Charles	Assistant Director, Strength/Conditioning, Football	Athletics	Reg	12	19-Jun-17	100	\$ 45,000	
Szefc, John	Head Coach, Baseball	Athletics	Reg	12	8-Jun-17	100	\$ 400,000	
Vice President for Advancement								
Salmon, Brandy	Executive Director of the Business Engagement Center	University Development	Reg	12	13-Jun-17	100	\$ 207,500	
Stokes, Loyd Wade	Assistant Dean of Advancement, College of Science	University Development	Reg	12	1-May-17	100	\$ 160,000	

#### **ADMINISTRATIVE AND PROFESSIONAL FACULTY**

					CURRENT ACTION			
					EFF DATE	% APPT	ANNUA	
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Agriculture & Life Sciences								
Spencer, Janet	District Director	Southeast District Cooperative Extension	Reg	12	25-May-17	100	. ,	
Thompson, John	District Director	Northern District Cooperative Extension	Reg	12	25-May-17	100	\$ 75,000	
Architecture & Urban Studies								
Jacks, Robert	Director, Academic Advising	Architecture & Urban Studies	Reg	12	7-Jun-17	100	\$ 50,000	
Dean of Libraries								
Nino, Miguel	Instructional Design and Training Manager	Library	Reg	12	10-May-17	100	\$ 61,000	
Engineering								
Haugh, Lindsay	Director of Communications	Dean - Engineering	Reg	12	25-Jun-17	100	\$ 81,400	
Executive Vice President & Provost								
Clarke, Menah-Pratt	Vice Provost for Diversity and Inclusion and Vice President for Strategic Affairs	Diversity and Inclusion	Reg	12	1-Aug-17	100	\$ 305,000	
Gile, Roxanne	Interim Associate Provost, Acad Decision Support	Institutional Research	Reg	12	10-May-17	100	\$ 120,000	
Schweighart, Matthew	Systems Manager	Scholarships and Financial Aid	Reg	12	25-Mar-17	100	\$ 60,000	
Thorpe, Leemar	Associate Director	Inclusion and Diversity	Reg	12	10-Apr-17	100	\$ 52,000	
<u>President</u>								
Abbott, Russell	Assistant Coach, Golf	Athletics	Reg	12	1-Jun-17	100	9	5,000
Cianelli, David	Director, TFCC Program	Athletics	Reg	12	25-Jun-17	100	\$	
			-		25-Jun-17	100	\$	
					25-Jun-17	100	9	8,000
					25-Jun-17	100	9	8,000

#### **ADMINISTRATIVE AND PROFESSIONAL FACULTY**

					CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL	
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Eugene, Ernest	Assistant Athletic Director, Sports Medicine	Athletics	Reg	12	25-Apr-17	100	\$	8,066.66
Franchi, Peter	Computer & Server Technology Specialist	Office of the President Business & Management Systems	Reg	12	22-May-17	100	\$ 65,000	
Gabbard, Thomas	Senior Associate Athletic Director, Facilities	Athletics	Reg	12	25-Apr-17	100	\$	3,000
Jacobson, Cara	Director of Administration	Athletics	Reg	12	25-Apr-17	100	\$	4,166.66
Jack, Gregory	Associate Head Coach, TFCC	Athletics	Reg	12	25-Jun-17	100	\$	4,500
					25-Jun-17	100	\$	3,000
					25-Jun-17	100	\$	4,000
					25-Jun-17	100	\$	4,000
Jackson, David	Senior Director, Basketball Programs	Athletics	Reg	12	25-Apr-17	100	\$	9,166.66
Johannigmeier, Eric	Assistant Coach, TFCC	Athletics	Reg	12	25-Jun-17	100	\$	4,500
					25-Jun-17	100	\$	4,000
					25-Jun-17	100	\$	4,000
Johnson, Devin	Director of Player Personnel	Athletics	Reg	12	25-Apr-17	100	\$	7,083.34
Peterson, Cheryl	Executive Director of the Office of the President	President	Reg	12	1-Aug-17	100	\$ 130,000	
Reed Francois, Desiree	Deputy Director	Athletics	Reg	12	25-Apr-17	100	\$	3,000
Reynolds, Jeffrey	Director of Operations	Athletics	Reg	12	25-Apr-17	100	\$	12,083.34
Sands, Timothy	President	President	Reg	12	10-Jul-17	100	\$ 538,407	
					11-Sep-17	100	\$	40,000.00
Thomas, Benjamin	Head Coach, TFCC	Athletics	Reg	12	25-Jun-17	100	\$	4,500
					25-Jun-17	100	\$	4,000
					25-Jun-17	100	\$	4,000
Vaught, Timothy	Assistant Coach, TFCC	Athletics	Reg	12	25-Jun-17	100	\$	4,500
					25-Jun-17	100	\$	4,000
					25-Jun-17	100	\$	4,000
Wolf, Lyle	Director of SA Development	Athletics	Reg	12	25-Apr-17	100	\$	5,833.34
Zalewski, Paul	Assistant Coach, TFCC	Athletics	Reg	12	25-Jun-17	100	\$	4,500
					25-Jun-17	100	\$	4,000
					25-Jun-17	100	\$	4,000
<u>Science</u>								
Panneton, Robin	Associate Dean for Undergraduate Programs	Dean of Science	Reg	12	25-May-17	100	\$ 127,222	

#### **ADMINISTRATIVE AND PROFESSIONAL FACULTY**

					CURRENT ACTION			
					EFF DATE	% APPT		UAL RATE
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Senior Vice President for Operations	and Administration							
Shelton, M. Dwight	Interim Sr. Vice President for Operations and Administration	Sr. Vice President for Operations and Administration	Reg	12	1-Aug-17	100	\$ 400,007	7
Vice President for Administration								
Avis, Kimberly	Assistant Director, Leasing	Facilities Services, Real Estate Management	Reg	12	25-Mar-17	100	\$ 80,807	7
Ball, Robin	Assistant Director, Facilities Human Resources	Facilities Services, Human Resources	Reg	12	25-Mar-17	100	\$ 90,809	•
Crane, Joseph	Assistant Director, Real Estate Services	Facilities Services, Real Estate Management	Reg	12	25-Mar-17	100	\$ 80,807	7
Hansen, Elizabeth	Interim Director of Facilities Finance & Administration	Facilities Services, Finance	Reg	12	25-Mar-17	100	\$ 119,582	2
Hillman, James	Director of Finance	Vice President for Administration	Reg	12	1-Jun-17	100	\$ 103,500	)
McCoy, Virginia	Associate Director of Mail Services	Printing Services	Reg	12	25-Mar-17	100	\$ 74,618	3
Smith, Kayla	Special Assistant to the Vice President	Vice President for Administration	Reg	12	25-Apr-17	100	\$ 85,000	)
Teglas, Jonathan	Chief of Staff to the AVP and Chief Facilities Officer	Facilities Services - AVP	Reg	12	10-Jun-17	100	\$ 71,987	,
Vice President for Advancement								
Blair, Kimberly	Senior Principal Gifts Officer	University Development	Reg	12	10-May-17	100	\$ 190,000	)
Blevins, Anne	Director of Alumni Relations, CVM	Alumni Relations	Reg	12	1-Jan-17	100		
Frazier, Thomas	Assistant Director of Development for Annual Giving	Virginia Tech Athletic Fund	Reg	12	25-Mar-17	100		
Hart, Natalie	Principal Gifts Officer	University Development	Reg	12	10-Apr-17	100	\$ 140,250	)
McCallum, Anne	Director of Communications for Alumni Relations	University Relations	Reg	12	25-Apr-17	100	\$ 63,000	)
Stacy, Erica	University Editor	University Development	Reg	12	10-Apr-17	100	\$ 65,000	)
Tawney, Janice	Interim Director of Development, CLAHS	University Development	Reg	12	10-Apr-17	100	\$ 75,543	3

#### **ADMINISTRATIVE AND PROFESSIONAL FACULTY**

						T ACTION			
					EFF DATE	% APPT		IL RATE	
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME	
Vice President for Finance and CFO									
Broyden, Robert	Assistant Vice President for Capital Assets and Financial Management	Capital Assets and Financial Management	Reg	12	10-Apr-17	100	\$ 184,278		
Sharma, Savita	Chief of Staff	Vice President for Finance	Reg	12	10-Apr-17	100	\$ 128,300		
Starling, Barbara	Associate Controller for Financial Reporting and Cost Accounting	Controller's Office	Reg	12	10-Apr-17	100	\$ 127,000		
Sumpter, Jerry B	Director of Finance Information Technology	Finance Information Technology	Reg	12	10-Apr-17	100	\$ 120,523		
Vice President for Human Resources									
Wilkes, Lisa	Interim Vice President for Human Resources	Vice President for Human Resources	Reg	12	1-Aug-17	100	\$ 275,317		
Vice President for Information Techn	Vice President for Information Technology								
Booker, Brandon	Log Archiving and Analysis Specialist	Communications Network Services	Reg	12	10-May-17	100	\$ 71,400		
Krometis, Justin	Computational Science Specialist	Advanced Research Computing	Reg	12	10-May-17	100	\$ 108,200		
Powell, Lincoln	Applications Analyst	Business Applications & Integration	Reg	12	5-May-17	100			
Vice President for Policy and Govern	ance_								
O'Rourke, Kim	Vice President for Policy and Governance	Vice President for Policy and Governance	Reg	12	1-Aug-17	100	\$ 225,000		
Vice President for Outreach & Interna	ational Affairs								
Jobst, Shelly	Director of Continuing & Professional Education	Continuing and Professional Education	Reg	12	10-May-17	100	\$ 105,000		
Vice President for Research									
Childers, Diane	Chief of Staff	Virginia Tech Carilion Research Institute	Reg	12	1-Apr-17	100	\$ 75,000		

#### **ADMINISTRATIVE AND PROFESSIONAL FACULTY**

					CURRENT ACTION			
					EFF DATE	% APPT	ANNUA	AL RATE
NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS			BASE	ONE-TIME
Vice President for Student Affairs								
Feldhaus, Jeffrey	Assistant Director of Intramural Sports	Recreational Sports	Reg	12	25-May-17	100	\$ 52,000	
Galvez, Tricia	Assistant Director for Immigration and Support Services	Cranwell International Center	Reg	12	1-Apr-17	100	\$ 53,460	
Gwilliam, Krista	Assistant Director for Fitness Programs	Recreational Sports	Reg	12	25-May-17	100	\$ 51,500	
Hughes, Megan	Associate Director of Administrative Services	Recreational Sports	Reg	12	25-May-17	100	\$ 61,700	
Keene, Frances	Interim Director of Housing and Residence Life	Housing and Residence Life	Reg	12	25-May-17	100	\$ 120,000	
Mitcham, Rhonda	Chief Administrative and Financial Officer	Schiffert Health Center	Reg	12	25-Mar-17	100	\$ 95,909	
Simmons, Angela	Assistant Vice President	Student Engagement and Campus Life	Reg	12	10-Apr-17	100	\$ 138,016	

#### Board of Visitors Constituent Report Seyi Olusina, Undergraduate Representative September 10, 2017

Good afternoon Rector Treacy, President Sands, members of the board, administration, and distinguished guests.

First, I would like to thank you all for selecting me to represent the undergraduate student population this year. It is truly an honor and I am looking forward to working with you all in the coming year and helping to make a difference.

This semester started a week later than usual, which means we will get out close to the winter holidays, but the students are excited to be back. The new class of 2021 came to school with a record number freshman class of 7,075. It is the most diverse class ever with students from all around the world and many states represented. They bring many different interest and passions and are ready to get involved in clubs and organizations that they are passionate about. They are also very prepared to learn about the fields that interest them and push themselves academically.

The large class of students does not come without its difficulties. Students are in triples, rooming with RA's, living in lounges and even converted storage closets. Many parents dropped their students off frustrated with some of the accommodations. Upperclassman are concerned that the school is growing quicker than it can handle. They also fear that the standard to get in is being decreased because of the schools want to grow. Some dining halls are open later to help accommodate more people, but this has caused an increase in hours for student workers while there is still a shortage of staff. With more students parking is even more of a concern. The Division of Student Affairs though is working hard to help make sure that the overall student experience does not suffer as a result of the high enrollment

The football game last weekend against West Virginia lived up to all the hype that led up to it. With the excitement about a new quarterback and second year coach and the recent success of the men's basketball team and other sports, the student body is fill with optimism about the coming year for our athletics program. With the Drive for 25 still in full effect Athletics is hoping to reach their goal.

Resources are even more important with a growing university. With such a diverse incoming class it is important to help them feel welcome and help them find a home here. Two weeks ago the Division of Student affairs had their Community Kick-Off where the six Cultural and Community Centers were open so people could go through and get connected and learn about the different groups. Dr. Pratt-Clarke and her office will also be starting their Inclusive VT week tomorrow and it is for students to get involved in things they normally would not be involved in, in hopes to better unite our school. Funding for Cultural Centers, Inclusion, and Diversity, as a whole, are important for the continued success of students. Other resources like

Cook Counseling, Dean of Students, and the Women's Center also need continued support, as topics surrounding mental health are becoming less taboo to address. As more people seek help we as a university need to be able to help provide that help.

Over the course of the year I really hope to educate the student body about governance at the university level. So many students don't understand how it works or who is involved so I hope to be able to provide more transparency between the board and students. Hopefully, some of you will join me on campus to give talks and O and A sessions for students. This will allow student the opportunity to to meet board members and for you board members to hear about some of the smaller issues they have, that aren't always communicated. I will also be working with the Alumni Association to help lead a student giving campaign where the class of 2018 will give \$20.18 anywhere in the University that they please. We want to encourage students to give back to something that means a lot to them and help them understand how much philanthropy plays a role in what the University can do. Lastly the big initiative at the forefront right now for me is Corps Day. It is next Saturday from 11-3 and you all are invited. It has truly grown from the original idea I presented to the Corps but we are very excited for the opportunity to help showcase the Corps. We reached out the elementary school in Montgomery County to invite them and just finished this past week going to the schools and talking to the students. Students, kids, faculty and staff will have the opportunity to participate in Corps activities like marching, drill, dressing like a cadet and even a chance to run the obstacle course for \$5. Money raised will be going to the Wounded Warrior Project. The Corps has already said that this is something they are going to adopt as an annual event and hopes that it grows to be a staple event at Virginia Tech. They hope that the rest of the school will understand them more from this event and get to learn more about who they are. We believe this is a big step in helping break down barriers between the Corps and Civilians.

I want to thank all of you for your commitment to Virginia Tech and everything you do to help make this a better place. We as students appreciate all the thought that goes into big decisions you make and that of senior leadership. Over the course of the year I am more than happy to help any of you in any way that I can. I hope that you will come to campus more often outside of board meeting and get to know the students from different walks of life. I am honored to represent the undergraduate student population for the next year and excited for all the opportunities I will have to make a difference. I look forward to working with you all for the next year and please refrain from asking me about graduation because I may start to tear up and cry right away.

# Constituency Report Brett R. Netto Graduate Student Representative to the Virginia Tech Board of Visitors September 10, 2017

Good afternoon Rector Tracey, President Sands, distinguished members of the Board, administration, and guests. I wish to express appreciation to the Board for selecting me to serve in this role for the 2017-2018 academic year. While my time in this role is short, I look forward to closely working with each of you and developing professional and personal relationships.

Approximately 1,800 new students started their graduate degrees at Virginia Tech this semester across all campuses and online. I had the wonderful opportunity to speak to some of them via: various departmental orientations and the Graduate School orientation on the Blacksburg campus, the student life showcase organized and sponsored by the Roanoke Graduate Student Association at the Virginia Tech Carilion Research Institute, and several orientations in the North Capitol Region. All of them are eager to learn and conduct research. New and returning graduate students will always be reminded to also enjoy their time at Virginia Tech outside of the classroom and the research laboratory. The returning graduate students on assistantships are thankful for the two percent cost of living increase in their stipends that you approved during the March 2017 meeting. However, not all eligible graduate students received this increase due to a misinterpretation by some programs that it was a merit-based increase. The Graduate School and other graduate student leaders have been immensely helpful in making sure that students and graduate programs understand the intent of the increase.

Like my predecessor, I am deeply concerned about the health and wellness of my fellow graduate students and have several initiatives that lie within this broad category. While she is not here, I would like to express my thanks and gratitude to Tara Reel because two concrete examples have come about because of her hard work. The first is that Room G in the Graduate Life Center will finally become the health and wellness space it was originally designated to be in 2005. It will be accessible by graduate students 24/7 and finishing touches are being completed currently. For the second outcome of Tara's work, I am excited to announce that Cook Counseling is providing services for students at our Roanoke campus. Dr. Chris Flynn is travelling to the campus, at least once a week, for scheduled appointments with students and for walk-in hours. The services in Roanoke are in addition to weekly counseling services that have been offered at the Graduate Life Center for over ten years. Also, once a month the DSA Hokie Wellness team will offer health and wellness educational experiences for students.

The stress of graduate school is at times so overwhelming many students just want it to end and survive through any possible means. I am reminded of the words constantly spoken by Dean Karen DePauw in that she wants to change the rhetoric regarding graduate education from "surviving to thriving." The high levels of stress encountered in graduate studies can affect academic progress. It is now the time for us to be proactive instead of reactive in confronting some of the causes that lead to this survival mentality.

For the past year, I have been working with Dean Karen DePauw as part of an anti-academic bullying task force. Academic bullying, or hazing, as it is sometimes known, is unacceptable at Virginia Tech. It is belittling or intimidating behavior in a university setting that undermines, isolates, humiliates, or denigrates an individual in a manner that causes emotional distress and compromises a

person's self-esteem, health, feelings of safety, and productivity. It is one of a spectrum of behaviors that contributes to a hostile work environment. Initiatives will be implemented this semester with the backing of the Faculty Senate and a website with resources to disrupt academic bullying and a portal to submit concerns about academic bullying, either experienced or observed, will be online very soon. For the sake of time, anyone is more than welcome to speak to Dean DePauw or me individually to learn more on this subject.

I have also spoken with Dr. Muhammad Hajj, Associate Dean for Graduate Education, in regards to eventually implementing a mandatory GTA Workshop module that would educate GTAs to help detect the warning signs of stress and hopefully prevent the ill effects commonly associated with stress. The idea is that this would be taught to a distinct group of graduate students, who in turn are in contact with the larger communities of their fellow graduate students and the undergraduates they teach. The hope is to increase student's understanding of themselves and others within and outside of their silos. In other words, having Hokies looking out for other Hokies

Finally, there is a palpable tension as we begin this new academic year due to the events in Charlottesville and the more recent announcement concerning the phasing out of DACA. Virginia Tech is known as a university that promotes freedom of speech and openness to ideas except when it concerns the advocating of violence. In reference to DACA, the Student Government Association; the Graduate Student Association; and the Faculty Senate have issued a joint statement supporting this community of students at Virginia Tech. Similar to what is being offered to faculty, the Graduate School's Office of Recruitment and Diversity Initiatives, through Dr. Christian Matheis, is offering workshops to graduate teaching assistants regarding conscientious conversations in the classroom.

I also understand that Dr. Patty Perillo is leading a working group, which includes leadership within the Graduate School amongst many others, to prepare for what the university might do if an incident like Charlottesville were to take place at Virginia Tech or in the surrounding communities of Blacksburg and Christiansburg. I commend the administration for actively meeting about these concerns and for having the prudence to discuss these difficult issues. I know that the safety of our students is always at the forefront of any decision made by the administration, but I ask them to consider having students at the table to have their voices be a crucial role in these difficult conversations.

Thank you for the opportunity to share my report with you today. Again, I look forward to our collaboration in the coming year.

Respectfully,

Brett R. Netto

## Staff Senate Constituency Report Virginia Tech Board of Visitors September 10, 2017 Presented by Robert Sebek, Staff Senate President

Good afternoon Rector Treacy, members of the Board of Visitors, President Sands, administrators and distinguished guest. It is an honor to present to you issues and concerns from staff at Virginia Tech.

Before attending the BOV retreat last month, I had opportunities to meet with staff at a couple of our National Capital Region campuses to share information on Staff Senate and the governance process and to learn about unique issues faced by staff outside of Blacksburg. A lack of communication and a resulting feeling of isolation were mentioned by both groups I met with. The Senate will be exploring ways of improving communication. We have already been broadcasting our monthly meetings online so that remote staff could participate. We will be following up with University Relations to review the daily email sent to all staff to ensure our remote campuses are not left out.

The Staff Senate's largest concern this year is the reorganization of Human Resources and the search for a Vice President for Human Resources. Staff are worried we will not have opportunities to be involved in these processes. Senate leadership wants to share our need for a strong, effective Human Resources department that can consistently enforce policies and provide accurate information to all the staff of the university, particularly as the university—and its workforce—grows.

This fall, we expect HR to administer the latest round of the University Climate Survey, which measures the workplace climate in several categories. The Commission on Staff Policies and Affairs is analyzing trends from the last four results of the biennial survey to identify issues that commission should take on this year.

Finally, the Senate will be looking at issues that result from the economic diversity of our staff. Many are universal concerns for staff: commuting, parking, child care, work/life balance, insurance, and retirement savings, but are acutely felt by the lower paid staff of the university. Some of these issues can be alleviated through better awareness of programs and support, but some will need to be addressed through changes in policies. The Senate will work with relevant commissions to investigate solutions and send proposed policy changes through the governance system. I look forward to working with Board members towards solutions to improve conditions for staff at the university.

Respectfully submitted,

Robert Sebek President, Staff Senate

#### Faculty Constituency Report Virginia Tech Board of Visitors September 10, 2017

Hans Robinson, President—VT Faculty Senate

Good afternoon Rector Treacy, President Sands, members of the Board, Provost Rikakis, and all other gathered here today.

We are here to discuss the internal affairs and workings of Virginia Tech, and I will spend the bulk of my report on an issue that I believe is of great relevance to this topic. First, though, I would like to briefly turn to something that was regrettably imposed on us from the outside. This past Tuesday, president Trump announced that he would be ending the Deferred Action for Childhood Arrivals program, or DACA, which allows law-abiding undocumented immigrants who were brought here as children to obtain a measure of protection against deportation from the country where they have lived most of their lives. This affects nearly 800,000 people, including some 30 hokies.

Also on Tuesday, the Faculty Senate, at the instigation of the Graduate Student Assembly and the Student Government Association, unanimously passed a joint resolution expressing our support for the hokies who are affected by DACA's elimination and face being uprooted from their life and the only home many of them have ever known. They are as much hokies as we are, and we welcome them here. We believe that DACA is a humane and beneficial policy that should be kept in place until comprehensive immigration reform can be signed into law. We also believe that all of our students, regardless of their background or country of origin, have the right to try to improve their lives, and are equal members of our community. The decision to end DACA is antithetical to these values.

My second topic is perhaps more prosaic, but as I stated initially, quite relevant to our proceedings today.

I think it is fair to say that the university is in the communications business. To be a good teacher is to be a good communicator, and no matter how brilliant your scholarship may be, it means little unless you are able to communicate your findings to your peers and to the public. But as crucial as good communications is to the core missions of the university, good internal communication between the administration and the faculty is just as important to the long-term health of the university. This is particularly true in a period of rapid change such as this one, where we face multiple major initiatives being implemented at the same time. They include, for example:

- A new, quite complex, and, from what I can gather, uniquely structured budget model now coming into place across the university;
- a substantial growth in student enrollment, which will require careful planning and a sustained effort over years to accommodate while maintaining instructional quality; and
- the transdisciplinary Destination Areas, which will have profound implications for Virginia Tech's research enterprise and its curriculum.

Faculty, along with staff, are largely responsible for implementing and responding to these initiatives at the ground level. If we are to do so effectively, applying our expertise, our talent, and our creativity, the full context and goals of each initiative needs to be clear to us. In other words, it not enough to just understand the minutiae of whatever task lies before us, we also need a clear accounting of the analysis that motivates the need for change, the reasoning behind the design of the initiative, and, most importantly, the goals we are trying to achieve. I know from many conversations with faculty, that to a large extent, these things are unclear or unknown to most of us.

Not having this information is also deleterious for another reason. When my six-year-old looks at her dark closet at bedtime, her mind fills the spaces she cannot see with all kinds of scary beasts and monsters. We like to think of ourselves as wiser and more rational, but when we are faced with an information void, many of us tend to react the same way as my daughter, and fill it with our worst suspicions and most cynical assumptions. I wish I could say this is not happening here at Virginia Tech, but I regret to report that in many cases, it is.

The reason for this is simple. As faculty, our time is already overcommitted—we are so busy with teaching, research, and running programs and departments that there is little time or mental energy left over for administrative changes. The result is that each new proposed action is liable to be met with fear and instinctive rejection, unless it motivated and explained with clarity and precision.

For these reasons, I would like to urge the administration to make communicating to the university community the whys, the hows, and the wheretos behind your initiatives a high priority and central component of your plans for the upcoming year. If you do so in a thoughtful and concerted manner, I believe you will be rewarded with an energized and involved faculty.

Now, let me be clear. I am very optimistic about the future. I bring this issue to your attention because I believe it needs to be addressed, but I also believe this is eminently doable, and that the payoff would be large. After all, everyone I have met with and spoken to wants this institution to be the best it can be, and is willing to contribute their work and talent toward that goal. We may not always agree with the exact means of getting there, but I am confident I speak for the faculty when I say that we are as ready as ever to be a fully engaged partner in taking Virginia Tech to an even better place than where it already is.

Thank you.