

## **Virginia Tech Board of Visitors Meeting September 9, 2013**

### **Minutes**

- A. **Minutes:** Academic Affairs Committee
- B. **Resolution:** Ratification of Changes to the 2013-2014 Faculty Handbook
- C. **Resolution:** Approval of the Virginia Tech Winter Session
- D. **Minutes:** Buildings and Grounds Committee
- E. **Resolution:** Approval for Appointment to the Virginia Tech/Montgomery Regional Airport Authority
- F. **Minutes:** Finance and Audit Committee
- G. **Resolution:** Approval of Potential State Budget Initiatives for 2014-2016
- H. **Resolution:** Approval of the Year-to-Date Financial Performance Report (July 1, 2012 - June 30, 2013)
- I. **Resolution:** Authorizing the Signature of Contractual Documents
- J. **Resolution:** Ratification of the 2014-2020 Capital Outlay Plan
- K. **Resolution:** Approval of Funding for Upper Quad Project
- L. **Resolution:** Approval for Planning the Marching Virginians Practice Facility
- M. **Minutes:** Research Committee
- N. **Resolution:** Approval for Exclusion of Certain Officers/Directors
- O. **Minutes:** Student Affairs and Athletics Committee
- P. **Report:** Research and Development Disclosure
- Q. **Resolution:** ACC Governing Board Annual Certification
- R. **Resolution:** Approval of the 2014-2020 Six-Year Plan
- S. **Resolution:** Honoring Michele L. Duke
- T. **Resolution:** Honoring George C. Nolen
- U. **Resolution:** Honoring Paul W. Rogers, Jr.
- V. **Minutes:** Presidential Search Committee (July 17, 2013, and August 29, 2013)
- W. **Resolution:** University President Job Description
- X. **Resolutions:** Naming of University Facilities (32)
- Y. **Resolution:** Reappointment of Alumni Distinguished Professor (1)
- Z. **Resolutions:** Emeritus and Emeriti Status (12)
- AA. **Resolutions:** Endowed Chairs, Professorships, or Fellowships (4)



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

CC. [Reports](#): Constituent Remarks



## MINUTES

September 9, 2013

The Board of Visitors of Virginia Polytechnic Institute and State University met on Monday, September 9, 2013, at 1:15 p.m. in Torgersen Boardroom, Virginia Tech Campus, Blacksburg, Virginia.

### **Present**

Mr. James L. Chapman, IV  
 Dr. Nancy V. Dye  
 Mr. William D. Fairchild, III  
 Mr. Cordel Faulk  
 Mr. B. Keith Fulton  
 Mr. William B. Holtzman  
 Mr. John C. Lee, IV  
 Ms. Suzanne S. Obenshain  
 Ms. Deborah Leigh Martin Petrine (Vice-Rector)  
 Mr. Michael J. Quillen (Rector)  
 Mr. John G. Rocovich, Jr.  
 Dr. J. Thomas Ryan  
 Mr. Steve Sturgis

### **Absent**

Mr. Dennis H. Treacy

Dr. Joe Merola, Faculty Representative  
 Ms. Sue Teel, Staff Representative  
 Mr. Nick Warrington, Graduate Student Representative  
 Ms. Erica Wood, Undergraduate Student Representative

Also present were the following: Dr. Charles Steger, Mr. Ralph Byers, Ms. Shelia Collins, Ms. Wanda Dean, Dr. Karen DePauw, Deputy Chief Gene Deisinger, Dr. John Dooley, Dr. Jack Finney, Dr. Elizabeth Flanagan, Chief Wendell Flinchum, Deputy Chief Kevin Foust, Dr. Guru Ghosh, Ms. Natalie Hart, Ms. Kay Heidbreder, Mr. Larry Hincker, Mr. Tim Hodge, Ms. Sharon Kurek, Dr. Will Lewis, Ms. Heidi McCoy, Dr. Mark McNamee, Dr. Scott Midkiff, Mr. Mike Mulhare, Mr. George Nolen, Ms. Kim O'Rourke, Dr. Patty Perillo, Dr. Ellen Plummer, Mr. Minnis Ridenour, Ms. Savita Sharma, Mr. Dwight Shelton, Ms. Sandra Smith, Mr. Jeb Stewart, Dr. Tom Tillar, Dr. Sherwood Wilson, Mr. Chris Yianilos, faculty, staff, students, guests, and reporters.

\* \* \* \* \*

Rector Quillen introduced new Board members Mr. James L. Chapman IV, Dr. J. Thomas Ryan, and Mr. Steve Sturgis, and new Board constituent representatives Dr. Joseph Merola (Faculty Representative), Ms. Erica Wood (Undergraduate Student Representative), and Mr. Nick Warrington (Graduate Student Representative). Ms. Sue Teel is serving a second term as president of the Staff Senate and thus will continue as the Staff Representative for another year.



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Rector Quillen announced the Board of Visitors' meeting dates for 2014:

March 23-24, 2014

June 1-2, 2014

Sept. 7-8, 2014

Nov. 9-10, 2014

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Rector Quillen asked for a motion to approve the minutes of the June 2, 2013, meeting as distributed. The motion was made by Mr. Rocovich and seconded by Mr. Lee. The minutes were approved.

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### **REPORT OF THE ACADEMIC AFFAIRS COMMITTEE**

Rector Quillen called on Ms. Obenshain for a report of the Academic Affairs Committee. (Copy filed with the permanent minutes and marked Attachment A.)

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

#### **Resolution for Ratification of Changes to the 2013-2014 Faculty Handbook**

**That the 2013-2014 Faculty Handbook be approved.** (Copy filed with the permanent minutes and marked Attachment B.)

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

#### **Resolution for Approval of the Virginia Tech Winter Session**

**That the resolution to approve the implementation of Virginia Tech's Winter Session to be inaugurated in January 2014 be approved.** (Copy filed with the permanent minutes and marked Attachment C.)

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## REPORT OF THE BUILDINGS AND GROUNDS COMMITTEE

Rector Quillen called on Mr. Rocovich for a report of the Buildings and Grounds Committee. (Copy filed with the permanent minutes and marked Attachment D.)

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

### Resolution for Approval of Appointment to the Virginia Tech/Montgomery Regional Airport Authority

**That the resolution reappointing L. Allen Bowman as the at-large director to the Virginia Tech/Montgomery Regional Airport Authority for a four-year term ending August 31, 2017, be approved.** (Copy filed with the permanent minutes and marked Attachment E.)

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## REPORT OF THE FINANCE AND AUDIT COMMITTEE

Rector Quillen called on Ms. Petrine for the report of the Finance and Audit Committee. (Copy filed with the permanent minutes and marked Attachment F.)

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

### Resolution for Approval of Potential State Budget Initiatives for 2014-2016

**That the university administration be authorized to submit these budget initiatives to the Commonwealth for inclusion in the 2014-16 Executive Budget proposal in accordance with state instructions and consistent with the initiatives contained herein.** (Copy filed with the permanent minutes and marked Attachment G.)



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

**Resolution for Approval of the Year-to-Date Financial Performance Report  
(July 1, 2012 – June 30, 2013)**

**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, 2012, through June 30, 2013, and the Capital Outlay report be accepted.** (Copy filed with the permanent minutes and marked Attachment H.)

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

**Resolution Authorizing the Signature of Contractual Documents**

**That the proposed resolution authorizing contractual signature authority be approved.** (Copy filed with the permanent minutes and marked Attachment I.)

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

**Resolution for Ratification of the 2014-2020 Capital Outlay Plan**

**That the Six-Year Capital Outlay Plan for the period 2014 through 2020 as submitted to the state be ratified.** (Copy filed with the permanent minutes and marked Attachment J.)

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

**Resolution for Approval of Funding for Upper Quad Project**

**That the resolution authorizing Virginia Tech to design and construct the Upper Quad Residential Facilities project be approved.** (Copy filed with the permanent minutes and marked Attachment K.)

Rector Quillen commended Dr. Wilson and his staff for an excellent job.

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

**Resolution for Planning the  
Marching Virginians Practice Facility**

**That the resolution authorizing Virginia Tech to design the Marching Virginians Practice Facility be approved.** (Copy filed with the permanent minutes and marked Attachment L.)

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**REPORT OF THE RESEARCH COMMITTEE**

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

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As part of the Research Committee report, approval of the following resolution was moved by Mr. Lee, seconded by Mr. Rocovich, and approved unanimously.

**Resolution for Approval of  
Exclusion of Certain Officers/Directors**

**That this resolution dealing with personnel security clearance be adopted.** (Copy filed with the permanent minutes and marked Attachment N.)



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REPORT OF THE STUDENT AFFAIRS AND ATHLETICS COMMITTEE

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

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PRESIDENT’S REPORT

President Steger called the Board’s attention to this year’s common book, *Little Princes* by Conor Grennan, which all freshmen will read; each Board member was given a copy.

President Steger announced that the Joint Legislative Audit and Review Commission (JLARC) will be releasing today the second report in its series of reports on college costs. This one covers auxiliary fees, including athletics, dining, housing, and debt service. JLARC is the oversight agency of the Virginia General Assembly. Since the report is likely to be covered by the press, he wanted the Board to know how Virginia Tech compares to other institutions.

- Virginia Tech has the lowest comprehensive fee in Virginia and the lowest percentage of tuition and mandatory fees supporting our auxiliaries.
- We have the lowest athletic fee in Virginia, and the lowest percentage of tuition and mandatory fees supporting our athletics program—two percent, while the state average is twelve percent.
- For dining, we have the third lowest estimated price per meal compared to the other four-year institutions in the state and the highest percentage of dining meals actually consumed.
- We have the third lowest housing charge compared to the other institutions.
- JLARC is making several recommendations for all institutions, and Virginia Tech is already in compliance with them. For example, we are one of the few institutions that is completely transparent with respect to our non-Educational & General fees—a description of each fee can be found on our website. We also have a Board of Visitors policy on debt service for our auxiliaries, which some others do not have. He concluded that he believes this demonstrates clearly the efforts we have made over the years to keep our charges to students as low as possible.

Lastly, President Steger announced that for the first time the Atlantic Coast Conference (ACC) Council of Presidents will be meeting on campus September 10-11. As Chairman of the ACC Council of Presidents, he looks forward to welcoming the group to campus.

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### **Report of Research and Development Disclosures**

As part of the President's report, President Steger shared with the Board the **Report of Research and Development Disclosures** – for information only, no action needed. (Copy filed with the permanent minutes and marked Attachment P.)

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As part of his report, President Steger called the Board's attention to the **Atlantic Coast Conference Governing Board Annual Certification**, which will be signed by the President and the Rector. (No Board action required.) (Copy filed with the permanent minutes and marked Attachment Q.)

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### **Presentation on the 2014-2020 Six-Year Plan**

President Steger called on Mr. Dwight Shelton, who gave a presentation on the 2014-2020 Six-Year Plan. Mr. Shelton reminded the Board that the Higher Education Opportunity Act of 2011 requires each public institution of higher education in Virginia to develop and submit an academic, financial, and enrollment plan covering a six-year period. Six-year plans aid state officials in understanding institutional resource needs and serve as a starting point for Executive Budget development. These plans are required to be submitted for review by July 1 of each odd year, with the goal of finalizing plans by October 1. Revisions are done in even years. This being an odd year, the university submitted the plan by July 1, 2013, to the State Council of Higher Education for Virginia (SCHEV), as required. The Commonwealth's process requires approval of each institution's six-year plan by that institution's Board of Visitors. Virginia Tech has responded and prepared these plans in accordance with the requirements of the Higher Education Opportunity Act of 2011 and SCHEV guidelines. University representatives met and reviewed the plans with state officials on August 20. Mr. Shelton concluded that Virginia Tech's plan was well received by the state officials, and the new process envisions an iterative discussion with the Commonwealth culminating in a final plan by October 1.

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As part of the President's report, approval of the following resolution was moved by Mr. Rocovich, seconded by Mr. Faulk, and approved unanimously.

### **Resolution for Approval of the 2014-2020 Six-Year Plan**

**That Virginia Tech's six-year academic, financial, and enrollment plan be approved.** (Copy filed with the permanent minutes and marked Attachment R.)



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As part of the President's report, approval of the following three resolutions was moved by Mr. Rocovich, seconded by Mr. Lee, and approved unanimously.

**Resolution of Appreciation  
Honoring Shelley Duke**

**That this resolution recognizing Michele L. Duke (Shelley) for her service as a member of the Board of Visitors be approved.** (Copy filed with the permanent minutes and marked Attachment S.)

**Resolution of Appreciation  
Honoring George Nolen**

**That this resolution recognizing George Nolen for his service as a member of the Board of Visitors be approved.** (Copy filed with the permanent minutes and marked Attachment T.)

**Resolution of Appreciation  
Honoring Paul Rogers**

**That this resolution recognizing Paul W. Rogers, Jr. for his service as a member of the Board of Visitors be approved.** (Copy filed with the permanent minutes and marked Attachment U.)

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**REPORT OF THE PRESIDENTIAL SEARCH COMMITTEE**

Rector Quillen called on Mr. George Nolen, Chair of the Presidential Search Committee, and Mr. Minnis Ridenour, Senior Fellow for Resource Development, who is assisting with the search process. Mr. Nolen updated the Board on the work of the committee.

**Minutes from Presidential Search Committee Meeting - July 17, 2013**

**Minutes from Presidential Search Committee Meeting - August 29, 2013**

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



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### Approval of the University President Job Description

Rector Quillen asked the Board members for any comments on the University President Job Description that they had received. There being no comments, approval of the job description was moved by Mr. Rocovich, seconded by Mr. Lee, and approved unanimously.

(Copy filed with the permanent minutes and marked Attachment W.)

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### 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:

1. 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. Discussion or consideration of the acquisition of real property.

all pursuant to the following subparts of 2.2-3711 (A), Code of Virginia, as amended, .1, .3, .7, and .10.

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



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### **Motion to Return to Open Session**

Following the Closed Session, members of the press, students, and the public were invited to return to the meeting. Rector Quillen 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 Code of Virginia requires a certification by the Board of Visitors that such closed meeting was conducted in conformity with Virginia law;

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

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



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Upon motion by Mr. Rocovich and second by Mr. Faulk, unanimous approval was given to the resolutions for approval of **Naming of University Facilities (32)** as considered in Closed Session. Note: Mr. Fulton and Mr. Holtzman abstained from voting to avoid any conflict of interest arising from resolutions pertaining to them or their family members. (Copies filed with the permanent minutes and marked Attachment X.)

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Upon motion by Ms. Obenshain and second by Mr. Faulk, unanimous approval was given to the following sets of resolutions:

**Reappointment of Alumni Distinguished Professor (1)** as considered in Closed Session. (Copy filed with the permanent minutes and marked Attachment Y.)

**Approval of Emeritus status (12)** as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment Z.)

**Approval of Endowed Chairs, Professorships, or Fellowships (4)** as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment AA.)

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

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**Litigation Report**

**Not for Approval**



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**Constituent Reports (No action required.)**

- **Undergraduate Student Representative to the Board – Ms. Erica Wood**
- **Graduate Student Representative to the Board – Mr. Nick Warrington**
- **Staff Representative to the Board – Ms. Sue Teel**
- **Faculty Representative to the Board – Dr. Joe Merola**

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

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The date for the next regular meeting is November 17-18, 2013, in Blacksburg, Virginia.

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The meeting adjourned at 4:03 p.m.

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Michael J. Quillen, Rector

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Kim O'Rourke, Secretary



## **Committee Minutes**

### **ACADEMIC AFFAIRS COMMITTEE**

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

**September 9, 2013**

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

Suzanne Obenshain (Chair), Nancy Dye, Tom Ryan, Nick Warrington (graduate student representative). Also in attendance: Joe Merola (faculty representative).  
Regrets: Dennis Treacy

#### **Guests:**

Matthew Banfield, Kris Bush, Willie Caldwell, Wanda Hankins Dean, Adrien DeLoach, Karen DePauw, Jack Finney, Guru Ghosh, Rachel Holloway, William Lewis, Ellen Plummer, Karen Eley Sanders, Gerhardt Schurig, Ken Smith, Judy Taylor, Tod Whitehurst, Ashley Wood

#### **OPEN SESSION**

##### **1. Welcome.**

Suzanne Obenshain welcomed committee members and guests.

##### **2. Approval of Minutes.**

A motion was made and passed unanimously to approve the minutes of the committee's June 3, 2013 meeting.

##### **3. Report of Closed Session Action Items.**

The committee approved a resolution to move into closed session to consider one resolution to approve a reappointment of an Alumni Distinguished Professor; 12 resolutions to approve appointments to emeritus status; four resolutions to approve appointments to endowed chairs, professorships, or fellowships; and to ratify the faculty personnel changes report.

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



#### **4. Provost's Update.**

Mark McNamee, senior vice president and provost, provided the committee with preliminary data regarding fall student enrollments: 17,599 in-state undergraduates, 6,559 out-of-state undergraduates for a total of 24,158 students. The university enrolled 3,411 in-state graduate students and 3,220 out-of-state graduate students, for a total of 6,631 students. In addition, the university enrolled 322 in-state and 127 out-of-state doctor of veterinary medicine students. These enrollments total 31,238 students.

Dr. McNamee updated the committee on executive searches. Dr. Robert Sumichrast has begun his appointment as dean of the Pamplin College of Business. Dr. Cyril Clarke will begin his appointment as dean of the Virginia-Maryland Regional College of Veterinary Medicine on October 1, 2013. Semi-finalists have been identified and invited for interviews for the position of vice president of the National Capital Region. Completing the reorganization of the office of the senior vice president and provost, Rachel Holloway has been appointed as vice provost for undergraduate academic affairs.

The academic affairs committee reviewed its accomplishments and projected its agenda for the upcoming academic year.

Dr. McNamee reviewed new academic initiatives and highlighted the effectiveness and revenue production of summer sessions, Summer Academy, and Winter Session. These programs are popular with students and use university facilities and resources year-round.

Dr. McNamee reviewed the report of the Joint Legislative and Audit Review Commission (JLARC). JLARC is the oversight agency of the Virginia General Assembly, established to evaluate the operations and performance of state agencies and programs. JLARC plans to complete its study of the public institutions in the Commonwealth by November of 2014. The JLARC study includes five reports:

1. Trends in Higher Education Funding, Enrollment, and Student Costs
2. Review of Auxiliary Enterprises and Cost of Student Life
3. Review of Academic Cost and Efficiency
4. Review of Administrative Efficiency
5. Strategies and Practices to Facilitate Efficient and Effective Public Higher Education in Virginia

#### **5. Faculty Affairs.**

##### **a. Resolution to Approve the 2013-2014 Faculty Handbook.**

Dr. Jack Finney, vice provost for faculty affairs, described the editorial and policy changes reflected in this year's faculty handbook.



**The resolution to approve the 2013-2014 Faculty Handbook was approved unanimously by the committee.**

**6. Academic Affairs.**

**a. Resolution to Approve Winter Session.**

Ms. Wanda Hankins Dean, vice provost for enrollment and degree management, described the plans for the Winter Session that will begin in 2014. Winter Session will offer students additional opportunities for taking classes from January 2 through January 17. Courses will be offered that meet the Curriculum for Liberal Education requirements and include traditional “face-to-face” classes, off-campus study abroad and “winter experiences,” and on-line and blended classes (on-line and face-to-face).

**The resolution to approve Winter Session was approved unanimously by the committee.**

**b. Virginia-Maryland Regional College of Veterinary Medicine.**

Dr. McNamee acknowledged Dr. Schurig’s ten years of service as dean. Dr. Gerhardt Schurig, professor and outgoing dean of the Virginia-Maryland Regional College of Veterinary Medicine, provided information on the status of the college. College enrollment has increased 8% since 2011, new faculty hires are bringing increased research productivity, and important accreditations are in place. The Veterinary Teaching Hospital will expand services into Roanoke providing additional learning opportunities for students. The Equine Medical Center has been reorganized and sustainability plans are in place. Plans continue for the new One Health Translational Medicine building.

**7. Adjournment.**

**There being no further business, the meeting adjourned at 10:30.**





# **Virginia-Maryland Regional College of Veterinary Medicine**

## **Progress Report**

**Board of Visitors, Academic Affairs Committee  
September 9, 2013**

**Gerhardt Schurig, Professor and Dean**



# Accreditations

- **American Veterinary Medical Association (AVMA)** – next site visit of the Council on Education is October 2014
- **Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC)** – 2013
- **American Animal Hospital Association (AAHA)** – 2013
- **Council on Education for Public Health (CEPH)** – July 2013 for the Masters of Public Health Degree Program, part of the new Department of Population Health Sciences
- **American Association of Veterinary Laboratory Diagnosticians (AAVLD)** – expected in 2015



# Facilities

- **Infectious Disease Research Facility** - 2011; 24,000 GSF; \$10.1M; \$6.1M financed by College of Veterinary Medicine (CVM)
- **Veterinary Medicine Instruction Addition** – 2012; 30,000 GSF; \$14.1M financed by CVM student facility fee
- **Multi-disciplinary Labs** – renovated 2012; CVM paid \$1.7M
- **Classrooms** – renovated 2010-12; CVM paid \$200K
- **Community Practice** - renovated 2011; CVM paid \$300K
- **Vet Med Café, Commons and Library** – renovations in 2013 and 2014; CVM to pay all at \$750K
- **New Faculty Offices** – renovations from 2014 – 2017; CVM to pay all at \$3M
- **MRI Suite** – renovated 2012; \$800K; paid by Veterinary Teaching Hospitals (VTH) revenue



# Growth

- **Enrollment** – Now in second year of four-year planned increase of class size from 95 to 120
- **Hired 19 New Faculty since 2011** – 8 with a high research assignment to boost research productivity



# **Veterinary Students**

- **Applications in 2013 from qualified students increased by 8% to 1,226**
- **Average GRE scores in top 5:** only Cornell, UC Davis, Tufts, and Penn are higher
- **North American Veterinary Licensing Examination (NAVLE):** 100% pass rate in 2012
- **In 2013, moved from 19<sup>th</sup> to 4<sup>th</sup> in ranking of where students choose to apply**



# Veterinary Teaching Hospital

- 2012-13 Total Cases: 69,378 (13,045 in-house)  
(56,333 ambulatory)

- 2012-13 Finances:

Revenue	\$ 8,850,000
Expense	<u>\$ 8,600,000</u>
Net Revenue	\$ 250,000

- Net Revenue invested in facilities and equipment: Magnetic Resonance Imaging services, Oncology, Lab Information Systems, Electronic Medical Records
- Reinforcing practitioner referrals from Virginia, Maryland, West Virginia, National Capital Region, and other states
- Satellite Clinic in Roanoke: expanding services and training opportunities for students in clinical specialties



# Equine Medical Center

- **2012-13 Cases: 2,385** - down from 3,000

- **2012 – 13 Hospital:**

<b>Revenue</b>	<b>\$ 3,930,000</b>
<b>Expense</b>	<b><u>4,430,000</u></b>
<b>Deficit</b>	<b>\$ (500,000)</b>

- **New Interim Director – Dr. Michael Erskine**
- **Reorganized; implemented faculty and staff early retirements**
- **Projected deficit reduced to \$300,000 for 2013-14**
- **Continue to move toward sustainability**



# **One Health Translational Medicine** **Building**

- **Feasibility Study in process**
- **Veterinary Teaching Hospital Expansion**
- **Partnership with other colleges**
- **New research labs; moves research from the lab to the clinic**
- **One Health – unique opportunity**
- **Nuclear Medicine**
- **Architectural conception – next slide**





# One Health Translational Medicine Building





# Instruction Addition and One Health Translational Medicine Buildings





## **RESOLUTION TO APPROVE THE 2013-2014 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**, to ensure that the Faculty Handbook reflects the policies passed by the board and that any changes to the Handbook are appropriate and accurate, the board annually reviews and approves a revised edition of the Faculty Handbook;

**NOW, THEREFORE, BE IT RESLOVED** that the Virginia Tech Board of Visitors hereby approves the September 9, 2013 version of the Faculty Handbook that incorporates the revisions summarized in the attachment.

### **RECOMMENDATION:**

That the 2013-2014 Faculty Handbook be approved.

September 9, 2013



## **SIGNIFICANT REVISIONS INCORPORATED INTO THE 2013-2014 FACULTY HANDBOOK**

### **1.0 Mission and Governance of the University**

Editorial changes: titles, adjustments in responsibilities

1.2.16 Added Undergraduate Curriculum Committee (passed by University Council on 11/26/12)

1.6.6 Amended to reflect the elimination of the position of vice president and dean for undergraduate education

### **2.0 Employment Policies and Procedures for All Faculty**

Editorial changes: titles; and strike the word “special” from research faculty. Passed University Council on 12/03/12: Resolution to remove the word “special” from “special research faculty” such that the name of this type of faculty members is “research faculty”.

2.6.5 Added language to reflect Winter Session (passed by University Council May 6, 2013)

2.7.7 Edited to reflect technical changes regarding the federal Genetic Information Nondiscrimination Act (changes approved by the BOV June 3, 2013)

### **3.0 Employment Policies and Procedures for Tenured and Tenure-Track Faculty**

Editorial changes: title changes

3.5.5 Added language to reflect addition of academic vice presidents to policy on reviews (university policy 6105); removed procedural language which can be found outlined in the policy.

### **4.0 Employment Policies and Procedures for Faculty with Continued Appointment or on the Continued Appointment-Track**

Editorial changes: title changes

### **5.0 Employment Policies and Procedures for Non-Tenure-Track Instructional Faculty**

Editorial changes: title changes

5.1.4 Added language allowing for professors of practice to chair graduate committees (resolution passed University Council April 29, 2013)



## **6.0 Employment Policies and Procedures for Research Faculty**

Editorial changes: changes in location of offices, strike the word “special”, removed descriptive tables which can be found on the Office for Research website, clarified language regarding search processes

## **7.0 Employment Policies and Procedures for Administrative and Professional Faculty**

Editorial changes: title changes

## **8.0 Employment Policies and Procedures for Graduate Assistants**

Editorial changes: added language regarding resources available to graduate assistants

## **9.0 Instruction-Related Policies**

Editorial changes: clarifying language regarding auditing classes, the assessment of tuition and fees, confidential student records

9.1.1 Added language to reflect the addition of Winter Session (passed University Council May 6, 2013)

9.16.8 Added language to reflect changes to the Academy of Faculty Service (passed University Council May 6, 2013)

## **10.0 Research, Creative, and Scholarly Activities**

Editorial changes: title changes

10.1.5 Language changed to reflect new federal research compliance procedures

10.1.6 Language changed to reflect new federal research compliance procedures

10.2.3 Added language regarding research integrity officer

10.5 – 10.5.4 Replaced language with policy language passed by Board of Visitors on June 3, 2013.

## **11.0 Faculty Benefits Program**

Editorial changes: edits for clarity, edits to language to reflect change in names of units within Human Resources, changes in language in state retirement plan effective January 1, 2014.

11.1.3 Edited to reflect revisions in the Virginia Retirement System (VRS) effective January 1, 2014.

11.1.3.1 Edited to reflect revisions in the Virginia Retirement System (VRS) effective January 1, 2014



11.1.3.1.1 New language describes the VRS Hybrid Retirement Plan, effective in the Commonwealth on January 1, 2014.

11.1.3.2 Edited to reflect revisions in the Virginia Retirement System (VRS) effective January 1, 2014

11.1.4 Edited for clarity and to parallel language in state policy and procedures

11.2.1 Edited for clarity and to parallel language in state policy and procedures

11.2.3 Edited for clarity and to reflect changes in state and federal health coverage policy and procedures

11.2.4 Edited for clarity and to parallel language in state policy and procedures

11.2.5 Edited for clarity and to parallel language in state policy and procedures

11.2.7 Edited for clarity

11.2.8 Edited for clarity

11.2.10 New language regarding Optional Life Insurance

11.3.3.1 New language regarding the reporting of emergencies

## **12.0 Additional Information**

Editorial changes: title changes



## **RESOLUTION TO APPROVE THE VIRGINIA TECH WINTER SESSION**

**WHEREAS**, the university is committed to advancing the goals outlined in the Virginia Higher Education Opportunity Act of 2011 to improve student access to higher education; and

**WHEREAS**, Virginia Tech's 2012-2018 A Plan for A New Horizon outlines the university's commitments to a progressive profile of educational offerings including the exploration of a year-round academic calendar that increases available academic opportunities, improves efficiencies in the delivery of academic content; and

**WHEREAS**, the university seeks to provide credit-bearing educational opportunities to students throughout the year by taking advantage of time and resources available between the fall and spring semesters; and

**WHEREAS**, a progressive approach to comprehensive enrollment management includes innovative forms of year-round resource utilization, and improving a student's time-to-degree; and

**WHEREAS**, a Winter Session will allow students the opportunity to take for-credit classes between the fall and spring semesters offered by a variety of departments in a variety of colleges; and

**WHEREAS**, Winter Session will be available to all enrolled undergraduate and graduate students and visiting students who are not seeking admission to the university; and

**WHEREAS**, classes offered during Winter Session will be delivered using a variety of on-line, blended, and traditional classroom formats; and

**WHEREAS**, Winter Session classes will aid in the generation of tuition revenue for participating departments and the university;

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors approves the implementation of a Winter Session to be inaugurated in January 2014 and that all appropriate sections of the faculty handbook be edited to reflect the addition of a Winter Session; and

**BE IT FURTHER RESOLVED** that section 2.6.5 of the faculty handbook include the following language:

**Winter Session Appointments:** Faculty on academic or calendar year appointments may be invited by the department head or chair to teach in Winter Session. The faculty member will receive overload payment for teaching a Winter Session credit course as it is not considered part of the normal expectation for the instructional year. Compensation for teaching in the special session is negotiated by the faculty member and the department. Maximum compensation is set at 3.75% of the faculty member's



annual salary for each one-credit semester course taught. An additional incentive grant may be negotiated up to a maximum of one month salary. The overload payment including any incentive grant is considered in the total allowable additional aggregate compensation of no more than 33 1/3% of annual salary.

Appropriately credentialed administrative and professional (A/P) faculty may also teach during this special session with approval of their department head. Guidelines set forth in **Policy 4071**, *Policy for Staff Employed to Teach For-Credit Courses* and **Policy 4072**, *Teaching Credit Classes and Overload Compensation for Administrative and Professional Faculty Members* apply.

**RECOMMENDATION:**

That the Resolution to Approve the Virginia Tech Winter Session be approved.

September 9, 2013



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# **Enrollment & Degree Management**

## **Winter Session**

***Virginia Tech***  
***Board of Visitors***

---

***September 2013***



## ***Winter Session***

- **Special Session**
  - Offering for-credit classes between fall and spring terms
- **Innovative Financial Model**
- **Targeted Populations**
  - Students Graduating
  - Students Requiring Curriculum for Liberal Education credits
  - Visiting Students





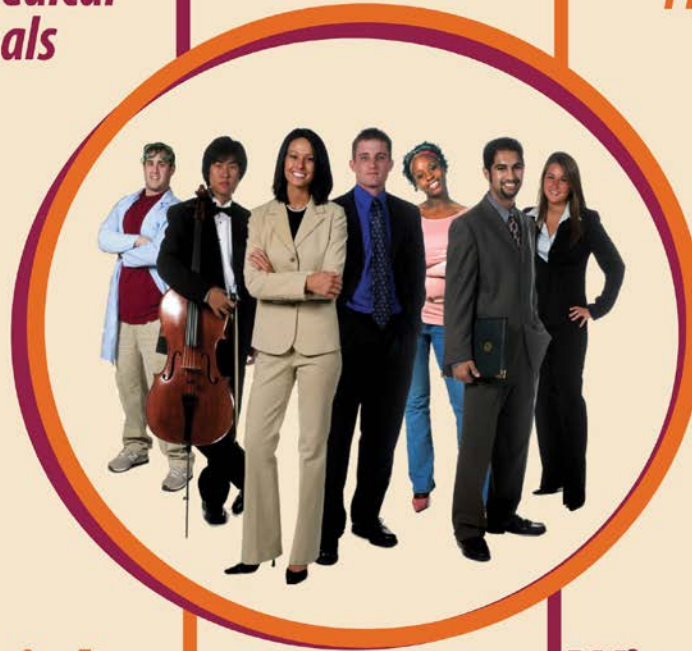
# ***Instructional Delivery Options***

**100% online**

*Spanish for Medical Professionals*

**Blended**

*Fluid Mechanics*



**Residential**

*Intro to Shakespeare*

**Winter Experience**

*Industrial Design (India)*



The background image shows a wide, snow-covered lawn in front of a large, multi-story stone building with two prominent towers. The scene is captured during twilight or early morning, with warm lights from the building and street lamps illuminating the snow. In the foreground, two snow globes are visible: a small one in the middle distance and a larger, more detailed one in the lower right corner. The word 'Questions?' is overlaid in a large, bold, dark red font in the center of the image.

# Questions?



**Committee Minutes**  
**BUILDINGS AND GROUNDS COMMITTEE**

**The Inn at Virginia Tech**  
**10:00 a.m.**

**September 9, 2013**

**Closed Session**

**Board Members Present:** Mr. William Fairchild, Mr. William Holtzman, Mr. John Rocovich

**VPI&SU Staff:** Mr. Mark Gess, Ms. Heidi McCoy, Mr. Jason Soileau, Dr. Charles Steger, Dr. Sherwood Wilson

- 1. Motion for Closed Meeting**
- 2. Disposition of Real Property:** The Committee met to discuss the disposition of real property.
- 3. Motion to Reconvene in Open Session**



## Committee Minutes

### BUILDINGS AND GROUNDS COMMITTEE

**The Inn at Virginia Tech**  
**8:15 a.m., Tour from The Inn**  
**10:15 a.m. Open Session, Solitude Room**

**September 9, 2013**

#### **Open Session**

**Board Members Present:** Mr. William Fairchild, Mr. William Holtzman, Dr. Joe Merola, Mr. Michael Quillen, Mr. John Rocovich

**VPI&SU Staff:** Dr. Mike Akers, Dr. Malcolm Beckett, Mr. Bob Broyden, Ms. Vickie Chiocca, Dr. Eleanor Finger, Dr. Elizabeth Flanagan, Chief Wendell Flinchum, Maj. Gen Randy Fullhart, Mr. Tom Gabbard, Mr. Mark Gess, Ms. Natalie Hart, Mr. Larry Hincker, Mr. Rick Hinson, Ms. Leigh LaClair, Ms. Heidi McCoy, Mr. Ricky McCoy, Mr. David McKee, Mr. Michael Mulhare, Ms. Kim O'Rourke, Mr. Charles Ruble, Ms. Kayla Smith, Mr. Ken Smith, Mr. Jason Soileau, Ms. Sue Steeves, Dr. Charles W. Steger, Dr. Lisa Wilkes, Dr. Sherwood Wilson, Mr. Chris Yianilos

**Guests:** Ms. Anna Altizer, Ms. Jessica Bennett, Ms. Kelly Brennan, Dr. Carola Haas, Mr. Michael Hubbard, Mr. Ranny Humphreys, Dr. Jeff Kirwan, Ms. Judy Kirwan, Ms. Arlean Lambert, Ms. Tonia Moxley, Ms. Starflower O'Sullivan, Ms. Rebekah Paulson, Ms. Patricia A. Polentz, Mr. Ray Roberts, Ms. Rosemarie Sawdon, Ms. Julie Styne, Ms. Liz Tuchler, Ms. Beth Umberger, Ms. Debbie Warren, Mr. Al Warren, Ms. Cheryl Woolwine, Ms. Gail Zatcoff

1. **Tour of Public Safety Building and Airport Runway Expansion Project:** The Committee toured the Public Safety Building and the Airport Runway Expansion Project.
2. **Opening Remarks and Approval of Minutes of the June 3, 2013 Meeting:** The minutes of the June 3, 2013 meeting were approved.
- \* 3. **Resolution for Appointment to the Virginia Tech/Montgomery Regional Airport Authority:** The Committee recommended full board approval of a resolution reappointing L. Allen Bowman as the at-large representative to the Virginia Tech/Montgomery Regional Airport Authority for a four-year term expiring on August 31, 2017.
4. **Design Preview of the Upper Quad Residential Facilities:** The Committee previewed and approved the preliminary designs for two new Upper Quad residence halls to replace the existing Rasche and Brodie Halls. Schematic design documents are being prepared for the replacement structures that will total approximately 220,000 gross square feet. The new residence halls will provide a combination of double and triple resident rooms with community hall bathrooms. In support of the modern Corps of Cadets (corps) programs, the new residence halls will feature multiple community, study, social, and other program support spaces. The traditional corps exterior spaces and elements including the "VT" formation will be saved and/or repositioned to facilitate continuation of corps traditions and functions. The existing Rasche Hall will be demolished in the fall of 2013. Construction is planned to commence in January 2014 and be completed in summer 2015 for corps



occupancy in the fall 2015 semester. Demolition of the existing Brodie Hall is planned for the summer of 2015. Completion of the replacement Brodie Hall is scheduled for the summer of 2016 with corps occupancy in the fall of 2016.

5. **Design Preview of the Agriculture Programs Relocation, Phase 1 Dairy Program:** The Committee previewed and approved the preliminary design for Phase 1 of the Dairy Science facilities to be constructed on a newly fenced 35-acre agricultural complex on the 1,700-acre Kentland Farm in Montgomery County. This project is the first of two anticipated phases, and involves improving and expanding the facilities at Kentland Farm to support instructional and production activities of the Dairy Science program. Specifically, the university will construct five major buildings, totaling over 77,000 gross square feet, and associated support structures that will enable the relocation of approximately 230 cows in the lactating herd from their current campus location to Kentland Farm.
6. **Final Report on Best Practices for Building Envelope Maintenance:** The Committee received the final report regarding industry standards for all aspects related to post construction inspection of stone building facades, as requested at the October 2012 meeting. Based on the information gathered by the consultants, "Virginia Tech's maintenance policies and procedures are comparable to its contemporaries and, in fact, seem to be proactive compared to most." The Committee was briefed on the progress of this report at the March and June 2013 meetings.
7. **Update on the Indoor Athletics Practice Facility:** The Committee approved the proposed site for the Indoor Athletics Practice Facility. The site is where the existing outdoor football practice fields are located. This location between Lane Stadium and the Jamerson Athletic Center meets the needs of the Athletic Department and does not encroach into the existing stadium woods site. The proposed location was endorsed by the Virginia Tech Arboretum Committee.
8. **2013 Sustainability Annual Report:** The Committee received the 2013 Annual Report on Campus Sustainability. Notable achievements and/or initiatives were highlighted. Virginia Tech achieved a silver rating from the Association for the Advancement of Sustainability in Higher Education (AASHE) Stars program in 2013, with the highest score to date by any college or university in Virginia. Virginia Tech was the only university to receive the 2013 Governor's Gold Medal Award for Environmental Excellence. Since 2010, Virginia Tech has achieved Leadership in Energy and Environmental Design (LEED) Certification for six major construction projects.
9. **Capital Project Status Report:** The Committee received an update on the status of all capital projects including the Agriculture Programs Relocation, the Classroom Building, the Kentland Farms Improvement, and the Upper Quad Residential Facilities projects that are in the design phase. Several other projects that are in the construction phase include the Center for the Arts, the Human and Agricultural Biosciences Building, the Davidson Hall Renovation and the Signature Engineering Building.

#### **Adjournment**

There being no further business, the meeting adjourned at 11:10 a.m.

**\*Requires full Board approval.**



## **Disposition of Real Property**

The Committee will discuss the disposition of real property.



*Update on:*

# *Airport Expansion Project*



## Aerial View: Existing Site



# AIRPORT EXPANSION PROJECT



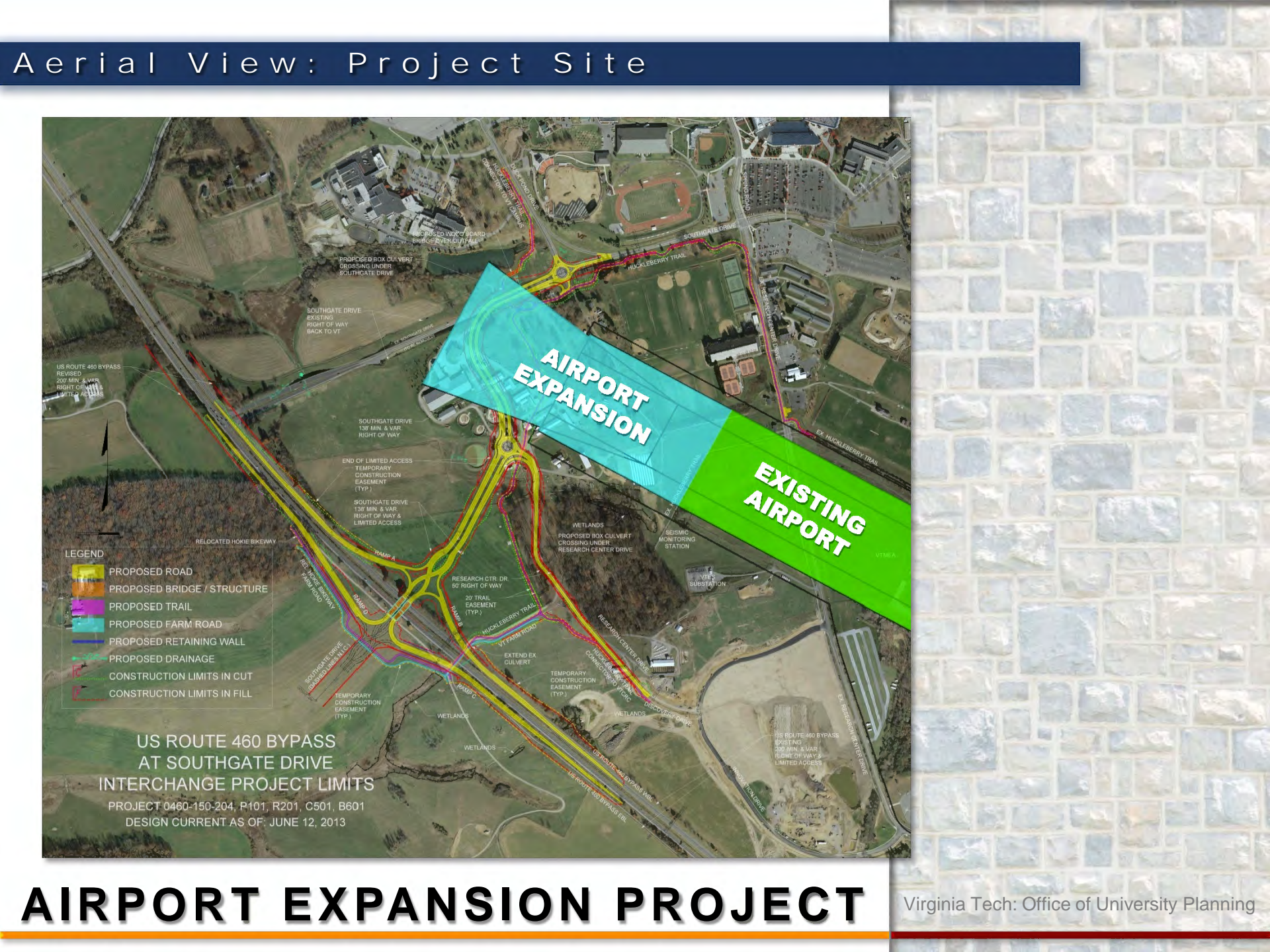
# Aerial View: Project Site

This aerial photograph shows the project site for the Airport Expansion Project. The map includes several key features and labels:

- Legend:**
  - PROPOSED ROAD (Yellow line)
  - PROPOSED BRIDGE / STRUCTURE (Orange line)
  - PROPOSED TRAIL (Purple line)
  - PROPOSED FARM ROAD (Light blue line)
  - PROPOSED RETAINING WALL (Dark blue line)
  - PROPOSED DRAINAGE (Green line)
  - CONSTRUCTION LIMITS IN CUT (Red dashed line)
  - CONSTRUCTION LIMITS IN FILL (Red solid line)
- Key Locations and Features:**
  - AIRPORT EXPANSION:** Indicated by a large cyan arrow pointing towards the center of the map.
  - EXISTING AIRPORT:** Indicated by a large green arrow pointing towards the bottom right of the map.
  - US ROUTE 460 BYPASS:** A major road running diagonally from the top left to the bottom right.
  - SOUTHGATE DRIVE:** A road running horizontally across the middle of the map.
  - HUCKLEBERRY TRAIL:** A trail running horizontally across the middle of the map, parallel to Southgate Drive.
  - RESEARCH CENTER DRIVE:** A road running horizontally across the middle of the map, parallel to Southgate Drive.
  - WETLANDS:** Several areas labeled as wetlands, primarily along the bottom and right sides of the map.
  - TEMPORARY CONSTRUCTION EASEMENT (TYP.):** Several areas labeled as temporary construction easements, primarily along the bottom and right sides of the map.
  - RELOCATED HORSE BIKEWAY:** A path running along the left side of the map.
  - RESEARCH CTR. DR. 50' TRAIL EASEMENT (TYP.):** A path running along the bottom of the map.
  - US ROUTE 460 BYPASS EXISTING 130' MIN. & VAR. RIGHT OF WAY & LIMITED ACCESS:** A label at the bottom right of the map.
- Text at the bottom of the map:**
  - US ROUTE 460 BYPASS AT SOUTHGATE DRIVE INTERCHANGE PROJECT LIMITS
  - PROJECT 0460-150-204, P101, R201, C501, B601
  - DESIGN CURRENT AS OF: JUNE 12, 2013

# AIRPORT EXPANSION PROJECT

Virginia Tech: Office of University Planning



# Aerial View: Project Site

**LEGEND**

- PROPOSED ROAD
- PROPOSED BRIDGE / STRUCTURE
- PROPOSED TRAIL
- PROPOSED FARM ROAD
- PROPOSED RETAINING WALL
- PROPOSED DRAINAGE
- CONSTRUCTION LIMITS IN CUT
- CONSTRUCTION LIMITS IN FILL

**US ROUTE 460 BYPASS AT SOUTHGATE DRIVE INTERCHANGE PROJECT LIMITS**

PROJECT 0460-150-204, P101, R201, C501, B601  
DESIGN CURRENT AS OF: JUNE 12, 2013

The aerial map illustrates the project site for the Airport Expansion Project. Key features include:

- Existing Infrastructure:** US Route 460 Bypass, Southgate Drive, Huckleberry Trail, Research Center Drive, and various wetlands.
- Proposed Infrastructure:** New roadways, bridges, and trails, highlighted in yellow and orange.
- Construction Limits:** Indicated by red dashed lines for cut areas and blue dashed lines for fill areas.
- Project Area:** A large cyan-shaded area labeled "AIRPORT EXPANSION" and a green-shaded area labeled "EXISTING AIRPORT".

# AIRPORT EXPANSION PROJECT

Virginia Tech: Office of University Planning

[illegible]



# Aerial View: Project Site



- **Runway extended 1000 LF**
- **26.361 acres Fee Take Area** to Airport Authority
- **17.920 acres RPZ Easement Area** to Airport Authority
- **3.549 acres Stormwater Easement Area** to Airport Authority
- **Dairy Science** relocating to **Kentland Farms**
- Construction **plans 30% complete**
- Preliminary **discussions with DGS\*** are **underway**
- **Formal resolution** for approval is to be presented to the BOV **November 2013**
- **FAA appraisal complete**; VT appraisal being finalized

\*DGS: Dept. of General Services,  
Real Estate Division

Virginia Tech: Office of University Planning

## AIRPORT EXPANSION PROJECT



Questions & Comments?

**AIRPORT EXPANSION PROJECT**

Virginia Tech: Office of University Planning



## **Capital Project Information Summary – Upper Quad Residential Facilities**

### **BUILDINGS AND GROUNDS COMMITTEE**

**September 9, 2013**

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

Upper Quad Residential Facilities

#### **Location:**

The current 1,000 plus Corps of Cadets (corps) population is housed in four residence halls on the Upper Quad: Monteith, Thomas, Rasche and Brodie Halls. This project involves the demolition of Rasche and Brodie Halls and the construction of two new replacement halls, which will in combination house the full corps population. The replacement building footprints will approximately match the existing Rasche and Brodie Halls, located at the south end of the Upper Quad, overlooking Alumni Mall. The vista to the front of Lane Hall, as seen from Alumni Mall between the two existing halls, will be recreated with the replacement halls and the corps formation field south of Lane Hall will be preserved.

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

The project is in the schematic design phase. Subsequent design phases are expected to continue through January 2014. The project is consistent with the Upper Quad Master Plan which was completed in April 2013.

#### **Project Description:**

The project includes replacement of two residence halls: the 62,491 gross square foot (GSF) Rasche Hall and the 66,037 GSF Brodie Hall. The 111,191 GSF replacement Rasche Hall and 108,795 GSF replacement Brodie Hall will provide a combination of double and triple resident rooms with community hall bathrooms. In support of the modern corps programs, the new residence halls will feature multiple community, study, social and other program support spaces. The traditional corps exterior spaces and elements, including the "VT" formation, will be saved and/or repositioned to facilitate continuation of corps traditions and functions.

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

The two replacement residence halls will provide living space for over 1,085 cadets and is planned to meet the full housing requirements of the corps. The ground (main) floors of both halls will house most commons spaces, including the Corps' Company meeting rooms, kitchen/living rooms, and mail/laundry/student storage spaces. Each upper floor will include multiple study rooms and a centrally located hall lounge.

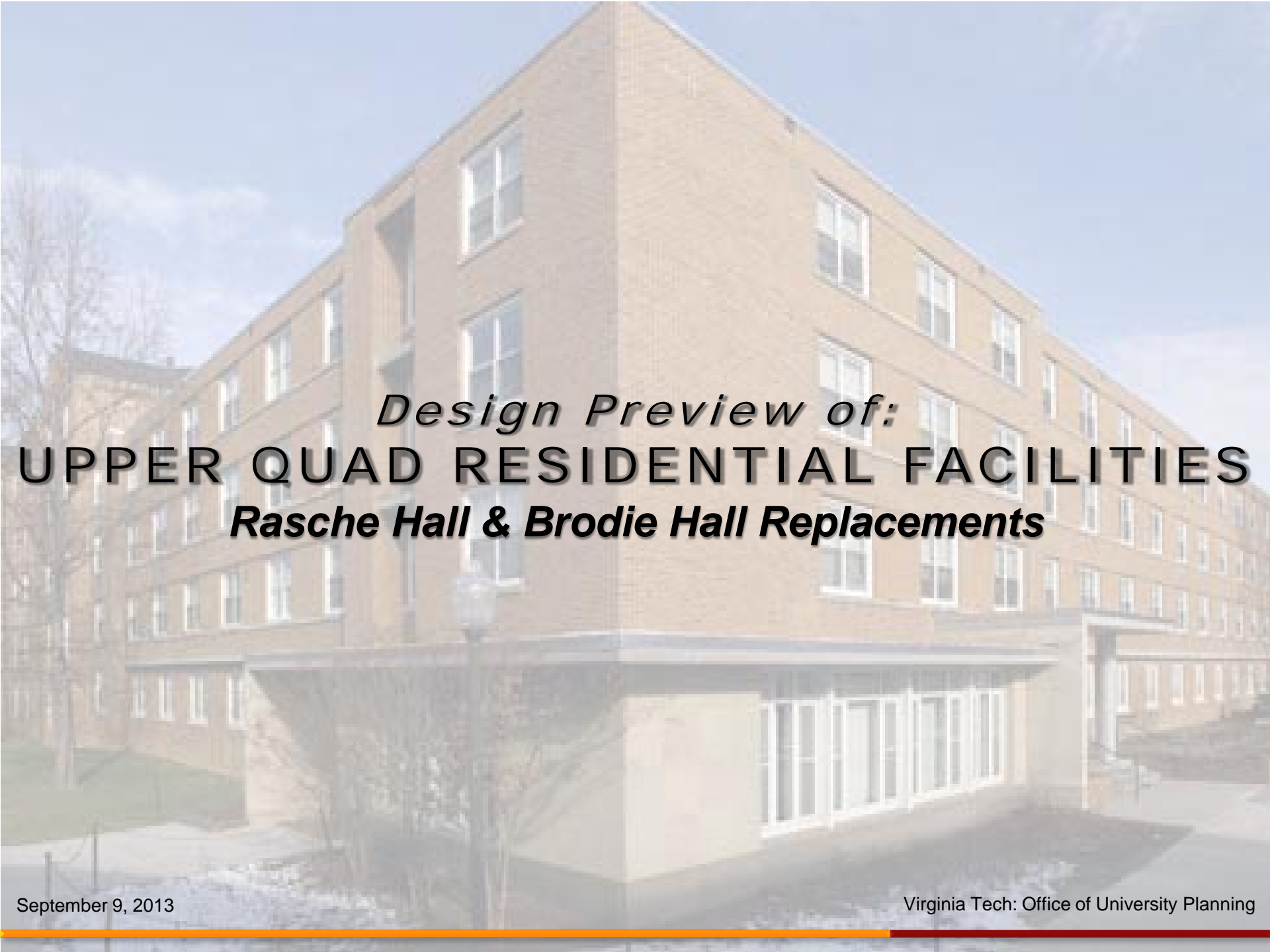
#### **Contextual Issues and Design Intent:**

Primary exterior materials will include sloping slate roofs with gable ends, native stone, precast concrete, and single and grouped bay windows in keeping with recent contemporary collegiate gothic residence halls constructed on campus. Each "L" shaped hall will be four stories above grade on the Quad sides, and five stories on the mall and perimeter sides to take advantage of the sloping sites. A prominent tower is the focal point at the intersection of each building's perpendicular wings.

**Architect/Engineer:** Clark•Nexsen

**Construction Manager:** Barton Malow

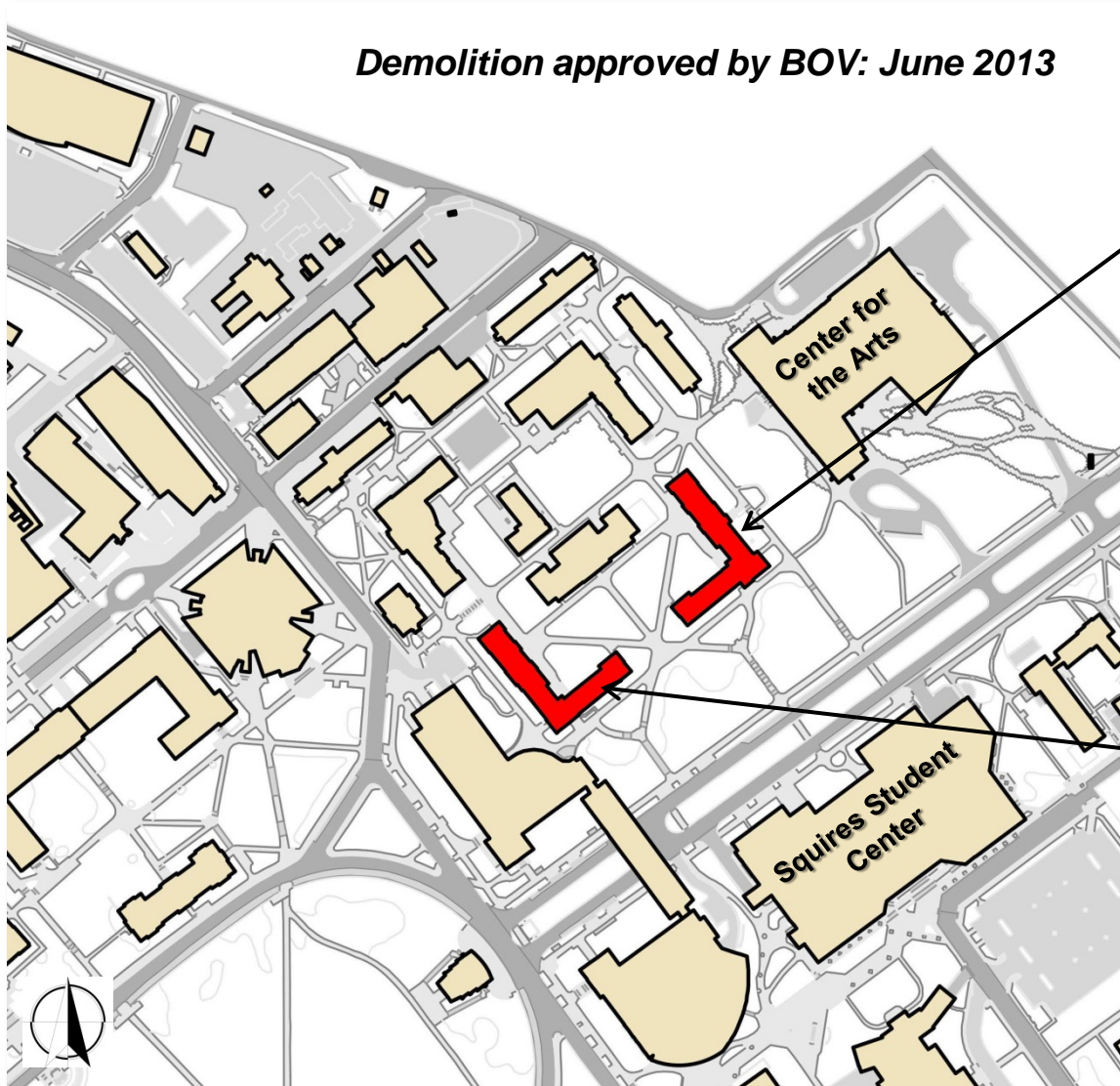




*Design Preview of:*  
**UPPER QUAD RESIDENTIAL FACILITIES**  
***Rasche Hall & Brodie Hall Replacements***



# UPPER QUAD: RASCHE & BRODIE DEMOLITIONS



**Rasche Hall**  
*Demolition: Fall 2013*

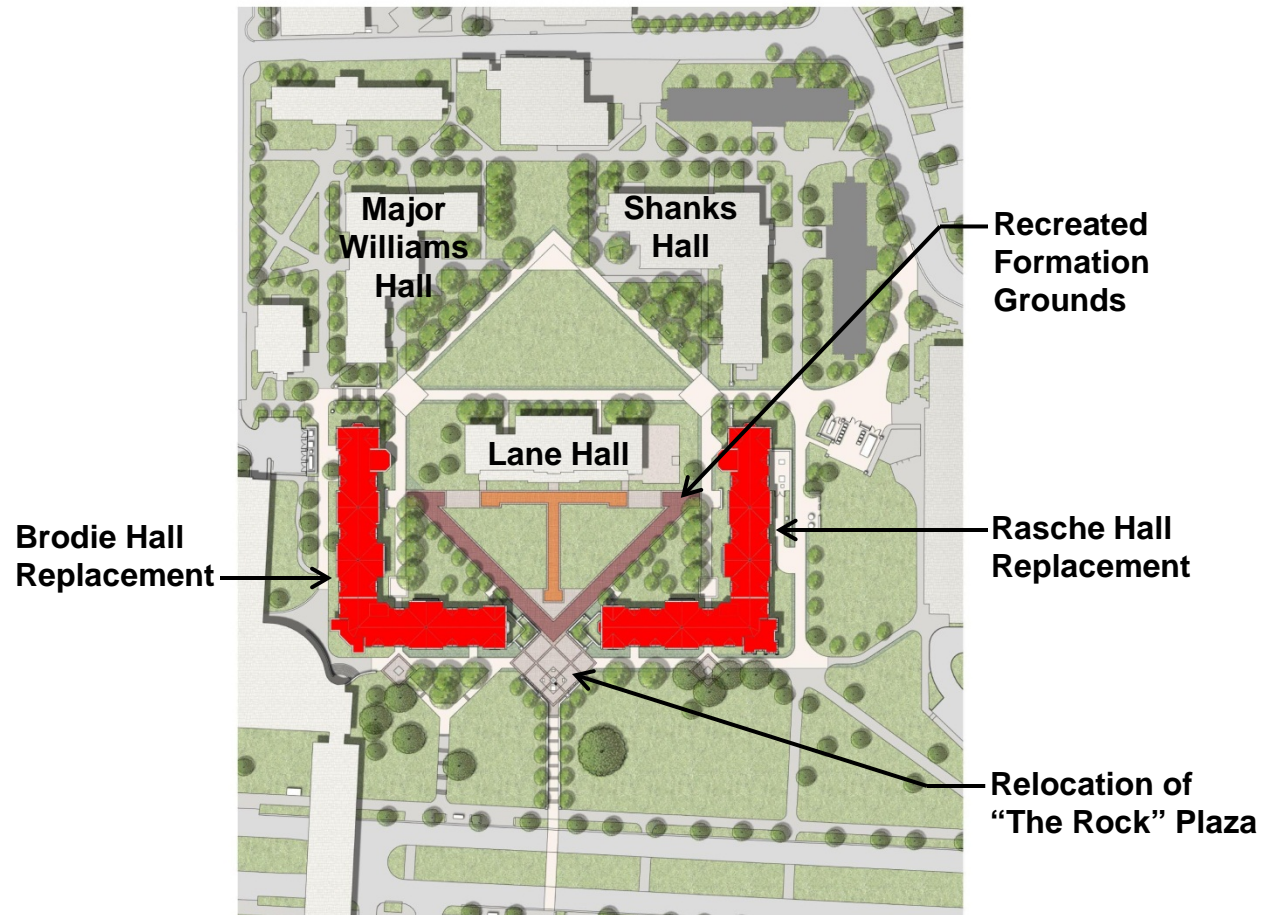


**Brodie Hall**  
*Demolition: Summer 2015*

## UPPER QUAD RESIDENTIAL FACILITIES



# UPPER QUAD: MASTER PLAN



## SITE PLAN

VIRGINIA TECH - UPPER QUAD RESIDENTIAL FACILITIES  
Blacksburg, VA

09/09/13 **CLARK•NEXSEN**  
Architecture & Engineering



# UPPER QUAD: CONCEPTUAL AERIAL VIEW



**Brodie Hall  
Replacement**

**Lane Hall**

**Rasche Hall  
Replacement**

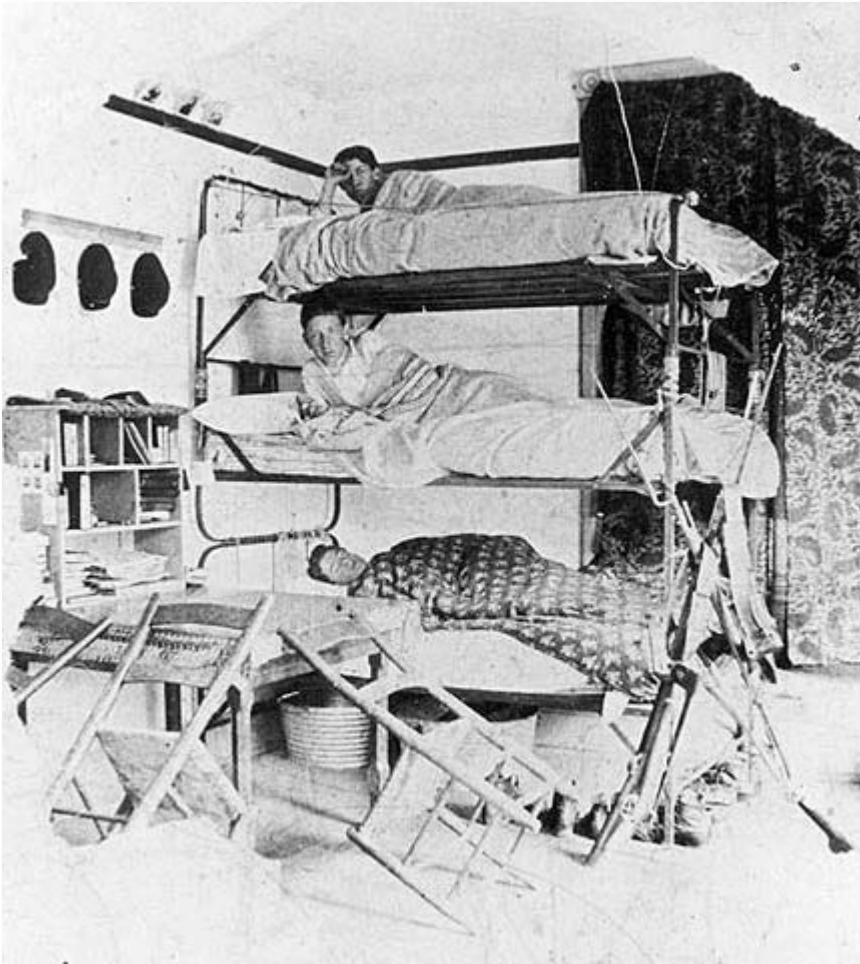
## AERIAL VIEW (competition design concept)

VIRGINIA TECH - UPPER QUAD RESIDENTIAL FACILITIES  
Blacksburg, VA

09/09/13

**CLARK • NEXSEN**  
Architecture & Engineering





Historic Photo of 19<sup>th</sup> Century Barracks for VPI Cadets

## PROJECT STATISTICS

---

**Fall 2013 Corps Enrollment: 1060 Cadets**

**Replacement Rasche Hall: 111,191 GSF**

Existing Rasche Hall: 62,491 GSF

**Replacement Brodie Hall: 108,795 GSF**

Existing Brodie Hall: 66,037 GSF

**Replacement Hall Beds: 1085+ Combined**

Existing Beds: 1033 Combined



# QUESTIONS & COMMENTS?



## UPPER QUAD RESIDENTIAL FACILITIES

Virginia Tech: Office of University Planning



## **Capital Project Information Summary – Agriculture Programs Relocation, Phase I**

### **BUILDINGS AND GROUNDS COMMITTEE**

**September 9, 2013**

**Title of Project:**

Agriculture Programs Relocation, Phase I Dairy Relocation

**Location:**

The replacement Dairy Science facilities are to be constructed on a newly fenced 35-acre agricultural complex on the 1,700-acre Kentland Farm in Montgomery County.

**Current Project Status and Schedule:**

The project is in the schematic design phase. Subsequent design phases are expected to continue through November 2013.

**Project Description:**

The project includes the one-to-one replacement of the existing Dairy Science program facilities currently located south of Southgate Drive on the central campus, which are slated for demolition to facilitate extension of the airport runway and relocation of the Southgate Drive/Route 460 interchange. The replacement Dairy Science facilities are to be constructed at a new 35-acre agricultural complex on the 1,700-acre Kentland Farm in Montgomery County. Kentland Farm was selected as the new site to take advantage of the proximity to feed production, grazing lands and manure application. The new complex will include five major buildings, totaling over 77,000 gross square feet (GSF), housing the approximately 230 cow milking herd. The dairy operation will be supported by six additional major structures, including feed storage facilities (totaling over 39,000 GSF) and manure management facilities.

**Brief Program Description:**

As an operational dairy, the cows will be milked using a double-12 automatic milking system located in the 11,900 GSF Parlor Barn. A 1,300 GSF administrative office suite wing will extend from the Parlor Barn. Scheduled feeding will occur in the 46,400 GSF Housing Barn. The complex will also include an 8,700 GSF Special Needs Barn, a 3,800 GSF Calf Barn and a 5,000 GSF Maintenance Facility. State of the art manure management will include a hydraulic flushing system and, within buildings, a wave flush cleaning system.

**Contextual Issues and Design Intent:**

The new buildings will be a combination of pre-engineered steel buildings and pole barns designed in traditional farm vernacular style. Primary exterior materials will include sloping standing seam metal roofs with gable ends, painted masonry block walls, and pre-finished vertical metal siding.

**Architect/Engineer:**

Thompson and Litton

**Construction Manager:**

English Construction





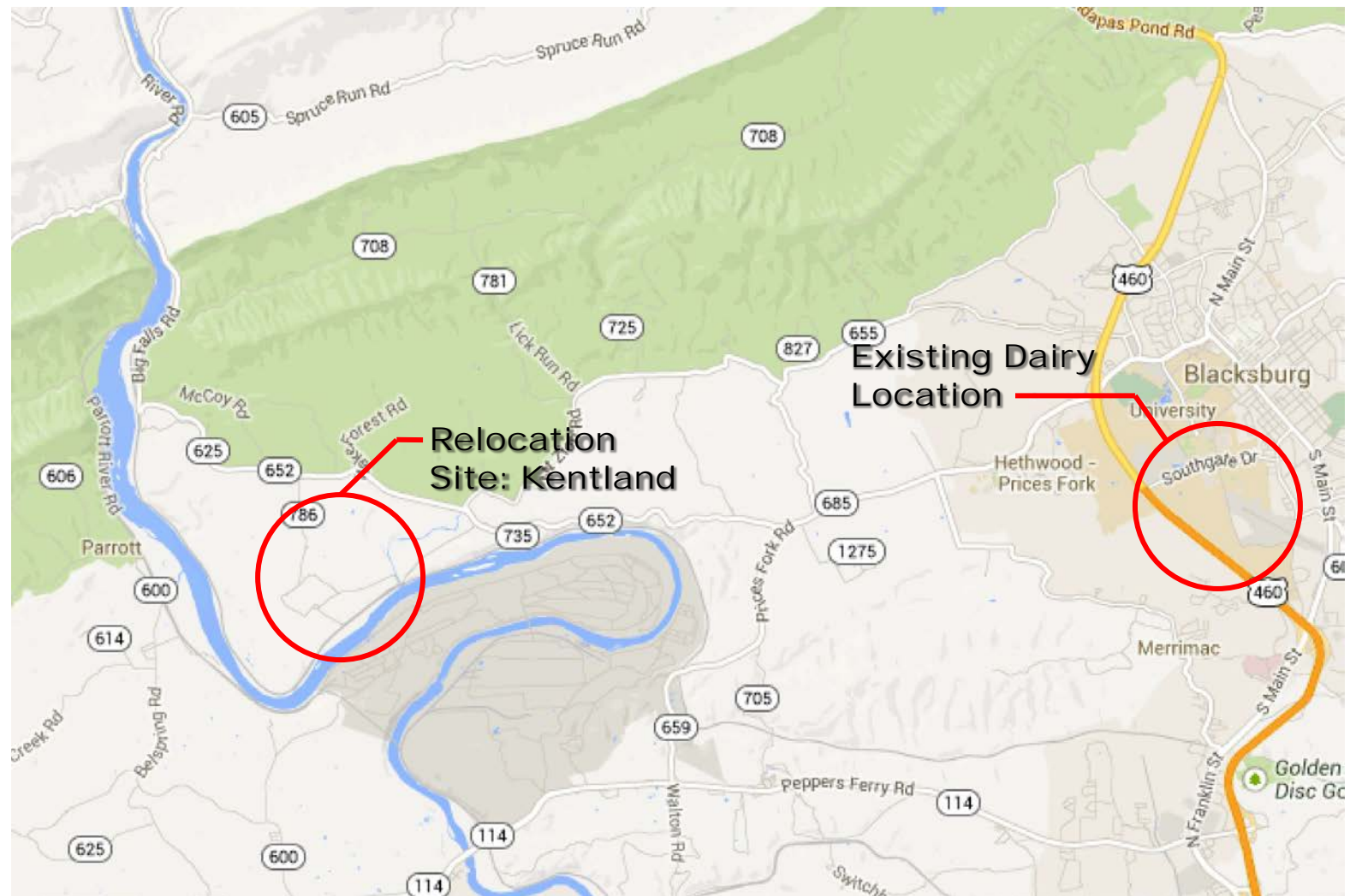
*Design Preview:*

# Agriculture Programs Relocation

## Phase I: Dairy Program



# Existing Dairy: Main Campus

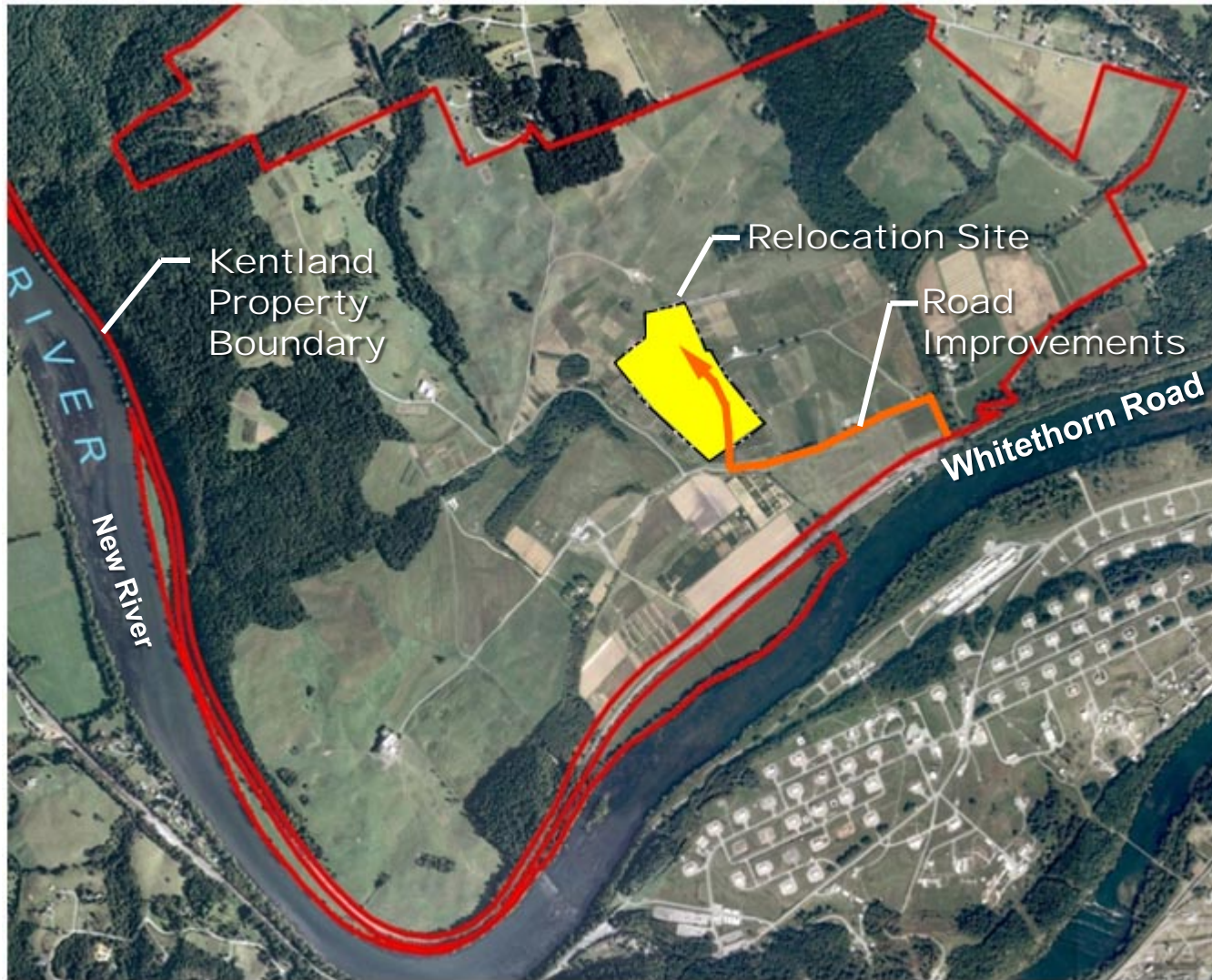


## KENTLAND PHASE I: DAIRY PROGRAM

Virginia Tech: Office of University Planning



# Kentland Farm: Property Boundary



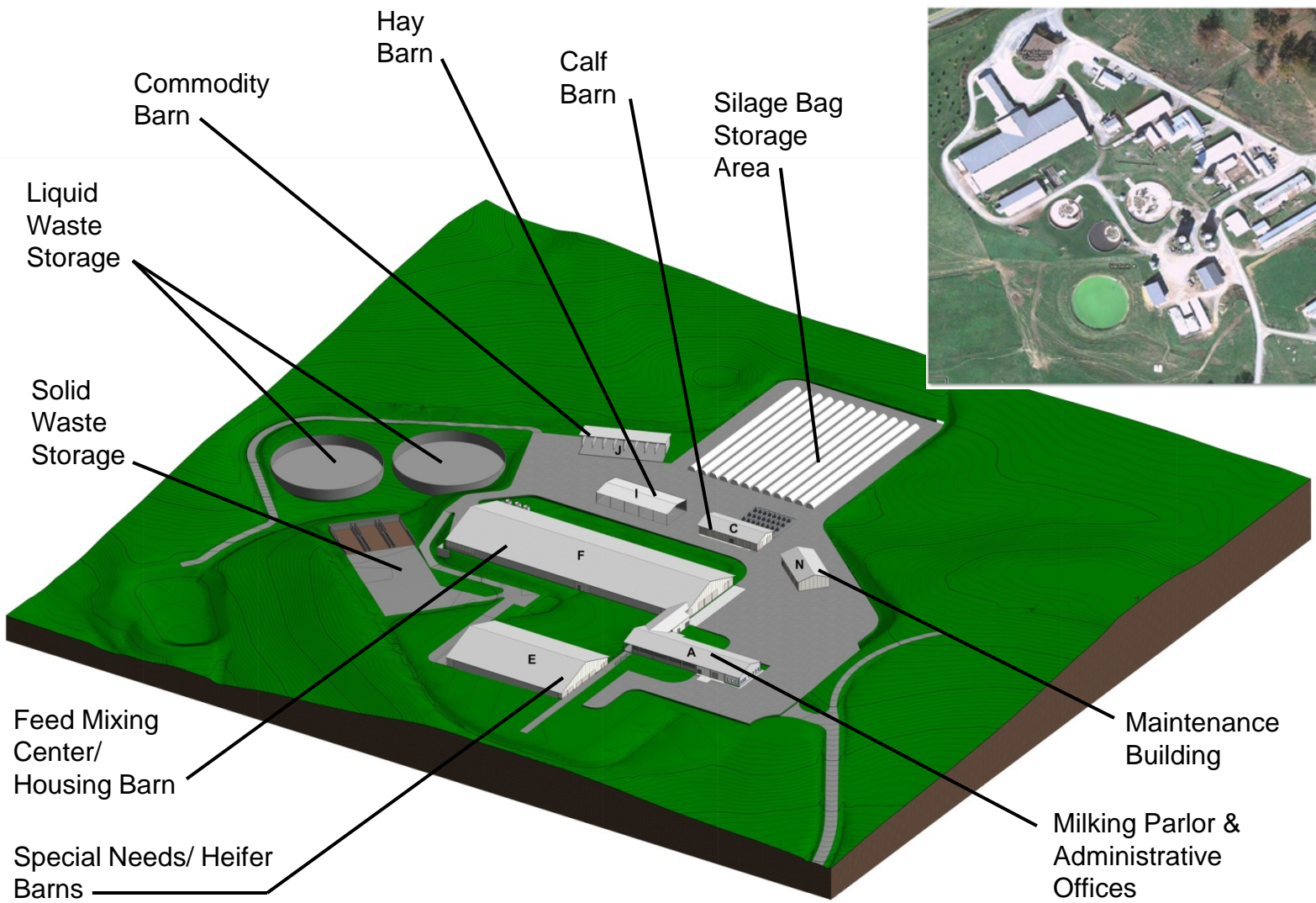
Aerial – Kentland Farm  
Montgomery County

## KENTLAND PHASE I: DAIRY PROGRAM

Virginia Tech: Office of University Planning



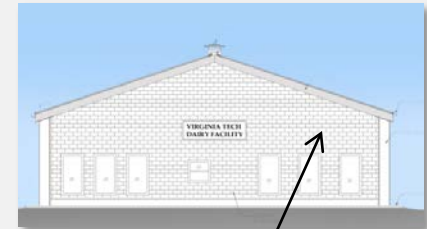
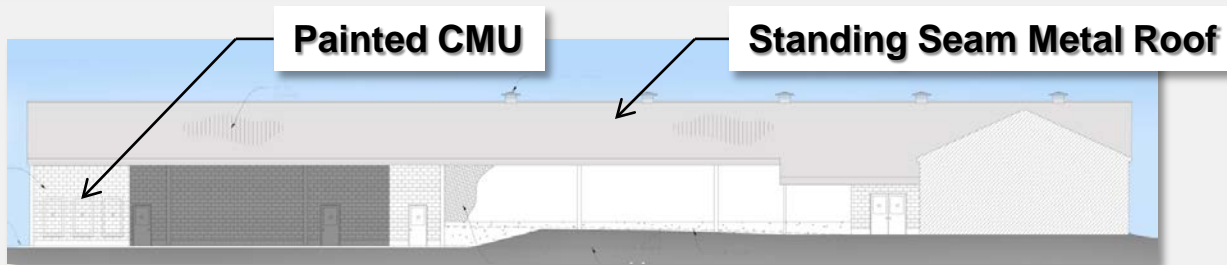
# Kentland Farm: Primary Structures



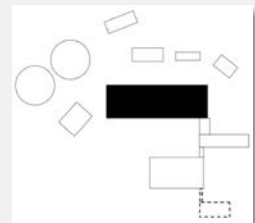
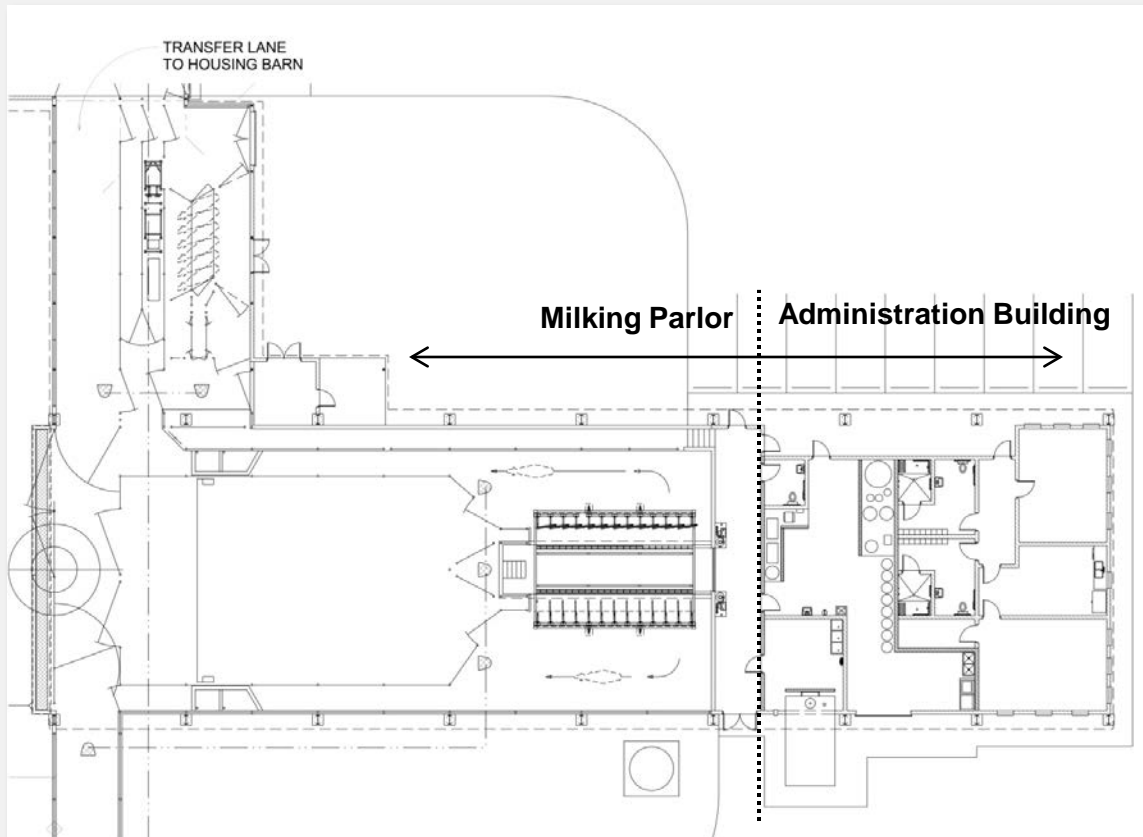
**New  
facilities  
demonstrate  
more  
efficient land  
use  
than existing  
facilities**



# Administration Building & Milking Parlor

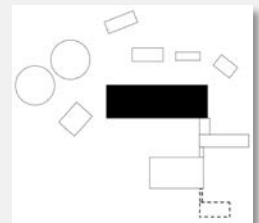
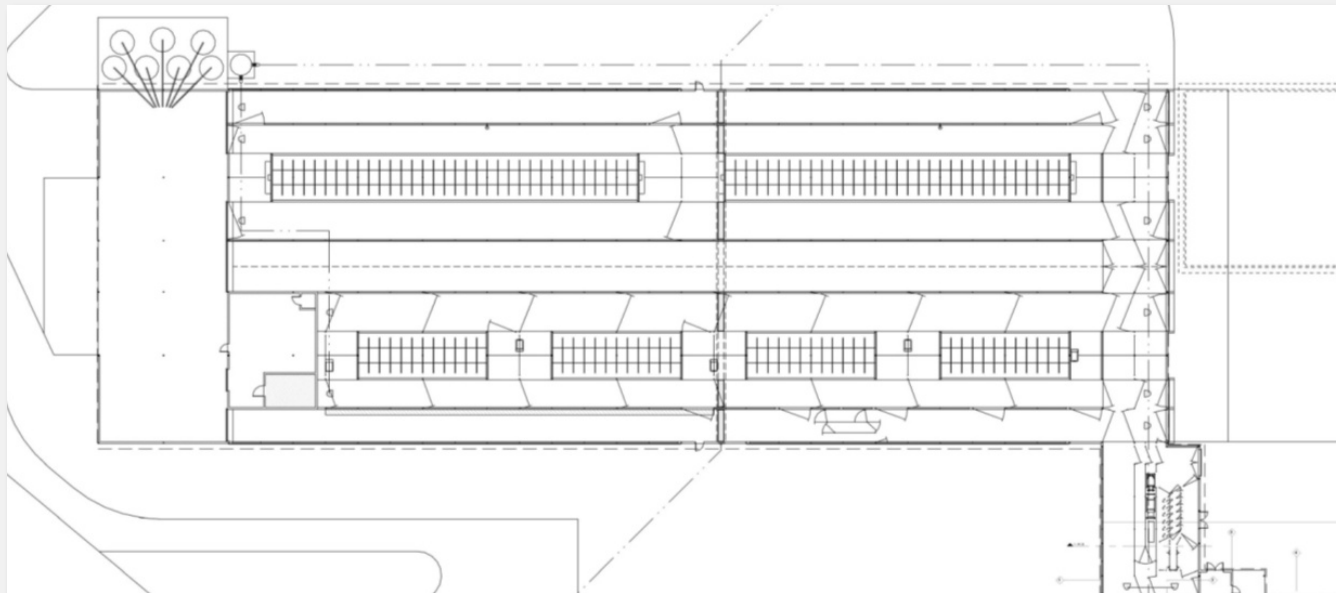
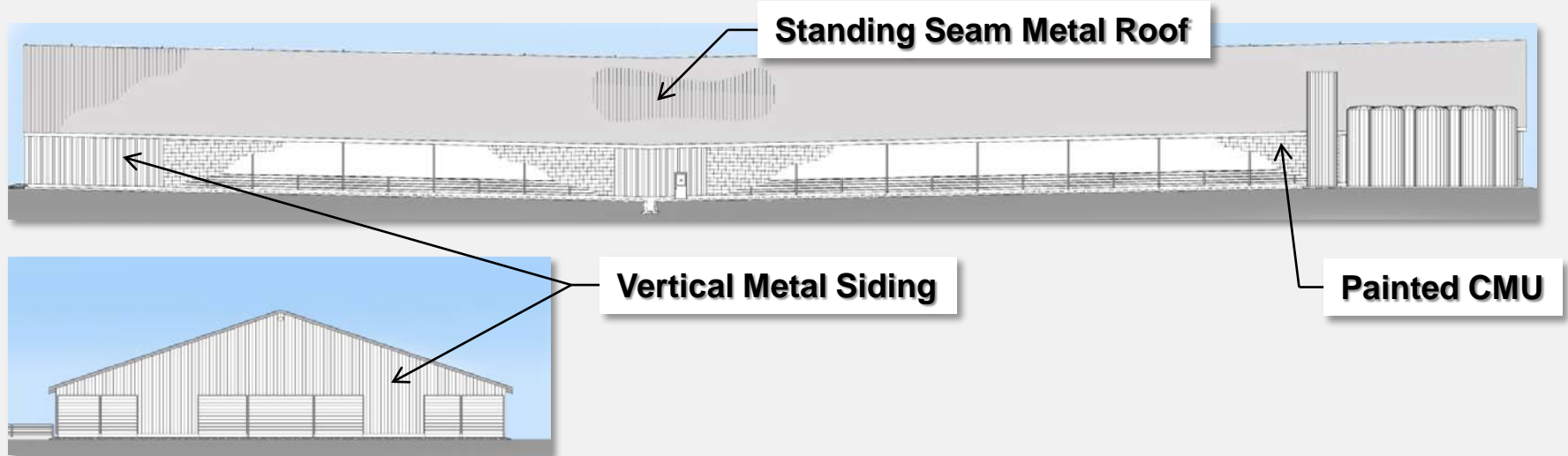


**Painted CMU**





# Housing Barn





# Additional Barn Facilities



**Calf Barn**

**Standing Seam Metal Roofing**



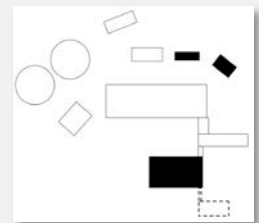
**Maintenance Building**

**Vertical Metal Siding**

**Coiling Overhead Doors**



**Special Needs/ Heifer Barn**

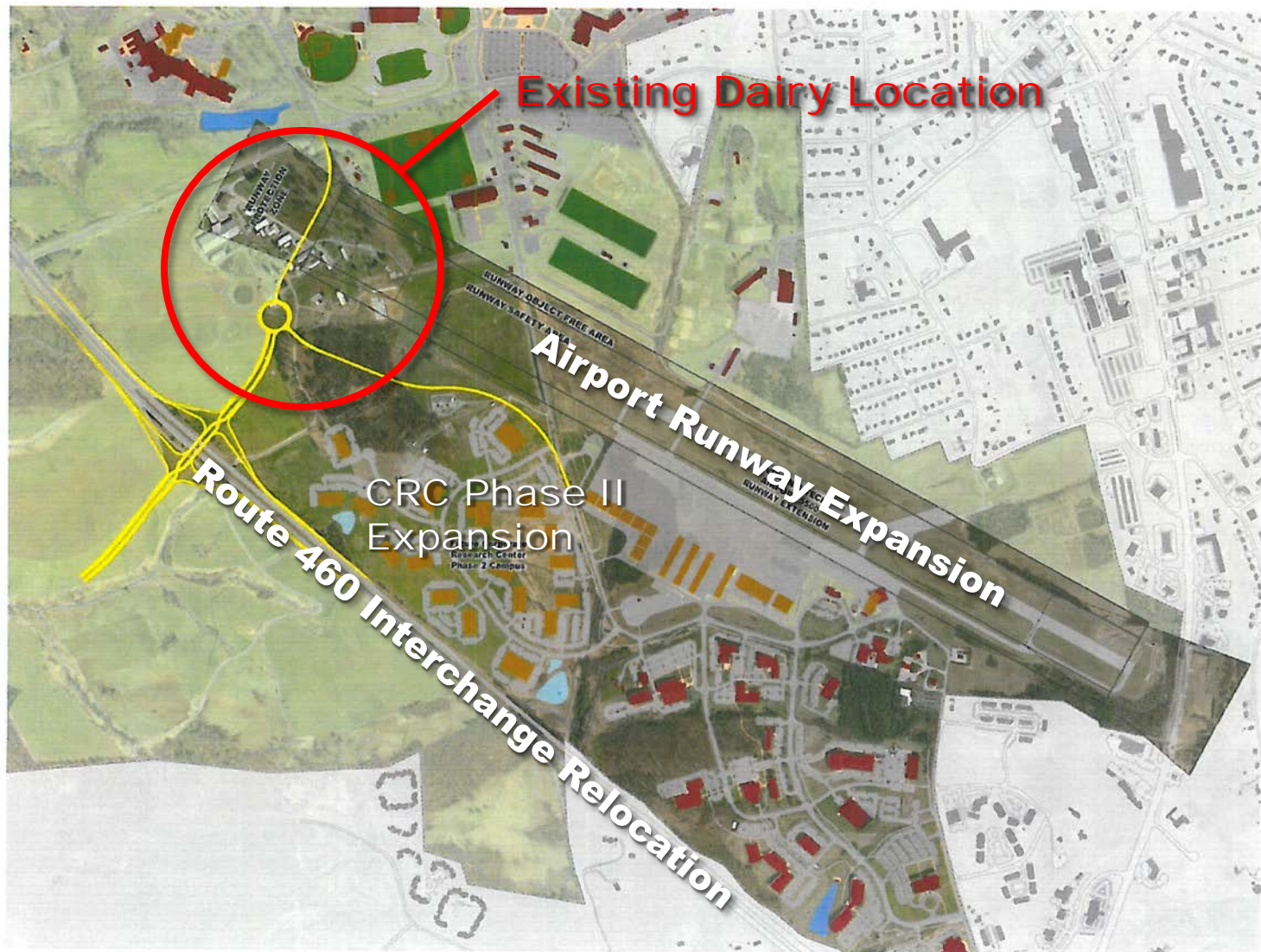








# Imminent Development: Main Campus



## KENTLAND PHASE I: DAIRY PROGRAM

Virginia Tech: Office of University Planning



**WHITLOCK DALRYMPLE POSTON & ASSOCIATES, INC.**  
**C O N S U L T I N G   E N G I N E E R S**

July 12, 2013

Virginia Polytechnic Institute and State University  
VP for Administrative Services Office  
248 Burruss Hall  
Blacksburg, Virginia 24061

Attention: Dr. Sherwood Wilson  
Vice President for Administration

Reference: Virginia Tech Stone Façade Inspection and  
Maintenance Information Study  
Final Report of Findings  
WDP Project No. 13047

Dear Dr. Wilson:

Whitlock Dalrymple Poston & Associates, Inc. (WDP) is pleased to provide the following Stone Façade Inspection and Maintenance Study Final Report to the Virginia Tech Board of Visitors (BOV). The purpose of this document is to advise the BOV of existing information within the industry related to recommended methods and procedures for inspection, assessment, and maintenance of existing masonry wall systems, specifically with respect to stone masonry, such as what is utilized predominantly on Virginia Tech's campus. WDP also performed a survey of thirteen universities (including Virginia Tech) throughout the Eastern United States to determine what other Universities have done historically to inspect and maintain their inventory of buildings. The results of this survey have been included for review by the BOV. It is our hope that this report will serve as a starting point for an ongoing dialogue within the Facilities Services personnel and ultimately will aid Virginia Tech in the development of a structured plan for monitoring and maintaining the stone façade of the University buildings.

## **INTRODUCTION**

Virginia Tech's facades are predominantly masonry clad with the vast majority of the facades clad in the signature "Hokie stone" quarried locally by the University. While this provides a distinctive appearance throughout the campus, it is an uncommon cladding material for most modern buildings due to the fabrication cost and the labor intensive nature of its installation. It also has a rather unique set of requirements with regard to construction, inspection, and maintenance of the facades.

The conditions of Virginia Tech's stone facades vary considerably around the campus and, in general, are not necessarily comparable with regard to the age or exposure of the building. The evolution of stone wall construction since the first

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buildings were constructed at Virginia Tech has been significant. The push for more economic and energy efficient wall systems has changed virtually everything about the way the first stone buildings were constructed on campus in the 19th century. Stone was initially used in the foundation elements of many of the earliest campus buildings and was generally constructed as a monolithic or “mass” masonry wall system with multiple layers of randomly oriented stone. The oldest building that is constructed with an entire stone masonry facade is the Performing Arts Building (constructed around 1900), which utilized a combination of different stone types and masonry wall configurations. As time went on, construction of stone facades moved toward a veneer type construction with stone masonry laid over a back-up material of concrete or masonry block which is the most common configuration of stone facades at Virginia Tech encompassing the majority of the campus buildings.

## **CONSIDERATIONS FOR A FAÇADE INSPECTION AND MAINTENANCE PROGRAM**

The first step in the development of an inspection and maintenance program for buildings, and specifically for facades, is to establish what parameters are of critical importance to the University. As with most façade assessments, identification of “unsafe conditions,” such as loose stones or failing glass lites, remains paramount in the process, particularly with respect to higher education facilities where there is generally a high concentration of pedestrian traffic in or around the buildings. There are several sources of industry information regarding the assessment of facades for unsafe conditions which are discussed in more detail below. However, the specific scope of the evaluation beyond what is termed an unsafe condition is normally dictated by how proactive the University wishes to be regarding serviceability considerations, preventative maintenance, and what the available budget is to affect repairs. For example, deteriorated mortar joints that have not yet resulted in the loss of the masonry unit may result in an increase in water penetration through the stone assembly and leakage to the interior, thus, impacting the level of service to the interior occupants. Similarly, if the deterioration is left to degrade over time, it can result in a higher probability that the condition will progress into an unsafe condition as the masonry unit becomes loose in the wall. Unlike typical façade inspections for unsafe conditions, these types of condition assessment surveys require careful scope development to prevent the inspection from being either too broad or too detailed to prioritize and design meaningful, cost effective repairs.

In recent years, there has been an effort to quantify what the minimum level of inspection should be to prevent the failure of “unsafe conditions” however, there is still disagreement as to what exactly is an unsafe condition. The 2012 International Property Maintenance Code is rather broad in scope and includes a variety of





requirements for the exterior property areas and intends to provide the minimum level of safety for both the general public and the occupants of the structure. However, in its description of unsafe conditions, it includes several items which are generally interpretive and/or broad (see Appendix A). For example, Section 304.1.1 Item 4 states that an unsafe condition could include “Siding and masonry joints including joints between the building envelope and the perimeter of windows, doors and skylights that are not maintained, weather resistant or water tight.” By this definition, a failed sealant joint is an unsafe condition and would be required to be repaired. However, the intent of this provision is more likely intended to include items that could potentially lead to indoor air quality issues or to a progression of damage due to water infiltration and as such, should be considered in context of the overall impact on the function of the assembly.

By contrast, other documents, such as ASTM E2270, “Standard Practice for Periodic Inspections of Building Facades for Unsafe Conditions,” define unsafe conditions more directly. In Section 3.2.13., it defines an unsafe condition as “a condition identified at the time of inspection of a component or system that presents an imminent threat of harm, injury, damage, or loss to persons or property.” The added context of an “imminent threat” serves to separate such conditions from “potential threats” due to a progressive condition. For these conditions, the document provides two other potential classifications of defects: “requires repair/stabilization” and “ordinary maintenance.” These conditions serve to permit the investigator to identify and report issues that are problematic and that might progress into unsafe conditions but do not need to be addressed in a time critical manner. This is generally consistent with most façade ordinance documents in large cities where the intent is to identify and eliminate threats to the public without becoming overly cumbersome to the Owner.

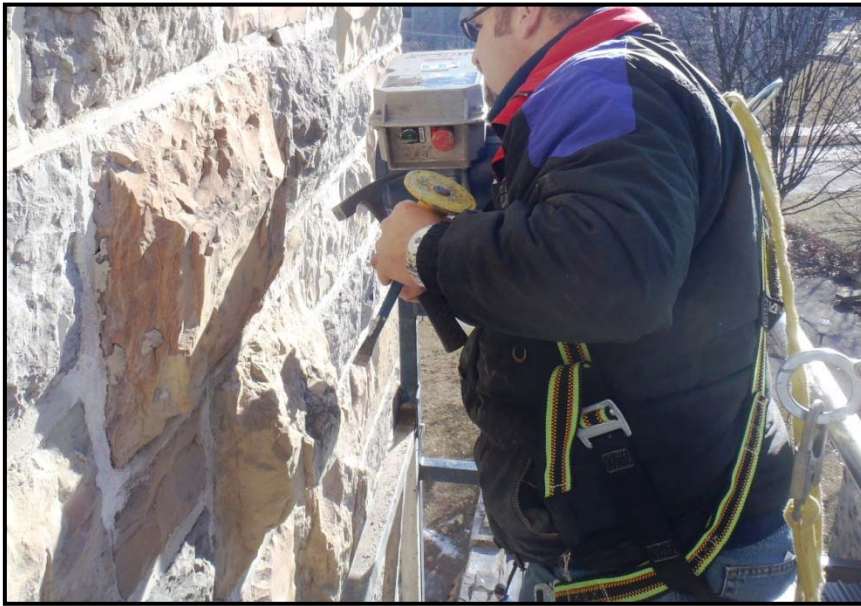
Such a strategy provides a useful framework for higher education facilities, such as Virginia Tech, to develop a functional and consistent method for inspecting and identifying the typical problems associated with the cladding materials. As inspections are performed and deficiencies are categorized into prioritized groups, the groups can then be gathered together to establish trends with regard to certain repetitive building problems as well as projections for future repairs based on other similar conditions in the inventory. It also serves to satisfy the requirements to protect the student populous from hazards by monitoring the conditions of the buildings and helping to eliminate failures of the facades.





## WHO PERFORMS THE INSPECTIONS?

There is general consensus among the industry that a licensed professional (Architect or Engineer) should oversee the work performed as well as the process of evaluation. However, it is generally acceptable for the licensed professional to rely on the work of qualified inspectors for the performance of some of the field work. According to ASTM E2270, a qualified inspector should be “...familiar with the available service history and the available design documents relevant to the building façade” and “...capable of assessing both the watertight integrity and exterior conditions of the building façade to evaluate and identify potential unsafe conditions”, (Photograph 1).



**Photograph 1 – Close Inspection of Hokie Stone from Portable Lift**

Following these guidelines, the inspection process for Virginia Tech could be performed by either in-house personnel or outside consultants (or by a combination of both), assuming a registered professional is available to oversee the process. Education and training are important factors in the selection of those performing the inspection, particularly with regard to identification of unsafe conditions. Virginia Tech’s current facility maintenance staff could be utilized to provide vast amounts of useful information to the qualified professional in the process of performing routine inspections of the buildings.



In a policy directive from the University’s Chief Facilities Officer dated October 30, 2012, attached hereto as Appendix D, the University has a process in place whereby



members of facilities maintenance perform periodic visual and tactile (hands-on) inspections of many of the stone facades around campus, particularly around and above entrances where pedestrian traffic is concentrated. According to the policy directive, this process is officially memorialized and standardized through a computerized maintenance management system (Hokie Serv), and it represents a significant internal effort to protect the student body and to obtain useful information regarding portions of the building inventory. This current process could be modified and expanded to meet the requirements of ASTM E2270 in regards to oversight by a registered professional.

## **IDENTIFICATION OF DEFICIENCIES AND DETERMINATION OF CAUSES**

The identification and classification of deficiencies in a masonry façade is generally the most difficult portion of any assessment. The investigators must identify a defect and determine what caused the condition to occur. In many cases, this cannot be performed without additional information or supplemental investigation, testing and/or calculations. With masonry in particular, many visible defects can manifest themselves in ways that could be the result of more than one problem. For example, diagonal cracking on the corner of a building could be the result of settlement of the foundation, expansion/contraction of the building frame/veneer, corrosion of embedded steel, seismic or wind damage, load overstress, or a combination of these or other potential causes.

To simplify such a broad range of potential problems, it often helps to first organize and categorize the cladding materials by type or material (windows, stone, brick, cast stone, precast concrete, sealants, roofing, etc.) to make it easy to group conditions consistently among inspectors. Individual materials or systems can then be evaluated based on industry specific guidelines and criteria.

With regard to masonry, there are several useful documents that provide insight into the causes of deterioration and recommended repair for masonry facades. Neither is specific to stone; however, many issues speak directly to stone issues or are relevant to stone masonry as well as clay masonry (brick and terra-cotta).



The Masonry Society publishes TMS 1700-12, “Guide for Condition Assessment of Masonry Structures” that provides a useful framework for organizing and conducting inspections and assessments. The document outlines the normal tasks assumed in an evaluation and then outlines numerous conditions specific to masonry that can be documented and classified by the inspector. A similar document has been developed and published by the International Concrete Repair Institute (ICRI) termed Guideline



No. 410.1-2008, “Guide for the Evaluation of Masonry Façade Structures.” Similar to the TMS document, the Guide provides a typical framework for the process for the evaluation of masonry; including information on document reviews, field investigations, and reporting. However, unlike the TMS document, there are pictures of many typical conditions to assist the reader with understanding the described conditions. Both of these documents would prove to be useful for organizing internal inspections of the buildings.

There currently is no standard for assessment or maintenance specifically for random ashlar or rubble stone masonry. However, ASTM C1496, “Standard Guide for Dimension Stone Masonry Walls and Facades” outlines how to visually assess dimension stone construction, which is very similar in many aspects. Dimension stone is akin to large stone panels cut to a prescribed size rather than individual stone units laid up as an assembly. Many of the defects observed in dimension stone can also be found in ashlar stone walls, such as efflorescence, staining and cracking; as such, the standard provides useful guidance regarding typical stone masonry defects. It is also one of the only consensus documents regarding typical maintenance repairs for stone cladding systems.

Through the use of the above referenced documents and other references provided in Appendix B, a program can be developed and refined to help consistently and knowledgeably perform basic visual assessments of the stone facades and identify where there are concerns that need to be investigated further.

## **FREQUENCY OF INSPECTION**

In general, the frequency of an inspection or assessment of a façade depends predominantly on the cladding material and the intent of the inspection. For unsafe conditions, ASTM E2270 provides a useful table of inspection intervals for several different cladding material types along with what type of inspection is generally required, based on the age of the building. For example, for brick and stone buildings more than 20 years old, facades should be inspected at least once every 5 years. Such an inspection would include a general visual inspection of the entire façade from greater than 6 feet away looking for out-of-plane displacements or distress. Additionally, representative sections of the building comprising roughly 20% of the façade area should be selected for a detailed inspection with tactile contact on the façade. The detailed inspection should also include probe openings to reveal concealed conditions (minimum of three locations) and potentially adhesion tests of adhered anchors or non-destructive testing of unobservable components (Photograph 2).







**Photograph 2 – Opening in Hokie Stone to Inspect Concealed Conditions**

However, while this consensus approach to identifying unsafe conditions is useful from the perspective of preventing a hazard, it does very little to assist facilities personnel with long term planning of common maintenance repairs. Therefore, additional, less invasive, but more frequent and broader ranging assessments could be performed to catalogue the progression of known problems and to help establish reasonable estimates of remaining service life in the façade before major renovation work is necessary.

It is also worthwhile to consider that the frequency of inspections may need to be modified in the event that there are known deficiencies in the wall system. Such is the case with buildings utilizing the drypack mortar collar joint, which displays significant signs of efflorescence in the facades of some buildings. In these instances, the frequency of inspection should be increased to prevent localized rapid deterioration of stone or mortar joints from creating an overhead hazard.



## **CONSISTENCY WITH OTHER UNIVERSITIES**

With the information that has been identified within the industry for façade maintenance and inspection, much of the attention focuses on a typical building Owner and not necessarily on a typical higher education facility. The most obvious



difference is the need of a university or college to maintain its inventory in good condition to present an aesthetically pleasing environment for students, faculty, and alumni and to further the prestige and reputation among its peers. As such, the generally accepted level of inspection and maintenance is more clearly represented by comparison to other universities.

With that in mind, WDP performed a survey of several colleges and universities to try to better understand how others evaluate and maintain their buildings and how consistent that is with the procedures currently in place at Virginia Tech.

A total of thirteen (13) universities completed the online survey, including Virginia Tech. The summarized results are presented below, and the survey details are attached in Appendix C.

In general, the universities that responded provided useful data that can be directly compared with Virginia Tech in each of the seven categories of the survey.

## **1. Building Inventory**

Virginia Tech holds a building inventory of more than 100 buildings as do more than 70% of the respondents, but less than half of the respondents have more than 8 million square feet or more, indicating Virginia Tech has generally larger buildings with more square footage per building.

All of the respondents have masonry facades, but only three have more stone than brick, and one has between 25-50% stone. One university only uses stone masonry as accent material. Virginia Tech uses relatively more stone than the majority of the other universities but can be directly compared to approximately one third of the respondents.

On question #6: “What is the anticipated service life of a typical University Building?” most universities responded that they anticipated either a 50 or 100 year service life. One university provided detailed information: “Greater than 100 years for world heritage historic structures that will continue to be preserved and renewed as needed. The majority of buildings will realistically be in the 50 to 100 year category; although student housing may be considered at 25 years.” Virginia Tech responded that they anticipate a 100 year service life. This is an important design element to communicate to architects and engineers during the design phase of new construction and should be included in the design policies and standards.





## 2. Human Resources

The number of personnel directly involved with building inspection and employed by the universities varied widely among the respondents and may indicate different approaches to inspection. More than half, including Virginia Tech, indicated that less than 10 personnel are involved with building inspections. Virginia Tech noted that this number represents the individuals that are specifically dedicated to inspection. On the other hand, two responses stated that more than 50 personnel are involved with inspection, indicating a more broadly cast responsibility for building inspection.

Building façade maintenance responses landed in a much tighter range with all universities employing less than 25 personnel and about half of them using less than 10.

## 3. Budget Allocations

Annual building maintenance budgets correlated directly with the size of the university. The seven largest universities including Virginia Tech all had \$10-50 million budgets and five of the smallest universities were all less than \$10 million budgets.

The majority of the universities spend less than 1% on façade inspection, including Virginia Tech. However, a few universities spend a disproportionately larger amount of their budget on inspections. A similar grouping holds true for monies spent on façade repairs. Most universities spend less than 5% of the maintenance budget on repairs, including Virginia Tech, and a smaller group spends 5-10% and two universities spend more than 10% on façade repairs.

## 4. Established Practices and Frequency

The first question in this section, #15: “Is the anticipated building service life documented in the University design requirements provided to architects at the time of construction?” ties directly with question #34: “Does the University have a design standard that includes requirements, guidelines or principles that are provided to Architects or Engineers for new building design?” regarding the proactive position the university takes with architects and engineers. Virginia Tech is included with the large majority of positive responses, indicating they provide requirements, documents and standards to design professionals prior to construction.





Virginia Tech falls into the upper third of proactive positions taken in question #16: “Does the University review original construction documents for targeting and identifying potential maintenance problem areas on the exterior?” The comments for this are particularly helpful in understanding the level of detail several universities shared, and we recommend reviewing them in Appendix C.

Question #17: “Does the University have a documented policy or program for the general inspection of building facades that is performed in house?” is the first of four questions regarding façade inspection practices. Virginia Tech is one of only two universities that responded positively to having a documented façade inspection program in-house. Taken by itself, this is surprising, but after reading the comments and taking the next three questions into account, it becomes clear that there is quite a range of differentiation among the universities in how thorough their inspection process is and how often it is performed. Most comments and responses indicate that inspections center around either problematic buildings or as problems arise. In all four questions, Virginia Tech is among the most proactive in façade inspection.

The next three questions focus on the closer inspection and tactile work performed to maintain the surface integrity of masonry facades. Question #21: “On average, how often are masonry facades completely re-pointed (removal of pointing mortar and replaced with new mortar)?”, question #22: “On average, how often are the masonry facades cleaned?” and question #23: “On average, how often are exterior sealants completely replaced on the buildings?”. The overwhelming response in all three of these practices was that they were addressed: “only when problems arise.” Virginia Tech was one of two universities that responded to having a 50 year cycle for re-pointing. Two universities indicated that there was a schedule in place for cleaning, and only one university indicated a schedule for replacing sealants.

Responses for frequency of window replacement and renovations dominated the “More than 35 years” category, including Virginia Tech. Two comments in this section and one in the prior indicated that interior renovations and window replacements are performed as needed and are coupled with façade repairs.

## 5. Common Issues

Virginia Tech is not alone in any of the following categories. All but two universities have re-clad up to 5% of buildings due to façade problems.

Only one university responded to having more than 5% of the buildings exhibit problems with efflorescence or staining; all the rest (including Virginia Tech) indicated up to 5% of the buildings having issues.





Virginia Tech, along with almost 70% of the respondents, has had problems with systemic or widespread leakage on their buildings. Four universities indicated no major leakage problems.

The final question in this section calls out numerous specific issues with mortar, stone, brick, and sealant deficiencies. Virginia Tech and the majority of the respondents cited problems with each category and provided detailed comments that name the causes of their problems. We recommend reading the comments for questions #30 and #31 in Appendix C. A brief list and corresponding photographs of the most commonly experienced issues by Virginia Tech and other universities are included here:

1. Cracked mortar (Photograph 3)
2. Cracked stone (Photograph 4)
3. Failed flashing at shelf angles (Photograph 5)



**Photograph 3 – Cracked Mortar**





**Photograph 4 – Cracked Stone**



**Photograph 5 – Failed Flashing at Shelf Angle**



## 6. New Construction

Almost half of the respondents have a masonry façade design review process in-house, for new construction. Virginia Tech landed in the 25% group that have design review fulfilled by a third party, and the remaining 25% do not have a masonry façade design review process at this time.

Of the respondents that have a design review process, most universities responded positively to the first five of the six topics listed in question #33: “Does the University include the following considerations in the design review process?”

1. Peer review of the plans and specifications
2. Air and moisture/water barrier continuity
3. Constructability and sequencing
4. Material durability and compatibility
5. Provisions for expansion control
6. Hygrothermal analysis (dew point location within building envelope)

Virginia Tech is one of only four universities that responded positively to the sixth topic.

In question #34: “Does the University have a design standard that includes requirements, guidelines or principles that are provided to Architects or Engineers for new building design?”, Virginia Tech is among the most proactive group that includes masonry façade requirements in new design standards. Almost half of the respondents do not include masonry design in their standards, and two do not provide standards.

All universities responded positively to question #35: “Does the University have a construction observation process for masonry facades and building envelopes for newly constructed buildings?” Virginia Tech and the majority of the respondents fulfill this process in-house. The remaining three universities hire a third party.

Almost all of the respondents, including Virginia Tech, responded positively to each of the five construction observation tasks outlined in question #36: “Does the University include the following considerations in the construction observation process?”

1. Facilitate preconstruction and regular meetings
2. Review of shop drawings and submittals
3. Field construction observation, verification and documentation





4. Field performance testing of representative and critical components and systems
5. Establishment of non-conformance issues, discussions and resolutions

## **7. Roof Considerations**

Although this section was optional to respond to, almost all respondents wrote in answers to each question. There is a wide range of answers to each question, and we recommend reviewing the responses in Appendix C. In general, Virginia Tech was among the majority on the following responses:

- Roof systems inspected annually
- 100% of roof inspections are performed by the University
- 20 year expected service life of typical roof system
- 2 to 5 year interval for performing nondestructive surveys, such as infrared thermography

Most universities indicated that they request a 20 year warranty on new roof systems, while Virginia Tech responded that they request a 30 year warranty.

## **SUMMARY**

Virginia Tech has established a nationally recognized form of stone masonry façade construction. The preservation and maintenance of this unique stone asset has evolved over the years along with construction methods. Not a great deal of literature has been written that addresses maintaining multiple styles of stone masonry let alone being specific to Hokie stone construction. However, numerous published documents were reviewed that are germane to stone masonry construction and can be applied, in the correct context, to the conditions on the Virginia Tech campus.

A façade inspection and maintenance program could be developed utilizing the available resources in the industry in conjunction with Virginia Tech's already established internal practices. Such a program could include policies and procedures for:

- Imminent health and safety concerns
- Identification of progressive conditions
- Frequency of inspection and who performs them
- Prioritization of the repairs





The newly revised construction policies and procedures should also be linked to this program.

Based on the information gathered in the masonry façade survey, Virginia Tech's maintenance policies and procedures are comparable to its contemporaries and, in fact, seem to be proactive compared to most. In a policy directive from the University's Chief Facilities Officer dated October 30, 2012, attached hereto as Appendix D, the University has a process in place whereby members of facilities maintenance perform periodic visual and tactile (hands-on) inspections of many of the stone facades around campus, particularly around and above entrances where pedestrian traffic is concentrated. According to the policy directive, this process is officially memorialized and standardized through a computerized maintenance management system (Hokie Serv), and it represents a significant internal effort to protect the student body and to obtain useful information regarding portions of the building inventory. This current process could be modified and expanded to meet the requirements of ASTM E2270 in regards to oversight by a registered professional.

We trust this report has served as an informative resource for providing both a historical and current perspective and will ultimately aid Virginia Tech in the development of a structured plan for monitoring and maintaining the condition of the University buildings. Should you have any questions regarding this report, please feel free to contact us at your convenience.

Sincerely,

**Whitlock Dalrymple Poston & Associates, Inc.**



J. Eric Peterson, P.E.  
Principal



Steven T. Treser, Assoc. AIA  
Architectural Engineer





## **Appendix A**

### **2012 International Property Maintenance Code**







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# PREFACE

## Introduction

Internationally, code officials recognize the need for a modern, up-to-date property maintenance code governing the maintenance of existing buildings. The *International Property Maintenance Code*®, in this 2012 edition, is designed to meet this need through model code regulations that contain clear and specific property maintenance requirements with required property improvement provisions.

This 2012 edition is fully compatible with all of the *International Codes*® (I-Codes®) published by the International Code Council (ICC)®, including the *International Building Code*®, *International Energy Conservation Code*®, *International Existing Building Code*®, *International Fire Code*®, *International Fuel Gas Code*®, *International Green Construction Code*™ (to be available March 2012), *International Mechanical Code*®, *ICC Performance Code*®, *International Plumbing Code*®, *International Private Sewage Disposal Code*®, *International Residential Code*®, *International Swimming Pool and Spa Code*™ (to be available March 2012), *International Wildland-Urban Interface Code*® and *International Zoning Code*®.

The *International Property Maintenance Code* provisions provide many benefits, among which is the model code development process that offers an international forum for code officials and other interested parties to discuss performance and prescriptive code requirements. This forum provides an excellent arena to debate proposed revisions. This model code also encourages international consistency in the application of provisions.

## Development

The first edition of the *International Property Maintenance Code* (1998) was the culmination of an effort initiated in 1996 by a code development committee appointed by ICC and consisting of representatives of the three statutory members of the International Code Council at that time, including: Building Officials and Code Administrators International, Inc. (BOCA), International Conference of Building Officials (ICBO) and Southern Building Code Congress International (SBCCI). The committee drafted a comprehensive set of regulations for existing buildings that was consistent with the existing model property maintenance codes at the time. This 2012 edition presents the code as originally issued, with changes reflected through the previous 2006 editions and further changes developed through the ICC Code Development Process through 2010. A new edition of the code is promulgated every three years.

This code is founded on principles intended to establish provisions consistent with the scope of a property maintenance code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

## Adoption

The *International Property Maintenance Code* is available for adoption and use by jurisdictions internationally. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings established in the jurisdiction's laws. At the time of adoption, jurisdictions should insert the appropriate information in provisions requiring specific local information, such as the name of the adopting jurisdiction. These locations are shown in bracketed words in small capital letters in the code and in the sample ordinance. The sample adoption ordinance on page xiii addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.



## Maintenance

The *International Property Maintenance Code* is kept up to date through the review of proposed changes submitted by code enforcing officials, industry representatives, design professionals and other interested parties. Proposed changes are carefully considered through an open code development process in which all interested and affected parties may participate.

The contents of this work are subject to change both through the Code Development Cycles and the governmental body that enacts the code into law. For more information regarding the code development process, contact the Codes and Standards Development Department of the International Code Council.

While the development procedure of the *International Property Maintenance Code* ensures the highest degree of care, ICC, its membership and those participating in the development of this code do not accept any liability resulting from compliance or noncompliance with the provisions because ICC does not have the power or authority to police or enforce compliance with the contents of this code. Only the governmental body that enacts the code into law has such authority.

## Code Development Committee Responsibilities (Letter Designations in Front of Section Numbers)

In each code development cycle, proposed changes to this code are considered at the Code Development Hearings by the International Property Maintenance/Zoning Code Development Committee, whose action constitutes a recommendation to the voting membership for final action on the proposed changes. Proposed changes to a code section having a number beginning with a letter in brackets are considered by a different code development committee. For example, proposed changes to code sections that have the letter [F] in front of them (e.g., [F] 704.1) are considered by the International Fire Code Development Committee at the Code Development Hearings.

The content of sections in this code that begin with a letter designation is maintained by another code development committee in accordance with the following:

- [A] = Administrative Code Development Committee;
- [F] = International Fire Code Development Committee;
- [P] = International Plumbing Code Development Committee; and
- [B] = International Building Code Development Committee (IBC—Fire Safety, General, Means of Egress or Structural);



Note that, for the development of the 2015 edition of the I-Codes, there will be two groups of code development committees and they will meet in separate years. The groupings are as follows:

<b>Group A Codes (Heard in 2012, Code Change Proposals Deadline: January 3, 2012)</b>	<b>Group B Codes (Heard in 2013, Code Change Proposals Deadline: January 3, 2013)</b>
International Building Code	Administrative Provisions (Chapter 1 all codes except IRC and ICC PC, administrative updates to currently referenced standards, and designated definitions)
International Fuel Gas Code	International Energy Conservation Code
International Mechanical Code	International Existing Building Code
International Plumbing Code	International Fire Code
International Private Sewage Disposal Code	International Green Construction Code
	ICC Performance Code
	International Property Maintenance Code
	International Residential Code
	International Swimming Pool and Spa Code
	International Wildland-Urban Interface Code
	International Zoning Code

Code change proposals submitted for code sections that have a letter designation in front of them will be heard by the respective committee responsible for such code sections. Because different committees will meet in different years, it is possible that some proposals for this code will be heard by a committee in a different year than the year in which the primary committee for this code meets.

For instance, Section 502.1 is designated as the responsibility of the International Plumbing Code Development Committee, along with most of the provisions in Chapter 5. This committee will meet in 2012 to consider all code change proposals to the *International Plumbing Code* and any portions of other codes that it is responsible for, including Section 502.1 and most of the provisions of Chapter 5 (designated with [P] in front of those sections.) Therefore, any proposals to Section 502.1 in Chapter 5 will be needed to be submitted by January 3, 2012, for consideration in 2012 by the International Plumbing Code Committee.

Note that every section of Chapter 1 of this code is designated as the responsibility of the Administrative Code Development Committee, and that committee is part of the Group B portion of the hearings. This committee will hold its code development hearing in 2013 to consider all code change proposals for Chapter 1 of this code and proposals for Chapter 1 of all I-Codes except the *International Residential Code* and *ICC Performance Code*. Therefore, any proposals received for Chapter 1 of this code will be assigned to the Administrative Code Development Committee for consideration in 2013.

It is very important that anyone submitting code change proposals understand which code development committee is responsible for the section of the code that is the subject of the code change proposal. For further information on the code development committee responsibilities, please visit the ICC web site at [www.iccsafe.org/scoping](http://www.iccsafe.org/scoping).

## Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the previous edition. Deletion indicators in the form of an arrow ( ➡ ) are provided in the margin where an entire section, paragraph, exception or table has been deleted or an item in a list of items or a table has been deleted.



## **Italicized Terms**

Selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text. Such terms are not italicized where the definition set forth in Chapter 2 does not impart the intended meaning in the use of the term. The terms selected have definitions which the user should read carefully to facilitate better understanding of the code.



# EFFECTIVE USE OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE

The *International Property Maintenance Code* (IPMC) is a model code that regulates the minimum maintenance requirements for existing buildings.

The IPMC is a maintenance document intended to establish minimum maintenance standards for basic equipment, light, ventilation, heating, sanitation and fire safety. Responsibility is fixed among owners, operators and occupants for code compliance. The IPMC provides for the regulation and safe use of existing structures in the interest of the social and economic welfare of the community.

## Arrangement and Format of the 2009 IPMC

Before applying the requirements of the IPMC it is beneficial to understand its arrangement and format. The IPMC, like other codes published by ICC, is arranged and organized to follow sequential steps that generally occur during an inspection. The IPMC is divided into eight different parts:

Chapters	Subjects
1	Administration
2	Definitions
3	General Requirements
4	Light, Ventilation and Occupancy Limitations
5	Plumbing Facilities and Fixture Requirements
6	Mechanical and Electrical Requirements
7	Fire Safety Requirements
8	Referenced Standards

The following is a chapter-by-chapter synopsis of the scope and intent of the provisions of the *International Property Maintenance Code*:

**Chapter 1 Scope and Administration.** This chapter contains provisions for the application, enforcement and administration of subsequent requirements of the code. In addition to establishing the scope of the code, Chapter 1 identifies which buildings and structures come under its purview. Chapter 1 is largely concerned with maintaining “due process of law” in enforcing the property maintenance criteria contained in the body of the code. Only through careful observation of the administrative provisions can the building official reasonably expect to demonstrate that “equal protection under the law” has been provided.

**Chapter 2 Definitions.** All terms that are defined in the code are listed alphabetically in Chapter 2. While a defined term may be used in one chapter or another, the meaning provided in Chapter 2 is applicable throughout the code.

Where understanding of a term’s definition is especially key to or necessary for understanding of a particular code provision, the term is shown in italics wherever it appears in the code. This is true only for those terms that have a meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Guidance regarding tense, gender and plurality of defined terms as well as guidance regarding terms not defined in this code is provided.



**Chapter 3 General Requirements.** Chapter 3, “General Requirements,” is broad in scope. It includes a variety of requirements for the exterior property areas as well as the interior and exterior elements of the structure. This chapter provides requirements that are intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure, and to maintain a building’s structural and weather-resistance performance. Chapter 3 provides specific criteria for regulating the installation and maintenance of specific building components; maintenance requirements for vacant structures and land; requirements regulating the safety, sanitation and appearance of the interior and exterior of structures and all exterior property areas; accessory structures; vehicle storage regulations and establishes who is responsible for complying with the chapter’s provisions. This chapter also contains the requirements for swimming pools, spas and hot tubs and the requirements for protective barriers and gates in these barriers. Chapter 3 establishes the responsible parties for exterminating insects and rodents, and maintaining sanitary conditions in all types of occupancies.

**Chapter 4 Light, Ventilation and Occupancy Limitations.** The purpose of Chapter 4 is to set forth these requirements in the code and to establish the minimum environment for occupiable and habitable buildings, by establishing the minimum criteria for light and ventilation and identifies occupancy limitations including minimum room width and area, minimum ceiling height and restrictions to prevent overcrowding. This chapter also provides for alternative arrangements of windows and other devices to comply with the requirements for light and ventilation and prohibits certain room arrangements and occupancy uses.

**Chapter 5 Plumbing Facilities and Fixture Requirements.** Chapter 5 establishes the minimum criteria for the installation, maintenance and location of plumbing systems and facilities, including the water supply system, water heating appliances, sewage disposal system and related plumbing fixtures.

Sanitary and clean conditions in occupied buildings are dependent upon certain basic plumbing principles, including providing potable water to a building, providing the basic fixtures to effectively utilize that water and properly removing waste from the building. Chapter 5 establishes the minimum criteria to verify that these principles are maintained throughout the life of a building.

**Chapter 6 Mechanical and Electrical Requirements.** The purpose of Chapter 6 is to establish minimum performance requirements for heating, electrical and mechanical facilities and to establish minimum standards for the safety of these facilities.

This chapter establishes minimum criteria for the installation and maintenance of the following: heating and air-conditioning equipment, appliances and their supporting systems; water-heating equipment, appliances and systems; cooking equipment and appliances; ventilation and exhaust equipment; gas and liquid fuel distribution piping and components; fireplaces and solid fuel-burning appliances; chimneys and vents; electrical services; lighting fixtures; electrical receptacle outlets; electrical distribution system equipment, devices and wiring; and elevators, escalators and dumb-waiters.

**Chapter 7 Fire Safety Requirements.** The purpose of Chapter 7 is to address those fire hazards that arise as the result of a building’s occupancy. It also provides minimum requirements for fire safety issues that are most likely to arise in older buildings.

This chapter contains requirements for means of egress in existing buildings, including path of travel, required egress width, means of egress doors and emergency escape openings.

Chapter 7 establishes the minimum requirements for fire safety facilities and fire protection systems, as these are essential fire safety systems.



**Chapter 8 Referenced Standards.** The code contains numerous references to standards that are used to regulate materials and methods of construction. Chapter 8 contains a comprehensive list of all standards that are referenced in the code. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the code official, contractor, designer and owner.

Chapter 8 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based upon the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda included as part of the ICC adoption; and the section or sections of this code that reference the standard.







# LEGISLATION

The *International Codes* are designed and promulgated to be adopted by reference by legislative action. Jurisdictions wishing to adopt the 2012 *International Property Maintenance Code* as an enforceable regulation governing existing structures and premises should ensure that certain factual information is included in the adopting legislation at the time adoption is being considered by the appropriate governmental body. The following sample adoption legislation addresses several key elements, including the information required for insertion into the code text.

## SAMPLE LEGISLATION FOR ADOPTION OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE ORDINANCE NO. \_\_\_\_\_

A[N] [ORDINANCE/STATUTE/REGULATION] of the [JURISDICTION] adopting the 2012 edition of the *International Property Maintenance Code*, regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use, and the demolition of such existing structures in the [JURISDICTION]; providing for the issuance of permits and collection of fees therefor; repealing [ORDINANCE/STATUTE/REGULATION] No. \_\_\_\_\_ of the [JURISDICTION] and all other ordinances or parts of laws in conflict therewith.

The [GOVERNING BODY] of the [JURISDICTION] does ordain as follows:

**Section 1.** That a certain document, three (3) copies of which are on file in the office of the [TITLE OF JURISDICTION'S KEEPER OF RECORDS] of [NAME OF JURISDICTION], being marked and designated as the *International Property Maintenance Code*, 2012 edition, as published by the International Code Council, be and is hereby adopted as the Property Maintenance Code of the [JURISDICTION], in the State of [STATE NAME] for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use, and the demolition of such existing structures as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Property Maintenance Code on file in the office of the [JURISDICTION] are hereby referred to, adopted, and made a part hereof, as if fully set out in this legislation, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

**Section 2.** The following sections are hereby revised:

Section 101.1. Insert: [NAME OF JURISDICTION]

Section 103.5. Insert: [APPROPRIATE SCHEDULE]

Section 112.4. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS]

Section 302.4. Insert: [HEIGHT IN INCHES]

Section 304.14. Insert: [DATES IN TWO LOCATIONS]

Section 602.3. Insert: [DATES IN TWO LOCATIONS]

Section 602.4. Insert: [DATES IN TWO LOCATIONS]

**Section 3.** That [ORDINANCE/STATUTE/REGULATION] No. \_\_\_\_\_ of [JURISDICTION] entitled [FILL IN HERE THE COMPLETE TITLE OF THE LEGISLATION OR LAWS IN EFFECT AT THE PRESENT TIME SO THAT THEY WILL BE REPEALED BY DEFINITE MENTION] and all other ordinances or parts of laws in conflict herewith are hereby repealed.

**Section 4.** That if any section, subsection, sentence, clause or phrase of this legislation is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The [GOVERNING BODY] hereby declares that it would have passed this law, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

**Section 5.** That nothing in this legislation or in the Property Maintenance Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired



or existing, under any act or ordinance hereby repealed as cited in Section 3 of this law; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this legislation.

**Section 6.** That the [JURISDICTION'S KEEPER OF RECORDS] is hereby ordered and directed to cause this legislation to be published. (An additional provision may be required to direct the number of times the legislation is to be published and to specify that it is to be in a newspaper in general circulation. Posting may also be required.)

**Section 7.** That this law and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect [TIME PERIOD] from and after the date of its final passage and adoption.



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# CHAPTER 1

## SCOPE AND ADMINISTRATION

### PART 1 — SCOPE AND APPLICATION

#### SECTION 101 GENERAL

[A] **101.1 Title.** These regulations shall be known as the *International Property Maintenance Code* of [NAME OF JURISDICTION], hereinafter referred to as “this code.”

[A] **101.2 Scope.** The provisions of this code shall apply to all existing residential and nonresidential structures and all existing *premises* and constitute minimum requirements and standards for *premises*, structures, equipment and facilities for light, *ventilation*, space, heating, sanitation, protection from the elements, life safety, safety from fire and other hazards, and for safe and sanitary maintenance; the responsibility of *owners*, *operators* and *occupants*; the *occupancy* of existing structures and *premises*, and for administration, enforcement and penalties.

[A] **101.3 Intent.** This code shall be construed to secure its expressed intent, which is to ensure public health, safety and welfare insofar as they are affected by the continued *occupancy* and maintenance of structures and *premises*. Existing structures and *premises* that do not comply with these provisions shall be altered or repaired to provide a minimum level of health and safety as required herein.

[A] **101.4 Severability.** If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

#### SECTION 102 APPLICABILITY

[A] **102.1 General.** Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where, in a specific case, different sections of this code specify different requirements, the most restrictive shall govern.

[A] **102.2 Maintenance.** Equipment, systems, devices and safeguards required by this code or a previous regulation or code under which the structure or *premises* was constructed, altered or repaired shall be maintained in good working order. No *owner*, *operator* or *occupant* shall cause any service, facility, equipment or utility which is required under this section to be removed from or shut off from or discontinued for any occupied dwelling, except for such temporary interruption as necessary while repairs or alterations are in progress. The requirements of this code are not intended to provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures. Except as other-

wise specified herein, the *owner* or the *owner's* designated agent shall be responsible for the maintenance of buildings, structures and *premises*.

[A] **102.3 Application of other codes.** Repairs, additions or alterations to a structure, or changes of *occupancy*, shall be done in accordance with the procedures and provisions of the *International Building Code*, *International Energy Conservation Code*, *International Fire Code*, *International Fuel Gas Code*, *International Mechanical Code*, *International Residential Code*, *International Plumbing Code* and NFPA 70. Nothing in this code shall be construed to cancel, modify or set aside any provision of the *International Zoning Code*.

[A] **102.4 Existing remedies.** The provisions in this code shall not be construed to abolish or impair existing remedies of the jurisdiction or its officers or agencies relating to the removal or demolition of any structure which is dangerous, unsafe and insanitary.

[A] **102.5 Workmanship.** Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of this code shall be executed and installed in a *workmanlike* manner and installed in accordance with the manufacturer's instructions.

[A] **102.6 Historic buildings.** The provisions of this code shall not be mandatory for existing buildings or structures designated as historic buildings when such buildings or structures are judged by the *code official* to be safe and in the public interest of health, safety and welfare.

[A] **102.7 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 8 and considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

**Exception:** Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing shall apply.

[A] **102.7.1 Conflicts.** Where conflicts occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

[A] **102.7.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

[A] **102.8 Requirements not covered by code.** Requirements necessary for the strength, stability or proper operation of an existing fixture, structure or equipment, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the *code official*.

[A] **102.9 Application of references.** References to chapter or section numbers, or to provisions not specifically identi-



fied by number, shall be construed to refer to such chapter, section or provision of this code.

**[A] 102.10 Other laws.** The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

## PART 2 — ADMINISTRATION AND ENFORCEMENT

### SECTION 103 DEPARTMENT OF PROPERTY MAINTENANCE INSPECTION

**[A] 103.1 General.** The department of property maintenance inspection is hereby created and the executive official in charge thereof shall be known as the *code official*.

**[A] 103.2 Appointment.** The *code official* shall be appointed by the chief appointing authority of the jurisdiction.

**[A] 103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy(s). Such employees shall have powers as delegated by the *code official*.

**[A] 103.4 Liability.** The *code official*, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties. Any suit instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The *code official* or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 103.5 Fees.** The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be as indicated in the following schedule.

[JURISDICTION TO INSERT APPROPRIATE SCHEDULE.]

### SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 General.** The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2 Inspections.** The *code official* shall make all of the required inspections, or shall accept reports of inspection by

*approved* agencies or individuals. All reports of such inspections shall be in writing and be certified by a responsible officer of such *approved* agency or by the responsible individual. The *code official* is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

**[A] 104.3 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or whenever the *code official* has reasonable cause to believe that there exists in a *structure* or upon a *premises* a condition in violation of this code, the *code official* is authorized to enter the structure or *premises* at reasonable times to inspect or perform the duties imposed by this code, provided that if such structure or *premises* is occupied the *code official* shall present credentials to the *occupant* and request entry. If such structure or *premises* is unoccupied, the *code official* shall first make a reasonable effort to locate the *owner* or other person having charge or control of the structure or *premises* and request entry. If entry is refused, the *code official* shall have recourse to the remedies provided by law to secure entry.

**[A] 104.4 Identification.** The *code official* shall carry proper identification when inspecting structures or *premises* in the performance of duties under this code.

**[A] 104.5 Notices and orders.** The *code official* shall issue all necessary notices or orders to ensure compliance with this code.

**[A] 104.6 Department records.** The *code official* shall keep official records of all business and activities of the department specified in the provisions of this code. Such records shall be retained in the official records for the period required for retention of public records.

### SECTION 105 APPROVAL

**[A] 105.1 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of this code, the *code official* shall have the authority to grant modifications for individual cases upon application of the *owner* or *owner's* representative, provided the *code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the department files.

**[A] 105.2 Alternative materials, methods and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.



**[A] 105.3 Required testing.** Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *code official* shall have the authority to require tests to be made as evidence of compliance at no expense to the jurisdiction.

**[A] 105.3.1 Test methods.** Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *code official* shall be permitted to approve appropriate testing procedures performed by an *approved agency*.

**[A] 105.3.2 Test reports.** Reports of tests shall be retained by the *code official* for the period required for retention of public records.

**[A] 105.4 Used material and equipment.** The use of used materials which meet the requirements of this code for new materials is permitted. Materials, equipment and devices shall not be reused unless such elements are in good repair or have been reconditioned and tested when necessary, placed in good and proper working condition and *approved* by the *code official*.

**[A] 105.5 Approved materials and equipment.** Materials, equipment and devices *approved* by the *code official* shall be constructed and installed in accordance with such approval.

**[A] 105.6 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

## SECTION 106 VIOLATIONS

**[A] 106.1 Unlawful acts.** It shall be unlawful for a person, firm or corporation to be in conflict with or in violation of any of the provisions of this code.

**[A] 106.2 Notice of violation.** The *code official* shall serve a notice of violation or order in accordance with Section 107.

**[A] 106.3 Prosecution of violation.** Any person failing to comply with a notice of violation or order served in accordance with Section 107 shall be deemed guilty of a misdemeanor or civil infraction as determined by the local municipality, and the violation shall be deemed a *strict liability offense*. If the notice of violation is not complied with, the *code official* shall institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful *occupancy* of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto. Any action taken by the authority having jurisdiction on such *premises* shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate.

**[A] 106.4 Violation penalties.** Any person who shall violate a provision of this code, or fail to comply therewith, or with any of the requirements thereof, shall be prosecuted within the limits provided by state or local laws. Each day that a vio-

lation continues after due notice has been served shall be deemed a separate offense.

**[A] 106.5 Abatement of violation.** The imposition of the penalties herein prescribed shall not preclude the legal officer of the jurisdiction from instituting appropriate action to restrain, correct or abate a violation, or to prevent illegal *occupancy* of a building, structure or *premises*, or to stop an illegal act, conduct, business or utilization of the building, structure or *premises*.

## SECTION 107 NOTICES AND ORDERS

**[A] 107.1 Notice to person responsible.** Whenever the *code official* determines that there has been a violation of this code or has grounds to believe that a violation has occurred, notice shall be given in the manner prescribed in Sections 107.2 and 107.3 to the person responsible for the violation as specified in this code. Notices for condemnation procedures shall also comply with Section 108.3.

**[A] 107.2 Form.** Such notice prescribed in Section 107.1 shall be in accordance with all of the following:

1. Be in writing.
2. Include a description of the real estate sufficient for identification.
3. Include a statement of the violation or violations and why the notice is being issued.
4. Include a correction order allowing a reasonable time to make the repairs and improvements required to bring the *dwelling unit* or structure into compliance with the provisions of this code.
5. Inform the property *owner* of the right to appeal.
6. Include a statement of the right to file a lien in accordance with Section 106.3.

**[A] 107.3 Method of service.** Such notice shall be deemed to be properly served if a copy thereof is:

1. Delivered personally;
2. Sent by certified or first-class mail addressed to the last known address; or
3. If the notice is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice.

**[A] 107.4 Unauthorized tampering.** Signs, tags or seals posted or affixed by the *code official* shall not be mutilated, destroyed or tampered with, or removed without authorization from the *code official*.

**[A] 107.5 Penalties.** Penalties for noncompliance with orders and notices shall be as set forth in Section 106.4.

**[A] 107.6 Transfer of ownership.** It shall be unlawful for the *owner* of any *dwelling unit* or structure who has received a compliance order or upon whom a notice of violation has been served to sell, transfer, mortgage, lease or otherwise dispose of such *dwelling unit* or structure to another until the



provisions of the compliance order or notice of violation have been complied with, or until such *owner* shall first furnish the grantee, transferee, mortgagee or lessee a true copy of any compliance order or notice of violation issued by the *code official* and shall furnish to the *code official* a signed and notarized statement from the grantee, transferee, mortgagee or lessee, acknowledging the receipt of such compliance order or notice of violation and fully accepting the responsibility without condition for making the corrections or repairs required by such compliance order or notice of violation.

## SECTION 108 UNSAFE STRUCTURES AND EQUIPMENT

**[A] 108.1 General.** When a structure or equipment is found by the *code official* to be unsafe, or when a structure is found unfit for human *occupancy*, or is found unlawful, such structure shall be *condemned* pursuant to the provisions of this code.

**[A] 108.1.1 Unsafe structures.** An unsafe structure is one that is found to be dangerous to the life, health, property or safety of the public or the *occupants* of the structure by not providing minimum safeguards to protect or warn *occupants* in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation, that partial or complete collapse is possible.

**[A] 108.1.2 Unsafe equipment.** Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or within the structure which is in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or *occupants* of the *premises* or structure.

**[A] 108.1.3 Structure unfit for human occupancy.** A structure is unfit for human *occupancy* whenever the *code official* finds that such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is insanitary, vermin or rat infested, contains filth and contamination, or lacks *ventilation*, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the *occupants* of the structure or to the public.

**[A] 108.1.4 Unlawful structure.** An unlawful structure is one found in whole or in part to be occupied by more persons than permitted under this code, or was erected, altered or occupied contrary to law.

**[A] 108.1.5 Dangerous structure or premises.** For the purpose of this code, any structure or *premises* that has any or all of the conditions or defects described below shall be considered dangerous:

1. Any door, aisle, passageway, stairway, exit or other means of egress that does not conform to the *approved* building or fire code of the jurisdiction

as related to the requirements for existing buildings.

2. The walking surface of any aisle, passageway, stairway, exit or other means of egress is so warped, worn loose, torn or otherwise unsafe as to not provide safe and adequate means of egress.
3. Any portion of a building, structure or appurtenance that has been damaged by fire, earthquake, wind, flood, *deterioration*, *neglect*, abandonment, vandalism or by any other cause to such an extent that it is likely to partially or completely collapse, or to become *detached* or dislodged.
4. Any portion of a building, or any member, appurtenance or ornamentation on the exterior thereof that is not of sufficient strength or stability, or is not so *anchored*, attached or fastened in place so as to be capable of resisting natural or artificial loads of one and one-half the original designed value.
5. The building or structure, or part of the building or structure, because of dilapidation, *deterioration*, decay, faulty construction, the removal or movement of some portion of the ground necessary for the support, or for any other reason, is likely to partially or completely collapse, or some portion of the foundation or underpinning of the building or structure is likely to fail or give way.
6. The building or structure, or any portion thereof, is clearly unsafe for its use and *occupancy*.
7. The building or structure is *neglected*, damaged, dilapidated, unsecured or abandoned so as to become an attractive nuisance to children who might play in the building or structure to their danger, becomes a harbor for vagrants, criminals or immoral persons, or enables persons to resort to the building or structure for committing a nuisance or an unlawful act.
8. Any building or structure has been constructed, exists or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the *approved* building or fire code of the jurisdiction, or of any law or ordinance to such an extent as to present either a substantial risk of fire, building collapse or any other threat to life and safety.
9. A building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, inadequate light, *ventilation*, mechanical or plumbing system, or otherwise, is determined by the *code official* to be unsanitary, unfit for human habitation or in such a condition that is likely to cause sickness or disease.
10. Any building or structure, because of a lack of sufficient or proper fire-resistance-rated construction, fire protection systems, electrical system, fuel con-



nections, mechanical system, plumbing system or other cause, is determined by the *code official* to be a threat to life or health.

11. Any portion of a building remains on a site after the demolition or destruction of the building or structure or whenever any building or structure is abandoned so as to constitute such building or portion thereof as an attractive nuisance or hazard to the public.

**[A] 108.2 Closing of vacant structures.** If the structure is vacant and unfit for human habitation and *occupancy*, and is not in danger of structural collapse, the *code official* is authorized to post a placard of condemnation on the *premises* and order the structure closed up so as not to be an attractive nuisance. Upon failure of the *owner* to close up the *premises* within the time specified in the order, the *code official* shall cause the *premises* to be closed and secured through any available public agency or by contract or arrangement by private persons and the cost thereof shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate and may be collected by any other legal resource.

**[A] 108.2.1 Authority to disconnect service utilities.**

The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 102.7 in case of emergency where necessary to eliminate an immediate hazard to life or property or when such utility connection has been made without approval. The *code official* shall notify the serving utility and, whenever possible, the *owner* and *occupant* of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection the *owner* or *occupant* of the building structure or service system shall be notified in writing as soon as practical thereafter.

**[A] 108.3 Notice.** Whenever the *code official* has *condemned* a structure or equipment under the provisions of this section, notice shall be posted in a conspicuous place in or about the structure affected by such notice and served on the *owner* or the person or persons responsible for the structure or equipment in accordance with Section 107.3. If the notice pertains to equipment, it shall also be placed on the *condemned* equipment. The notice shall be in the form prescribed in Section 107.2.

**[A] 108.4 Placarding.** Upon failure of the *owner* or person responsible to comply with the notice provisions within the time given, the *code official* shall post on the *premises* or on defective equipment a placard bearing the word "Condemned" and a statement of the penalties provided for occupying the *premises*, operating the equipment or removing the placard.

**[A] 108.4.1 Placard removal.** The *code official* shall remove the condemnation placard whenever the defect or defects upon which the condemnation and placarding action were based have been eliminated. Any person who

defaces or removes a condemnation placard without the approval of the *code official* shall be subject to the penalties provided by this code.

**[A] 108.5 Prohibited occupancy.** Any occupied structure *condemned* and placarded by the *code official* shall be vacated as ordered by the *code official*. Any person who shall occupy a placarded *premises* or shall operate placarded equipment, and any *owner* or any person responsible for the *premises* who shall let anyone occupy a placarded *premises* or operate placarded equipment shall be liable for the penalties provided by this code.

**[A] 108.6 Abatement methods.** The *owner*, *operator* or *occupant* of a building, *premises* or equipment deemed unsafe by the *code official* shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other *approved* corrective action.

**[A] 108.7 Record.** The *code official* shall cause a report to be filed on an unsafe condition. The report shall state the *occupancy* of the structure and the nature of the unsafe condition.

## SECTION 109 EMERGENCY MEASURES

**[A] 109.1 Imminent danger.** When, in the opinion of the *code official*, there is *imminent danger* of failure or collapse of a building or structure which endangers life, or when any structure or part of a structure has fallen and life is endangered by the occupation of the structure, or when there is actual or potential danger to the building *occupants* or those in the proximity of any structure because of explosives, explosive fumes or vapors or the presence of toxic fumes, gases or materials, or operation of defective or dangerous equipment, the *code official* is hereby authorized and empowered to order and require the *occupants* to vacate the *premises* forthwith. The *code official* shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure Is Unsafe and Its Occupancy Has Been Prohibited by the *Code Official*." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition or of demolishing the same.

**[A] 109.2 Temporary safeguards.** Notwithstanding other provisions of this code, whenever, in the opinion of the *code official*, there is *imminent danger* due to an unsafe condition, the *code official* shall order the necessary work to be done, including the boarding up of openings, to render such structure temporarily safe whether or not the legal procedure herein described has been instituted; and shall cause such other action to be taken as the *code official* deems necessary to meet such emergency.

**[A] 109.3 Closing streets.** When necessary for public safety, the *code official* shall temporarily close structures and close, or order the authority having jurisdiction to close, sidewalks, streets, *public ways* and places adjacent to unsafe structures, and prohibit the same from being utilized.



**[A] 109.4 Emergency repairs.** For the purposes of this section, the *code official* shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

**[A] 109.5 Costs of emergency repairs.** Costs incurred in the performance of emergency work shall be paid by the jurisdiction. The legal counsel of the jurisdiction shall institute appropriate action against the *owner* of the *premises* where the unsafe structure is or was located for the recovery of such costs.

**[A] 109.6 Hearing.** Any person ordered to take emergency measures shall comply with such order forthwith. Any affected person shall thereafter, upon petition directed to the appeals board, be afforded a hearing as described in this code.

## SECTION 110 DEMOLITION

**[A] 110.1 General.** The *code official* shall order the *owner* of any *premises* upon which is located any structure, which in the *code official* judgment after review is so deteriorated or dilapidated or has become so out of repair as to be dangerous, unsafe, insanitary or otherwise unfit for human habitation or occupancy, and such that it is unreasonable to repair the structure, to demolish and remove such structure; or if such structure is capable of being made safe by repairs, to repair and make safe and sanitary, or to board up and hold for future repair or to demolish and remove at the *owner's* option; or where there has been a cessation of normal construction of any structure for a period of more than two years, the *code official* shall order the *owner* to demolish and remove such structure, or board up until future repair. Boarding the building up for future repair shall not extend beyond one year, unless *approved* by the building official.

**[A] 110.2 Notices and orders.** All notices and orders shall comply with Section 107.

**[A] 110.3 Failure to comply.** If the *owner* of a *premises* fails to comply with a demolition order within the time prescribed, the *code official* shall cause the structure to be demolished and removed, either through an available public agency or by contract or arrangement with private persons, and the cost of such demolition and removal shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate.

**[A] 110.4 Salvage materials.** When any structure has been ordered demolished and removed, the governing body or other designated officer under said contract or arrangement aforesaid shall have the right to sell the salvage and valuable materials at the highest price obtainable. The net proceeds of such sale, after deducting the expenses of such demolition and removal, shall be promptly remitted with a report of such sale or transaction, including the items of expense and the amounts deducted, for the person who is entitled thereto, subject to any order of a court. If such a surplus does not remain to be turned over, the report shall so state.

## SECTION 111 MEANS OF APPEAL

**[A] 111.1 Application for appeal.** Any person directly affected by a decision of the *code official* or a notice or order issued under this code shall have the right to appeal to the board of appeals, provided that a written application for appeal is filed within 20 days after the day the decision, notice or order was served. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or the requirements of this code are adequately satisfied by other means.

**[A] 111.2 Membership of board.** The board of appeals shall consist of a minimum of three members who are qualified by experience and training to pass on matters pertaining to property maintenance and who are not employees of the jurisdiction. The *code official* shall be an ex-officio member but shall have no vote on any matter before the board. The board shall be appointed by the chief appointing authority, and shall serve staggered and overlapping terms.

**[A] 111.2.1 Alternate members.** The chief appointing authority shall appoint a minimum of two alternate members who shall be called by the board chairman to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership.

**[A] 111.2.2 Chairman.** The board shall annually select one of its members to serve as chairman.

**[A] 111.2.3 Disqualification of member.** A member shall not hear an appeal in which that member has a personal, professional or financial interest.

**[A] 111.2.4 Secretary.** The chief administrative officer shall designate a qualified person to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.

**[A] 111.2.5 Compensation of members.** Compensation of members shall be determined by law.

**[A] 111.3 Notice of meeting.** The board shall meet upon notice from the chairman, within 20 days of the filing of an appeal, or at stated periodic meetings.

**[A] 111.4 Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the *code official* and any person whose interests are affected shall be given an opportunity to be heard. A quorum shall consist of a minimum of two-thirds of the board membership.

**[A] 111.4.1 Procedure.** The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.



[A] **111.5 Postponed hearing.** When the full board is not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

[A] **111.6 Board decision.** The board shall modify or reverse the decision of the *code official* only by a concurring vote of a majority of the total number of appointed board members.

[A] **111.6.1 Records and copies.** The decision of the board shall be recorded. Copies shall be furnished to the appellant and to the *code official*.

[A] **111.6.2 Administration.** The *code official* shall take immediate action in accordance with the decision of the board.

[A] **111.7 Court review.** Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

[A] **111.8 Stays of enforcement.** Appeals of notice and orders (other than *Imminent Danger* notices) shall stay the enforcement of the notice and order until the appeal is heard by the appeals board.

## SECTION 112 STOP WORK ORDER

[A] **112.1 Authority.** Whenever the *code official* finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the *code official* is authorized to issue a stop work order.

[A] **112.2 Issuance.** A stop work order shall be in writing and shall be given to the *owner* of the property, to the *owner's* agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work is authorized to resume.

[A] **112.3 Emergencies.** Where an emergency exists, the *code official* shall not be required to give a written notice prior to stopping the work.

[A] **112.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.







## CHAPTER 2

# DEFINITIONS

### SECTION 201 GENERAL

**201.1 Scope.** Unless otherwise expressly stated, the following terms shall, for the purposes of this code, have the meanings shown in this chapter.

**201.2 Interchangeability.** Words stated in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

**201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in the *International Building Code*, *International Existing Building Code*, *International Fire Code*, *International Fuel Gas Code*, *International Mechanical Code*, *International Plumbing Code*, *International Residential Code*, *International Zoning Code* or NFPA 70, such terms shall have the meanings ascribed to them as stated in those codes.

**201.4 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

**201.5 Parts.** Whenever the words “*dwelling unit*,” “*dwelling*,” “*premises*,” “*building*,” “*rooming house*,” “*rooming unit*,” “*housekeeping unit*” or “*story*” are stated in this code, they shall be construed as though they were followed by the words “or any part thereof.”

### SECTION 202 GENERAL DEFINITIONS

**ANCHORED.** Secured in a manner that provides positive connection.

**[A] APPROVED.** *Approved by the code official.*

**BASEMENT.** That portion of a building which is partly or completely below grade.

**BATHROOM.** A room containing plumbing fixtures including a bathtub or shower.

**BEDROOM.** Any room or space used or intended to be used for sleeping purposes in either a dwelling or *sleeping unit*.

**[A] CODE OFFICIAL.** The official who is charged with the administration and enforcement of this code, or any duly authorized representative.

**CONDEMN.** To adjudge unfit for *occupancy*.

**DETACHED.** When a structural element is physically disconnected from another and that connection is necessary to provide a positive connection.

**DETERIORATION.** To weaken, disintegrate, corrode, rust or decay and lose effectiveness.

**[B] DWELLING UNIT.** A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

**[Z] EASEMENT.** That portion of land or property reserved for present or future use by a person or agency other than the legal fee *owner(s)* of the property. The *easement* shall be permitted to be for use under, on or above a said lot or lots.

**EQUIPMENT SUPPORT.** Those structural members or assemblies of members or manufactured elements, including braces, frames, lugs, snuggers, hangers or saddles, that transmit gravity load, lateral load and operating load between the equipment and the structure.

**EXTERIOR PROPERTY.** The open space on the *premises* and on adjoining property under the control of *owners* or *operators* of such *premises*.

**GARBAGE.** The animal or vegetable waste resulting from the handling, preparation, cooking and consumption of food.

**[B] GUARD.** A building component or a system of building components located at or near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to a lower level.

**[B] HABITABLE SPACE.** Space in a structure for living, sleeping, eating or cooking. *Bathrooms*, *toilet rooms*, closets, halls, storage or utility spaces, and similar areas are not considered *habitable spaces*.

**HOUSEKEEPING UNIT.** A room or group of rooms forming a single *habitable space* equipped and intended to be used for living, sleeping, cooking and eating which does not contain, within such a unit, a toilet, lavatory and bathtub or shower.

**IMMINENT DANGER.** A condition which could cause serious or life-threatening injury or death at any time.

**INFESTATION.** The presence, within or contiguous to, a structure or *premises* of insects, rats, vermin or other pests.

**INOPERABLE MOTOR VEHICLE.** A vehicle which cannot be driven upon the public streets for reason including but not limited to being unlicensed, wrecked, abandoned, in a state of disrepair, or incapable of being moved under its own power.

**[A] LABELED.** Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-*labeled* items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.



## DEFINITIONS

**LET FOR OCCUPANCY or LET.** To permit, provide or offer possession or *occupancy* of a dwelling, *dwelling unit*, *rooming unit*, building, premise or structure by a person who is or is not the legal *owner* of record thereof, pursuant to a written or unwritten lease, agreement or license, or pursuant to a recorded or unrecorded agreement of contract for the sale of land.

**NEGLECT.** The lack of proper maintenance for a building or *structure*.

**[A] OCCUPANCY.** The purpose for which a building or portion thereof is utilized or occupied.

**OCCUPANT.** Any individual living or sleeping in a building, or having possession of a space within a building.

**OPENABLE AREA.** That part of a window, skylight or door which is available for unobstructed *ventilation* and which opens directly to the outdoors.

**OPERATOR.** Any person who has charge, care or control of a structure or *premises* which is let or offered for *occupancy*.

**[A] OWNER.** Any person, agent, *operator*, firm or corporation having a legal or equitable interest in the property; or recorded in the official records of the state, county or municipality as holding title to the property; or otherwise having control of the property, including the guardian of the estate of any such person, and the executor or administrator of the estate of such person if ordered to take possession of real property by a court.

**PERSON.** An individual, corporation, partnership or any other group acting as a unit.

**PEST ELIMINATION.** The control and elimination of insects, rodents or other pests by eliminating their harborage places; by removing or making inaccessible materials that serve as their food or water; by other *approved pest elimination* methods.

**[A] PREMISES.** A lot, plot or parcel of land, *easement* or *public way*, including any structures thereon.

**[A] PUBLIC WAY.** Any street, alley or similar parcel of land essentially unobstructed from the ground to the sky, which is deeded, dedicated or otherwise permanently appropriated to the public for public use.

**ROOMING HOUSE.** A building arranged or occupied for lodging, with or without meals, for compensation and not occupied as a one- or two-family dwelling.

**ROOMING UNIT.** Any room or group of rooms forming a single habitable unit occupied or intended to be occupied for sleeping or living, but not for cooking purposes.

**RUBBISH.** Combustible and noncombustible waste materials, except garbage; the term shall include the residue from the burning of wood, coal, coke and other combustible materials, paper, rags, cartons, boxes, wood, excelsior, rubber, leather, tree branches, *yard* trimmings, tin cans, metals, mineral matter, glass, crockery and dust and other similar materials.

**[B] SLEEPING UNIT.** A room or space in which people sleep, which can also include permanent provisions for liv-

ing, eating and either sanitation or kitchen facilities, but not both. Such rooms and spaces that are also part of a *dwelling unit* are not *sleeping units*.

**STRICT LIABILITY OFFENSE.** An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited, or failed to do an act which the defendant was legally required to do.

**[A] STRUCTURE.** That which is built or constructed or a portion thereof.

**TENANT.** A person, corporation, partnership or group, whether or not the legal *owner* of record, occupying a building or portion thereof as a unit.

**TOILET ROOM.** A room containing a water closet or urinal but not a bathtub or shower.

**ULTIMATE DEFORMATION.** The deformation at which failure occurs and which shall be deemed to occur if the sustainable load reduces to 80 percent or less of the maximum strength.

**[M] VENTILATION.** The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.

**WORKMANLIKE.** Executed in a skilled manner; e.g., generally plumb, level, square, in line, undamaged and without marring adjacent work.

**[Z] YARD.** An open space on the same lot with a structure.



## CHAPTER 3

# GENERAL REQUIREMENTS

### SECTION 301 GENERAL

**301.1 Scope.** The provisions of this chapter shall govern the minimum conditions and the responsibilities of persons for maintenance of structures, equipment and *exterior property*.

**301.2 Responsibility.** The *owner* of the *premises* shall maintain the structures and *exterior property* in compliance with these requirements, except as otherwise provided for in this code. A person shall not occupy as owner-occupant or permit another person to occupy *premises* which are not in a sanitary and safe condition and which do not comply with the requirements of this chapter. *Occupants* of a *dwelling unit*, *rooming unit* or *housekeeping unit* are responsible for keeping in a clean, sanitary and safe condition that part of the *dwelling unit*, *rooming unit*, *housekeeping unit* or *premises* which they occupy and control.

**301.3 Vacant structures and land.** All vacant structures and *premises* thereof or vacant land shall be maintained in a clean, safe, secure and sanitary condition as provided herein so as not to cause a blighting problem or adversely affect the public health or safety.

### SECTION 302 EXTERIOR PROPERTY AREAS

**302.1 Sanitation.** All *exterior property* and *premises* shall be maintained in a clean, safe and sanitary condition. The *occupant* shall keep that part of the *exterior property* which such *occupant* occupies or controls in a clean and sanitary condition.

**302.2 Grading and drainage.** All *premises* shall be graded and maintained to prevent the erosion of soil and to prevent the accumulation of stagnant water thereon, or within any structure located thereon.

**Exception:** *Approved* retention areas and reservoirs.

**302.3 Sidewalks and driveways.** All sidewalks, walkways, stairs, driveways, parking spaces and similar areas shall be kept in a proper state of repair, and maintained free from hazardous conditions.

**302.4 Weeds.** All *premises* and *exterior property* shall be maintained free from weeds or plant growth in excess of [JURISDICTION TO INSERT HEIGHT IN INCHES]. All noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.

Upon failure of the *owner* or agent having charge of a property to cut and destroy weeds after service of a notice of violation, they shall be subject to prosecution in accordance with Section 106.3 and as prescribed by the authority having jurisdiction. Upon failure to comply with the notice of viola-

tion, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut and destroy the weeds growing thereon, and the costs of such removal shall be paid by the *owner* or agent responsible for the property.

**302.5 Rodent harborage.** All structures and *exterior property* shall be kept free from rodent harborage and *infestation*. Where rodents are found, they shall be promptly exterminated by *approved* processes which will not be injurious to human health. After pest elimination, proper precautions shall be taken to eliminate rodent harborage and prevent reinfestation.

**302.6 Exhaust vents.** Pipes, ducts, conductors, fans or blowers shall not discharge gases, steam, vapor, hot air, grease, smoke, odors or other gaseous or particulate wastes directly upon abutting or adjacent public or private property or that of another *tenant*.

**302.7 Accessory structures.** All accessory structures, including *detached* garages, fences and walls, shall be maintained structurally sound and in good repair.

**302.8 Motor vehicles.** Except as provided for in other regulations, no inoperative or unlicensed motor vehicle shall be parked, kept or stored on any *premises*, and no vehicle shall at any time be in a state of major disassembly, disrepair, or in the process of being stripped or dismantled. Painting of vehicles is prohibited unless conducted inside an *approved* spray booth.

**Exception:** A vehicle of any type is permitted to undergo major overhaul, including body work, provided that such work is performed inside a structure or similarly enclosed area designed and *approved* for such purposes.

**302.9 Defacement of property.** No person shall willfully or wantonly damage, mutilate or deface any exterior surface of any structure or building on any private or public property by placing thereon any marking, carving or graffiti.

It shall be the responsibility of the *owner* to restore said surface to an *approved* state of maintenance and repair.

### SECTION 303 SWIMMING POOLS, SPAS AND HOT TUBS

**303.1 Swimming pools.** Swimming pools shall be maintained in a clean and sanitary condition, and in good repair.

**303.2 Enclosures.** Private swimming pools, hot tubs and spas, containing water more than 24 inches (610 mm) in depth shall be completely surrounded by a fence or barrier at least 48 inches (1219 mm) in height above the finished ground level measured on the side of the barrier away from the pool. Gates and doors in such barriers shall be self-closing and self-latching. Where the self-latching device is a minimum of 54 inches (1372 mm) above the bottom of the gate,



## GENERAL REQUIREMENTS

the release mechanism shall be located on the pool side of the gate. Self-closing and self-latching gates shall be maintained such that the gate will positively close and latch when released from an open position of 6 inches (152 mm) from the gatepost. No existing pool enclosure shall be removed, replaced or changed in a manner that reduces its effectiveness as a safety barrier.

**Exception:** Spas or hot tubs with a safety cover that complies with ASTM F 1346 shall be exempt from the provisions of this section.

### SECTION 304 EXTERIOR STRUCTURE

**304.1 General.** The exterior of a structure shall be maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety or welfare.

**304.1.1 Unsafe conditions.** The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* or the *International Existing Building Code* as required for existing buildings:

1. The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength;
2. The *anchorage* of the floor or roof to walls or columns, and of walls and columns to foundations is not capable of resisting all nominal loads or load effects;
3. Structures or components thereof that have reached their limit state;
4. Siding and masonry joints including joints between the building envelope and the perimeter of windows, doors and skylights are not maintained, weather resistant or water tight;
5. Structural members that have evidence of *deterioration* or that are not capable of safely supporting all nominal loads and load effects;
6. Foundation systems that are not firmly supported by footings, are not plumb and free from open cracks and breaks, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects;
7. Exterior walls that are not *anchored* to supporting and supported elements or are not plumb and free of holes, cracks or breaks and loose or rotting materials, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects;
8. Roofing or roofing components that have defects that admit rain, roof surfaces with inadequate drainage, or any portion of the roof framing that is not in good repair with signs of *deterioration*, fatigue or without proper anchorage and incapable of supporting all nominal loads and resisting all load effects;
9. Flooring and flooring components with defects that affect serviceability or flooring components that show signs of *deterioration* or fatigue, are not properly *anchored* or are incapable of supporting all nominal loads and resisting all load effects;
10. Veneer, cornices, belt courses, corbels, trim, wall facings and similar decorative features not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects;
11. Overhang extensions or projections including, but not limited to, trash chutes, canopies, marquees, signs, awnings, fire escapes, standpipes and exhaust ducts not properly *anchored* or that are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects;
12. Exterior stairs, decks, porches, balconies and all similar appurtenances attached thereto, including *guards* and handrails, are not structurally sound, not properly *anchored* or that are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects; or
13. Chimneys, cooling towers, smokestacks and similar appurtenances not structurally sound or not properly *anchored*, or that are anchored with connections not capable of supporting all nominal loads and resisting all load effects.

#### Exceptions:

1. When substantiated otherwise by an *approved* method.
2. Demolition of unsafe conditions shall be permitted when *approved* by the *code official*.

**304.2 Protective treatment.** All exterior surfaces, including but not limited to, doors, door and window frames, cornices, porches, trim, balconies, decks and fences, shall be maintained in good condition. Exterior wood surfaces, other than decay-resistant woods, shall be protected from the elements and decay by painting or other protective covering or treatment. Peeling, flaking and chipped paint shall be eliminated and surfaces repainted. All siding and masonry joints, as well as those between the building envelope and the perimeter of windows, doors and skylights, shall be maintained weather resistant and water tight. All metal surfaces subject to rust or corrosion shall be coated to inhibit such rust and corrosion, and all surfaces with rust or corrosion shall be stabilized and coated to inhibit future rust and corrosion. Oxidation stains shall be removed from exterior surfaces. Surfaces designed for stabilization by oxidation are exempt from this requirement.

**[F] 304.3 Premises identification.** Buildings shall have *approved* address numbers placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) in height with a minimum stroke width of 0.5 inch (12.7 mm).



**304.4 Structural members.** All structural members shall be maintained free from *deterioration*, and shall be capable of safely supporting the imposed dead and live loads.

**304.5 Foundation walls.** All foundation walls shall be maintained plumb and free from open cracks and breaks and shall be kept in such condition so as to prevent the entry of rodents and other pests.

**304.6 Exterior walls.** All exterior walls shall be free from holes, breaks, and loose or rotting materials; and maintained weatherproof and properly surface coated where required to prevent *deterioration*.

**304.7 Roofs and drainage.** The roof and flashing shall be sound, tight and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or *deterioration* in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall not be discharged in a manner that creates a public nuisance.

**304.8 Decorative features.** All cornices, belt courses, corbels, terra cotta trim, wall facings and similar decorative features shall be maintained in good repair with proper anchorage and in a safe condition.

**304.9 Overhang extensions.** All overhang extensions including, but not limited to canopies, marquees, signs, metal awnings, fire escapes, standpipes and exhaust ducts shall be maintained in good repair and be properly *anchored* so as to be kept in a sound condition. When required, all exposed surfaces of metal or wood shall be protected from the elements and against decay or rust by periodic application of weather-coating materials, such as paint or similar surface treatment.

**304.10 Stairways, decks, porches and balconies.** Every exterior stairway, deck, porch and balcony, and all appurtenances attached thereto, shall be maintained structurally sound, in good repair, with proper anchorage and capable of supporting the imposed loads.

**304.11 Chimneys and towers.** All chimneys, cooling towers, smoke stacks, and similar appurtenances shall be maintained structurally safe and sound, and in good repair. All exposed surfaces of metal or wood shall be protected from the elements and against decay or rust by periodic application of weather-coating materials, such as paint or similar surface treatment.

**304.12 Handrails and guards.** Every handrail and *guard* shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

**304.13 Window, skylight and door frames.** Every window, skylight, door and frame shall be kept in sound condition, good repair and weather tight.

**304.13.1 Glazing.** All glazing materials shall be maintained free from cracks and holes.

**304.13.2 Openable windows.** Every window, other than a fixed window, shall be easily openable and capable of being held in position by window hardware.

**304.14 Insect screens.** During the period from [DATE] to [DATE], every door, window and other outside opening required for *ventilation* of habitable rooms, food preparation

areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with *approved* tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

**Exception:** Screens shall not be required where other *approved* means, such as air curtains or insect repellent fans, are employed.

**304.15 Doors.** All exterior doors, door assemblies, operator systems if provided, and hardware shall be maintained in good condition. Locks at all entrances to dwelling units and sleeping units shall tightly secure the door. Locks on means of egress doors shall be in accordance with Section 702.3.

**304.16 Basement hatchways.** Every *basement* hatchway shall be maintained to prevent the entrance of rodents, rain and surface drainage water.

**304.17 Guards for basement windows.** Every *basement* window that is openable shall be supplied with rodent shields, storm windows or other *approved* protection against the entry of rodents.

**304.18 Building security.** Doors, windows or hatchways for *dwelling units*, room units or *housekeeping units* shall be provided with devices designed to provide security for the *occupants* and property within.

**304.18.1 Doors.** Doors providing access to a *dwelling unit*, *rooming unit* or *housekeeping unit* that is rented, leased or let shall be equipped with a deadbolt lock designed to be readily openable from the side from which egress is to be made without the need for keys, special knowledge or effort and shall have a minimum lock throw of 1 inch (25 mm). Such deadbolt locks shall be installed according to the manufacturer's specifications and maintained in good working order. For the purpose of this section, a sliding bolt shall not be considered an acceptable deadbolt lock.

**304.18.2 Windows.** Operable windows located in whole or in part within 6 feet (1828 mm) above ground level or a walking surface below that provide access to a *dwelling unit*, *rooming unit* or *housekeeping unit* that is rented, leased or let shall be equipped with a window sash locking device.

**304.18.3 Basement hatchways.** *Basement* hatchways that provide access to a *dwelling unit*, *rooming unit* or *housekeeping unit* that is rented, leased or let shall be equipped with devices that secure the units from unauthorized entry.

**304.19 Gates.** All exterior gates, gate assemblies, operator systems if provided, and hardware shall be maintained in good condition. Latches at all entrances shall tightly secure the gates.

## SECTION 305 INTERIOR STRUCTURE

**305.1 General.** The interior of a structure and equipment therein shall be maintained in good repair, structurally sound



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and in a sanitary condition. *Occupants* shall keep that part of the structure which they occupy or control in a clean and sanitary condition. Every *owner* of a structure containing a *rooming house*, *housekeeping units*, a hotel, a dormitory, two or more *dwelling units* or two or more nonresidential occupancies, shall maintain, in a clean and sanitary condition, the shared or public areas of the structure and *exterior property*.

**305.1.1 Unsafe conditions.** The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* or the *International Existing Building Code* as required for existing buildings:

1. The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength;
2. The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations is not capable of resisting all nominal loads or load effects;
3. Structures or components thereof that have reached their limit state;
4. Structural members are incapable of supporting nominal loads and load effects;
5. Stairs, landings, balconies and all similar walking surfaces, including *guards* and handrails, are not structurally sound, not properly *anchored* or are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects;
6. Foundation systems that are not firmly supported by footings are not plumb and free from open cracks and breaks, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects.

**Exceptions:**

1. When substantiated otherwise by an *approved* method.
2. Demolition of unsafe conditions shall be permitted when *approved* by the *code official*.

**305.2 Structural members.** All structural members shall be maintained structurally sound, and be capable of supporting the imposed loads.

**305.3 Interior surfaces.** All interior surfaces, including windows and doors, shall be maintained in good, clean and sanitary condition. Peeling, chipping, flaking or abraded paint shall be repaired, removed or covered. Cracked or loose plaster, decayed wood and other defective surface conditions shall be corrected.

**305.4 Stairs and walking surfaces.** Every stair, ramp, landing, balcony, porch, deck or other walking surface shall be maintained in sound condition and good repair.

**305.5 Handrails and guards.** Every handrail and *guard* shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

**305.6 Interior doors.** Every interior door shall fit reasonably well within its frame and shall be capable of being opened

and closed by being properly and securely attached to jambs, headers or tracks as intended by the manufacturer of the attachment hardware.

## SECTION 306 COMPONENT SERVICEABILITY

**306.1 General.** The components of a structure and equipment therein shall be maintained in good repair, structurally sound and in a sanitary condition.

**306.1.1 Unsafe conditions.** Where any of the following conditions cause the component or system to be beyond its limit state, the component or system shall be determined as unsafe and shall be repaired or replaced to comply with the *International Building Code* as required for existing buildings:

1. Soils that have been subjected to any of the following conditions:
  - 1.1. Collapse of footing or foundation system;
  - 1.2. Damage to footing, foundation, concrete or other structural element due to soil expansion;
  - 1.3. Adverse effects to the design strength of footing, foundation, concrete or other structural element due to a chemical reaction from the soil;
  - 1.4. Inadequate soil as determined by a geotechnical investigation;
  - 1.5. Where the allowable bearing capacity of the soil is in doubt; or
  - 1.6. Adverse effects to the footing, foundation, concrete or other structural element due to the ground water table.
2. Concrete that has been subjected to any of the following conditions:
  - 2.1. *Deterioration*;
  - 2.2. *Ultimate deformation*;
  - 2.3. Fractures;
  - 2.4. Fissures;
  - 2.5. Spalling;
  - 2.6. Exposed reinforcement; or
  - 2.7. *Detached*, dislodged or failing connections.
3. Aluminum that has been subjected to any of the following conditions:
  - 3.1. *Deterioration*;
  - 3.2. Corrosion;
  - 3.3. Elastic deformation;
  - 3.4. *Ultimate deformation*;
  - 3.5. Stress or strain cracks;
  - 3.6. Joint fatigue; or
  - 3.7. *Detached*, dislodged or failing connections.



4. Masonry that has been subjected to any of the following conditions:
  - 4.1. *Deterioration*;
  - 4.2. *Ultimate deformation*;
  - 4.3. Fractures in masonry or mortar joints;
  - 4.4. Fissures in masonry or mortar joints;
  - 4.5. Spalling;
  - 4.6. Exposed reinforcement; or
  - 4.7. *Detached*, dislodged or failing connections.
5. Steel that has been subjected to any of the following conditions:
  - 5.1. *Deterioration*;
  - 5.2. Elastic deformation;
  - 5.3. *Ultimate deformation*;
  - 5.4. Metal fatigue; or
  - 5.5. *Detached*, dislodged or failing connections.
6. Wood that has been subjected to any of the following conditions:
  - 6.1. *Ultimate deformation*;
  - 6.2. *Deterioration*;
  - 6.3. Damage from insects, rodents and other vermin;
  - 6.4. Fire damage beyond charring;
  - 6.5. Significant splits and checks;
  - 6.6. Horizontal shear cracks;
  - 6.7. Vertical shear cracks;
  - 6.8. Inadequate support;
  - 6.9. *Detached*, dislodged or failing connections; or
  - 6.10. Excessive cutting and notching.

**Exceptions:**

1. When substantiated otherwise by an *approved* method.
2. Demolition of unsafe conditions shall be permitted when *approved* by the *code official*.

### SECTION 307 HANDRAILS AND GUARDRAILS

**307.1 General.** Every exterior and interior flight of stairs having more than four risers shall have a handrail on one side of the stair and every open portion of a stair, landing, balcony, porch, deck, ramp or other walking surface which is more than 30 inches (762 mm) above the floor or grade below shall have *guards*. Handrails shall not be less than 30 inches (762 mm) in height or more than 42 inches (1067 mm) in height measured vertically above the nosing of the tread or above the finished floor of the landing or walking surfaces. *Guards* shall not be less than 30 inches (762 mm) in height

above the floor of the landing, balcony, porch, deck, or ramp or other walking surface.

**Exception:** *Guards* shall not be required where exempted by the adopted building code.

### SECTION 308 RUBBISH AND GARBAGE

**308.1 Accumulation of rubbish or garbage.** All *exterior property* and *premises*, and the interior of every structure, shall be free from any accumulation of *rubbish* or garbage.

**308.2 Disposal of rubbish.** Every *occupant* of a structure shall dispose of all *rubbish* in a clean and sanitary manner by placing such *rubbish* in *approved* containers.

**308.2.1 Rubbish storage facilities.** The *owner* of every occupied *premises* shall supply *approved* covered containers for *rubbish*, and the *owner* of the *premises* shall be responsible for the removal of *rubbish*.

**308.2.2 Refrigerators.** Refrigerators and similar equipment not in operation shall not be discarded, abandoned or stored on *premises* without first removing the doors.

**308.3 Disposal of garbage.** Every *occupant* of a structure shall dispose of garbage in a clean and sanitary manner by placing such garbage in an *approved* garbage disposal facility or *approved* garbage containers.

**308.3.1 Garbage facilities.** The *owner* of every dwelling shall supply one of the following: an *approved* mechanical food waste grinder in each *dwelling unit*; an *approved* incinerator unit in the structure available to the *occupants* in each *dwelling unit*; or an *approved* leakproof, covered, outside garbage container.

**308.3.2 Containers.** The *operator* of every establishment producing garbage shall provide, and at all times cause to be utilized, *approved* leakproof containers provided with close-fitting covers for the storage of such materials until removed from the *premises* for disposal.

### SECTION 309 PEST ELIMINATION

**309.1 Infestation.** All structures shall be kept free from insect and rodent *infestation*. All structures in which insects or rodents are found shall be promptly exterminated by *approved* processes that will not be injurious to human health. After pest elimination, proper precautions shall be taken to prevent reinfestation.

**309.2 Owner.** The *owner* of any structure shall be responsible for pest elimination within the structure prior to renting or leasing the structure.

**309.3 Single occupant.** The *occupant* of a one-family dwelling or of a single-*tenant* nonresidential structure shall be responsible for pest elimination on the *premises*.

**309.4 Multiple occupancy.** The *owner* of a structure containing two or more *dwelling units*, a multiple *occupancy*, a



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*rooming house* or a nonresidential structure shall be responsible for pest elimination in the public or shared areas of the structure and *exterior property*. If *infestation* is caused by failure of an *occupant* to prevent such *infestation* in the area occupied, the *occupant* and *owner* shall be responsible for pest elimination.

**309.5 Occupant.** The *occupant* of any structure shall be responsible for the continued rodent and pest-free condition of the structure.

**Exception:** Where the *infestations* are caused by defects in the structure, the *owner* shall be responsible for pest elimination.



## CHAPTER 4

# LIGHT, VENTILATION AND OCCUPANCY LIMITATIONS

### SECTION 401 GENERAL

**401.1 Scope.** The provisions of this chapter shall govern the minimum conditions and standards for light, *ventilation* and space for occupying a structure.

**401.2 Responsibility.** The *owner* of the structure shall provide and maintain light, *ventilation* and space conditions in compliance with these requirements. A person shall not occupy as *owner-occupant*, or permit another person to occupy, any *premises* that do not comply with the requirements of this chapter.

**401.3 Alternative devices.** In lieu of the means for natural light and *ventilation* herein prescribed, artificial light or mechanical *ventilation* complying with the *International Building Code* shall be permitted.

### SECTION 402 LIGHT

**402.1 Habitable spaces.** Every *habitable space* shall have at least one window of *approved* size facing directly to the outdoors or to a court. The minimum total glazed area for every *habitable space* shall be 8 percent of the floor area of such room. Wherever walls or other portions of a structure face a window of any room and such obstructions are located less than 3 feet (914 mm) from the window and extend to a level above that of the ceiling of the room, such window shall not be deemed to face directly to the outdoors nor to a court and shall not be included as contributing to the required minimum total window area for the room.

**Exception:** Where natural light for rooms or spaces without exterior glazing areas is provided through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but a minimum of 25 square feet (2.33 m<sup>2</sup>). The exterior glazing area shall be based on the total floor area being served.

**402.2 Common halls and stairways.** Every common hall and stairway in residential occupancies, other than in one- and two-family dwellings, shall be lighted at all times with at least a 60-watt standard incandescent light bulb for each 200 square feet (19 m<sup>2</sup>) of floor area or equivalent illumination, provided that the spacing between lights shall not be greater than 30 feet (9144 mm). In other than residential occupancies, means of egress, including exterior means of egress, stairways shall be illuminated at all times the building space served by the means of egress is occupied with a minimum of 1 footcandle (11 lux) at floors, landings and treads.

**402.3 Other spaces.** All other spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe *occupancy* of the space and utilization of the appliances, equipment and fixtures.

### SECTION 403 VENTILATION

**403.1 Habitable spaces.** Every *habitable space* shall have at least one openable window. The total openable area of the window in every room shall be equal to at least 45 percent of the minimum glazed area required in Section 402.1.

**Exception:** Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but a minimum of 25 square feet (2.33 m<sup>2</sup>). The *ventilation* openings to the outdoors shall be based on a total floor area being ventilated.

**403.2 Bathrooms and toilet rooms.** Every *bathroom* and *toilet room* shall comply with the *ventilation* requirements for *habitable spaces* as required by Section 403.1, except that a window shall not be required in such spaces equipped with a mechanical *ventilation* system. Air exhausted by a mechanical *ventilation* system from a *bathroom* or *toilet room* shall discharge to the outdoors and shall not be recirculated.

**403.3 Cooking facilities.** Unless *approved* through the certificate of *occupancy*, cooking shall not be permitted in any *rooming unit* or dormitory unit, and a cooking facility or appliance shall not be permitted to be present in the *rooming unit* or dormitory unit.

**Exceptions:**

1. Where specifically *approved* in writing by the *code official*.
2. Devices such as coffee pots and microwave ovens shall not be considered cooking appliances.

**403.4 Process ventilation.** Where injurious, toxic, irritating or noxious fumes, gases, dusts or mists are generated, a local exhaust *ventilation* system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space.

**403.5 Clothes dryer exhaust.** Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted outside the structure in accordance with the manufacturer's instructions.

**Exception:** Listed and *labeled* condensing (ductless) clothes dryers.

### SECTION 404 OCCUPANCY LIMITATIONS

**404.1 Privacy.** *Dwelling units*, hotel units, *housekeeping units*, *rooming units* and dormitory units shall be arranged to provide privacy and be separate from other adjoining spaces.

**404.2 Minimum room widths.** A habitable room, other than a kitchen, shall be a minimum of 7 feet (2134 mm) in any



plan dimension. Kitchens shall have a minimum clear passageway of 3 feet (914 mm) between counterfronts and appliances or counterfronts and walls.

**404.3 Minimum ceiling heights.** *Habitable spaces*, hallways, corridors, laundry areas, *bathrooms*, *toilet rooms* and habitable *basement* areas shall have a minimum clear ceiling height of 7 feet (2134 mm).

**Exceptions:**

1. In one- and two-family dwellings, beams or girders spaced a minimum of 4 feet (1219 mm) on center and projecting a maximum of 6 inches (152 mm) below the required ceiling height.
2. *Basement* rooms in one- and two-family dwellings occupied exclusively for laundry, study or recreation purposes, having a minimum ceiling height of 6 feet 8 inches (2033 mm) with a minimum clear height of 6 feet 4 inches (1932 mm) under beams, girders, ducts and similar obstructions.
3. Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a minimum clear ceiling height of 7 feet (2134 mm) over a minimum of one-third of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a minimum clear ceiling height of 5 feet (1524 mm) shall be included.

**404.4 Bedroom and living room requirements.** Every *bedroom* and living room shall comply with the requirements of Sections 404.4.1 through 404.4.5.

**404.4.1 Room area.** Every living room shall contain at least 120 square feet (11.2 m<sup>2</sup>) and every bedroom shall contain a minimum of 70 square feet (6.5 m<sup>2</sup>) and every bedroom occupied by more than one person shall contain a minimum of 50 square feet (4.6 m<sup>2</sup>) of floor area for each occupant thereof.

**404.4.2 Access from bedrooms.** *Bedrooms* shall not constitute the only means of access to other *bedrooms* or *habitable spaces* and shall not serve as the only means of egress from other *habitable spaces*.

**Exception:** Units that contain fewer than two *bedrooms*.

**404.4.3 Water closet accessibility.** Every *bedroom* shall have access to at least one water closet and one lavatory without passing through another *bedroom*. Every *bedroom* in a *dwelling unit* shall have access to at least one water closet and lavatory located in the same story as the *bedroom* or an adjacent story.

**404.4.4 Prohibited occupancy.** Kitchens and nonhabitable spaces shall not be used for sleeping purposes.

**404.4.5 Other requirements.** *Bedrooms* shall comply with the applicable provisions of this code including, but not limited to, the light, *ventilation*, room area, ceiling height and room width requirements of this chapter; the plumbing facilities and water-heating facilities requirements of Chapter 5; the heating facilities and electrical

receptacle requirements of Chapter 6; and the smoke detector and emergency escape requirements of Chapter 7.

**404.5 Overcrowding.** Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.

**TABLE 404.5  
MINIMUM AREA REQUIREMENTS**

SPACE	MINIMUM AREA IN SQUARE FEET		
	1-2 occupants	3-5 occupants	6 or more occupants
Living room <sup>a, b</sup>	120	120	150
Dining room <sup>a, b</sup>	No requirement	80	100
Bedrooms	Shall comply with Section 404.4.1		

For SI: 1 square foot = 0.093 m<sup>2</sup>.

a. See Section 404.5.2 for combined living room/dining room spaces.

b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

**404.5.1 Sleeping area.** The minimum occupancy area required by Table 404.5 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section 404.4.

**404.5.2 Combined spaces.** Combined living room and dining room spaces shall comply with the requirements of Table 404.5 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.

**404.6 Efficiency unit.** Nothing in this section shall prohibit an efficiency living unit from meeting the following requirements:

1. A unit occupied by not more than one occupant shall have a minimum clear floor area of 120 square feet (11.2 m<sup>2</sup>). A unit occupied by not more than two *occupants* shall have a minimum clear floor area of 220 square feet (20.4 m<sup>2</sup>). A unit occupied by three *occupants* shall have a minimum clear floor area of 320 square feet (29.7 m<sup>2</sup>). These required areas shall be exclusive of the areas required by Items 2 and 3.
2. The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a minimum clear working space of 30 inches (762 mm) in front. Light and *ventilation* conforming to this code shall be provided.
3. The unit shall be provided with a separate *bathroom* containing a water closet, lavatory and bathtub or shower.
4. The maximum number of *occupants* shall be three.

**404.7 Food preparation.** All spaces to be occupied for food preparation purposes shall contain suitable space and equipment to store, prepare and serve foods in a sanitary manner. There shall be adequate facilities and services for the sanitary disposal of food wastes and refuse, including facilities for temporary storage.



## CHAPTER 5

# PLUMBING FACILITIES AND FIXTURE REQUIREMENTS

### SECTION 501 GENERAL

**501.1 Scope.** The provisions of this chapter shall govern the minimum plumbing systems, facilities and plumbing fixtures to be provided.

**501.2 Responsibility.** The *owner* of the structure shall provide and maintain such plumbing facilities and plumbing fixtures in compliance with these requirements. A person shall not occupy as *owner-occupant* or permit another person to occupy any structure or *premises* which does not comply with the requirements of this chapter.

### SECTION 502 REQUIRED FACILITIES

**[P] 502.1 Dwelling units.** Every *dwelling unit* shall contain its own bathtub or shower, lavatory, water closet and kitchen sink which shall be maintained in a sanitary, safe working condition. The lavatory shall be placed in the same room as the water closet or located in close proximity to the door leading directly into the room in which such water closet is located. A kitchen sink shall not be used as a substitute for the required lavatory.

**[P] 502.2 Rooming houses.** At least one water closet, lavatory and bathtub or shower shall be supplied for each four *rooming units*.

**[P] 502.3 Hotels.** Where private water closets, lavatories and baths are not provided, one water closet, one lavatory and one bathtub or shower having access from a public hallway shall be provided for each ten *occupants*.

**[P] 502.4 Employees' facilities.** A minimum of one water closet, one lavatory and one drinking facility shall be available to employees.

**[P] 502.4.1 Drinking facilities.** Drinking facilities shall be a drinking fountain, water cooler, bottled water cooler or disposable cups next to a sink or water dispenser. Drinking facilities shall not be located in *toilet rooms* or *bathrooms*.

**[P] 502.5 Public toilet facilities.** Public toilet facilities shall be maintained in a safe sanitary and working condition in accordance with the *International Plumbing Code*. Except for periodic maintenance or cleaning, public access and use shall be provided to the toilet facilities at all times during *occupancy* of the *premises*.

### SECTION 503 TOILET ROOMS

**[P] 503.1 Privacy.** *Toilet rooms* and *bathrooms* shall provide privacy and shall not constitute the only passageway to a hall or other space, or to the exterior. A door and interior locking

device shall be provided for all common or shared *bathrooms* and *toilet rooms* in a multiple dwelling.

**[P] 503.2 Location.** *Toilet rooms* and *bathrooms* serving hotel units, *rooming units* or dormitory units or *housekeeping units*, shall have access by traversing a maximum of one flight of stairs and shall have access from a common hall or passageway.

**[P] 503.3 Location of employee toilet facilities.** Toilet facilities shall have access from within the employees' working area. The required toilet facilities shall be located a maximum of one story above or below the employees' working area and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m). Employee facilities shall either be separate facilities or combined employee and public facilities.

**Exception:** Facilities that are required for employees in storage structures or kiosks, which are located in adjacent structures under the same ownership, lease or control, shall not exceed a travel distance of 500 feet (152 m) from the employees' regular working area to the facilities.

**[P] 503.4 Floor surface.** In other than *dwelling units*, every *toilet room* floor shall be maintained to be a smooth, hard, nonabsorbent surface to permit such floor to be easily kept in a clean and sanitary condition.

### SECTION 504 PLUMBING SYSTEMS AND FIXTURES

**[P] 504.1 General.** All plumbing fixtures shall be properly installed and maintained in working order, and shall be kept free from obstructions, leaks and defects and be capable of performing the function for which such plumbing fixtures are designed. All plumbing fixtures shall be maintained in a safe, sanitary and functional condition.

**[P] 504.2 Fixture clearances.** Plumbing fixtures shall have adequate clearances for usage and cleaning.

**[P] 504.3 Plumbing system hazards.** Where it is found that a plumbing system in a structure constitutes a hazard to the *occupants* or the structure by reason of inadequate service, inadequate venting, cross connection, backsiphonage, improper installation, *deterioration* or damage or for similar reasons, the *code official* shall require the defects to be corrected to eliminate the hazard.

### SECTION 505 WATER SYSTEM

**505.1 General.** Every sink, lavatory, bathtub or shower, drinking fountain, water closet or other plumbing fixture shall be properly connected to either a public water system or to an *approved* private water system. All kitchen sinks, lavatories, laundry facilities, bathtubs and showers shall be supplied



## PLUMBING FACILITIES AND FIXTURE REQUIREMENTS

with hot or tempered and cold running water in accordance with the *International Plumbing Code*.

**[P] 505.2 Contamination.** The water supply shall be maintained free from contamination, and all water inlets for plumbing fixtures shall be located above the flood-level rim of the fixture. Shampoo basin faucets, janitor sink faucets and other hose bibs or faucets to which hoses are attached and left in place, shall be protected by an approved atmospheric-type vacuum breaker or an approved permanently attached hose connection vacuum breaker.

**505.3 Supply.** The water supply system shall be installed and maintained to provide a supply of water to plumbing fixtures, devices and appurtenances in sufficient volume and at pressures adequate to enable the fixtures to function properly, safely, and free from defects and leaks.

**505.4 Water heating facilities.** Water heating facilities shall be properly installed, maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a minimum temperature of 110°F (43°C). A gas-burning water heater shall not be located in any *bathroom, toilet room, bedroom* or other occupied room normally kept closed, unless adequate combustion air is provided. An *approved* combination temperature and pressure-relief valve and relief valve discharge pipe shall be properly installed and maintained on water heaters.

### SECTION 506 SANITARY DRAINAGE SYSTEM

**[P] 506.1 General.** All plumbing fixtures shall be properly connected to either a public sewer system or to an *approved* private sewage disposal system.

**[P] 506.2 Maintenance.** Every plumbing stack, vent, waste and sewer line shall function properly and be kept free from obstructions, leaks and defects.

**[P] 506.3 Grease interceptors.** Grease interceptors and automatic grease removal devices shall be maintained in accordance with this code and the manufacturer's installation instructions. Grease interceptors and automatic grease removal devices shall be regularly serviced and cleaned to prevent the discharge of oil, grease, and other substances harmful or hazardous to the building drainage system, the public sewer, the private sewage disposal system or the sewage treatment plant or processes. All records of maintenance, cleaning and repairs shall be available for inspection by the code official.

### SECTION 507 STORM DRAINAGE

**[P] 507.1 General.** Drainage of roofs and paved areas, *yards* and courts, and other open areas on the *premises* shall not be discharged in a manner that creates a public nuisance.



## CHAPTER 6

# MECHANICAL AND ELECTRICAL REQUIREMENTS

### SECTION 601 GENERAL

**601.1 Scope.** The provisions of this chapter shall govern the minimum mechanical and electrical facilities and equipment to be provided.

**601.2 Responsibility.** The *owner* of the structure shall provide and maintain mechanical and electrical facilities and equipment in compliance with these requirements. A person shall not occupy as *owner-occupant* or permit another person to occupy any *premises* which does not comply with the requirements of this chapter.

### SECTION 602 HEATING FACILITIES

**602.1 Facilities required.** Heating facilities shall be provided in structures as required by this section.

**602.2 Residential occupancies.** Dwellings shall be provided with heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, *bathrooms* and *toilet rooms* based on the winter outdoor design temperature for the locality indicated in Appendix D of the *International Plumbing Code*. Cooking appliances shall not be used, nor shall portable unvented fuel-burning space heaters be used, as a means to provide required heating.

**Exception:** In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

**602.3 Heat supply.** Every *owner* and *operator* of any building who rents, leases or lets one or more *dwelling units* or *sleeping units* on terms, either expressed or implied, to furnish heat to the *occupants* thereof shall supply heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, *bathrooms* and *toilet rooms*.

#### Exceptions:

1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the *International Plumbing Code*.
2. In areas where the average monthly temperature is above 30°F (-1°C) a minimum temperature of 65°F (18°C) shall be maintained.

**602.4 Occupiable work spaces.** Indoor occupiable work spaces shall be supplied with heat during the period from [DATE] to [DATE] to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

#### Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.
2. Areas in which persons are primarily engaged in vigorous physical activities.

**602.5 Room temperature measurement.** The required room temperatures shall be measured 3 feet (914 mm) above the floor near the center of the room and 2 feet (610 mm) inward from the center of each exterior wall.

### SECTION 603 MECHANICAL EQUIPMENT

**603.1 Mechanical appliances.** All mechanical appliances, fireplaces, solid fuel-burning appliances, cooking appliances and water heating appliances shall be properly installed and maintained in a safe working condition, and shall be capable of performing the intended function.

**603.2 Removal of combustion products.** All fuel-burning equipment and appliances shall be connected to an *approved* chimney or vent.

**Exception:** Fuel-burning equipment and appliances which are *labeled* for unvented operation.

**603.3 Clearances.** All required clearances to combustible materials shall be maintained.

**603.4 Safety controls.** All safety controls for fuel-burning equipment shall be maintained in effective operation.

**603.5 Combustion air.** A supply of air for complete combustion of the fuel and for *ventilation* of the space containing the fuel-burning equipment shall be provided for the fuel-burning equipment.

**603.6 Energy conservation devices.** Devices intended to reduce fuel consumption by attachment to a fuel-burning appliance, to the fuel supply line thereto, or to the vent outlet or vent piping therefrom, shall not be installed unless *labeled* for such purpose and the installation is specifically *approved*.

### SECTION 604 ELECTRICAL FACILITIES

**604.1 Facilities required.** Every occupied building shall be provided with an electrical system in compliance with the requirements of this section and Section 605.



**604.2 Service.** The size and usage of appliances and equipment shall serve as a basis for determining the need for additional facilities in accordance with NFPA 70. *Dwelling units* shall be served by a three-wire, 120/240 volt, single-phase electrical service having a minimum rating of 60 amperes.

**604.3 Electrical system hazards.** Where it is found that the electrical system in a structure constitutes a hazard to the *occupants* or the structure by reason of inadequate service, improper fusing, insufficient receptacle and lighting outlets, improper wiring or installation, *deterioration* or damage, or for similar reasons, the *code official* shall require the defects to be corrected to eliminate the hazard.

**604.3.1 Abatement of electrical hazards associated with water exposure.** The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to water.

**604.3.1.1 Electrical equipment.** Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, molded case circuit breakers, low-voltage fuses, luminaires, ballasts, motors and electronic control, signaling and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the *International Building Code*.

**Exception:** The following equipment shall be allowed to be repaired where an inspection report from the equipment manufacturer or *approved* manufacturer's representative indicates that the equipment has not sustained damage that requires replacement:

1. Enclosed switches, rated a maximum of 600 volts or less;
2. Busway, rated a maximum of 600 volts;
3. Panelboards, rated a maximum of 600 volts;
4. Switchboards, rated a maximum of 600 volts;
5. Fire pump controllers, rated a maximum of 600 volts;
6. Manual and magnetic motor controllers;
7. Motor control centers;
8. Alternating current high-voltage circuit breakers;
9. Low-voltage power circuit breakers;
10. Protective relays, meters and current transformers;
11. Low- and medium-voltage switchgear;
12. Liquid-filled transformers;
13. Cast-resin transformers;
14. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water;

15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water;
16. Luminaires that are listed as submersible;
17. Motors;
18. Electronic control, signaling and communication equipment.

**604.3.2 Abatement of electrical hazards associated with fire exposure.** The provisions of this section shall govern the repair and replacement of electrical systems and equipment that have been exposed to fire.

**604.3.2.1 Electrical equipment.** Electrical switches, receptacles and fixtures, including furnace, water heating, security system and power distribution circuits, that have been exposed to fire, shall be replaced in accordance with the provisions of the *International Building Code*.

**Exception:** Electrical switches, receptacles and fixtures that shall be allowed to be repaired where an inspection report from the equipment manufacturer or *approved* manufacturer's representative indicates that the equipment has not sustained damage that requires replacement.

## SECTION 605 ELECTRICAL EQUIPMENT

**605.1 Installation.** All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and *approved* manner.

**605.2 Receptacles.** Every *habitable space* in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at least one grounded-type receptacle or a receptacle with a ground fault circuit interrupter. Every *bathroom* shall contain at least one receptacle. Any new *bathroom* receptacle outlet shall have ground fault circuit interrupter protection. All receptacle outlets shall have the appropriate faceplate cover for the location.

**605.3 Luminaires.** Every public hall, interior stairway, *toilet room*, kitchen, *bathroom*, laundry room, boiler room and furnace room shall contain at least one electric luminaire. Pool and spa luminaires over 15 V shall have ground fault circuit interrupter protection.

**605.4 Wiring.** Flexible cords shall not be used for permanent wiring, or for running through doors, windows, or cabinets, or concealed within walls, floors, or ceilings.

## SECTION 606 ELEVATORS, ESCALATORS AND DUMBWAITERS

**606.1 General.** Elevators, dumbwaiters and escalators shall be maintained in compliance with ASME A17.1. The most current certificate of inspection shall be on display at all times within the elevator or attached to the escalator or dumbwaiter, be available for public inspection in the office of the



building *operator* or be posted in a publicly conspicuous location *approved* by the *code official*. The inspection and tests shall be performed at not less than the periodic intervals listed in ASME A17.1, Appendix N, except where otherwise specified by the authority having jurisdiction.

**606.2 Elevators.** In buildings equipped with passenger elevators, at least one elevator shall be maintained in operation at all times when the building is occupied.

**Exception:** Buildings equipped with only one elevator shall be permitted to have the elevator temporarily out of service for testing or servicing.

## **SECTION 607 DUCT SYSTEMS**

**607.1 General.** Duct systems shall be maintained free of obstructions and shall be capable of performing the required function.







## CHAPTER 7

# FIRE SAFETY REQUIREMENTS

### SECTION 701 GENERAL

**701.1 Scope.** The provisions of this chapter shall govern the minimum conditions and standards for fire safety relating to structures and exterior *premises*, including fire safety facilities and equipment to be provided.

**701.2 Responsibility.** The *owner* of the *premises* shall provide and maintain such fire safety facilities and equipment in compliance with these requirements. A person shall not occupy as *owner-occupant* or permit another person to occupy any *premises* that do not comply with the requirements of this chapter.

### SECTION 702 MEANS OF EGRESS

**[F] 702.1 General.** A safe, continuous and unobstructed path of travel shall be provided from any point in a building or structure to the *public way*. Means of egress shall comply with the *International Fire Code*.

**[F] 702.2 Aisles.** The required width of aisles in accordance with the *International Fire Code* shall be unobstructed.

**[F] 702.3 Locked doors.** All means of egress doors shall be readily openable from the side from which egress is to be made without the need for keys, special knowledge or effort, except where the door hardware conforms to that permitted by the *International Building Code*.

**[F] 702.4 Emergency escape openings.** Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction, and the following. Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

### SECTION 703 FIRE-RESISTANCE RATINGS

**[F] 703.1 Fire-resistance-rated assemblies.** The required fire-resistance rating of fire-resistance-rated walls, fire stops, shaft enclosures, partitions and floors shall be maintained.

**[F] 703.2 Opening protectives.** Required opening protectives shall be maintained in an operative condition. All fire and smokestop doors shall be maintained in operable condi-

tion. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable.

### SECTION 704 FIRE PROTECTION SYSTEMS

**[F] 704.1 General.** All systems, devices and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any combination thereof shall be maintained in an operable condition at all times in accordance with the *International Fire Code*.

**[F] 704.1.1 Automatic sprinkler systems.** Inspection, testing and maintenance of automatic sprinkler systems shall be in accordance with NFPA 25.

**[F] 704.2 Smoke alarms.** Single- or multiple-station smoke alarms shall be installed and maintained in Group R or I-1 occupancies, regardless of *occupant* load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of *bedrooms*.
2. In each room used for sleeping purposes.
3. In each story within a *dwelling unit*, including *basements* and cellars but not including crawl spaces and uninhabitable attics. In dwellings or *dwelling units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

**[F] 704.3 Power source.** In Group R or I-1 occupancies, single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

**Exception:** Smoke alarms are permitted to be solely battery operated in buildings where no construction is taking place, buildings that are not served from a commercial power source and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

**[F] 704.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in Group R or I-1 occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one



## FIRE SAFETY REQUIREMENTS

alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all *bedrooms* over background noise levels with all intervening doors closed.

### Exceptions:

1. Interconnection is not required in buildings which are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or *basement* available which could provide access for interconnection without the removal of interior finishes.



## CHAPTER 8

# REFERENCED STANDARDS

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.7.

## ASME

American Society of Mechanical Engineers  
Three Park Avenue  
New York, NY 10016-5990

Standard reference number	Title	Referenced in code section number
A17.1/CSA B44—2007	Safety Code for Elevators and Escalators . . . . .	606.1

## ASTM

ASTM International  
100 Barr Harbor Drive  
West Conshohocken, PA 19428-2959

Standard reference number	Title	Referenced in code section number
F 1346—91 (2003)	Performance Specifications for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs . . . . .	303.2

## ICC

International Code Council  
500 New Jersey Avenue, NW  
6th Floor  
Washington, DC 20001

Standard reference number	Title	Referenced in code section number
IBC—12	International Building Code® . . . . .	102.3, 201.3, 401.3, 702.3
IEBC—12	International Existing Building Code® . . . . .	305.1.1, 306.1.1
IFC—12	International Fire Code® . . . . .	201.3, 604.3.1.1, 604.3.2.1, 702.1, 702.2, 704.1, 704.2
IFGC—12	International Fuel Gas Code® . . . . .	102.3
IMC—12	International Mechanical Code® . . . . .	102.3, 201.3
IPC—12	International Plumbing Code® . . . . .	201.3, 505.1, 602.2, 602.3
IRC—12	International Residential Code® . . . . .	201.3
IZC—12	International Zoning Code® . . . . .	102.3, 201.3

## NFPA

National Fire Protection Association  
1 Batterymarch Park  
Quincy, MA 02269

Standard reference number	Title	Referenced in code section number
25—11	Inspection, Testing and Maintenance of Water-Based Fire Protection Systems . . . . .	704.1.1
70—11	National Electrical Code . . . . .	102.4, 201.3, 604.2







## APPENDIX A

# BOARDING STANDARD

*The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.*

### A101 GENERAL

**A101.1 General.** All windows and doors shall be boarded in an *approved* manner to prevent entry by unauthorized persons and shall be painted to correspond to the color of the existing structure.

### A102 MATERIALS

**A102.1 Boarding sheet material.** Boarding sheet material shall be minimum  $\frac{1}{2}$ -inch (12.7 mm) thick wood structural panels complying with the *International Building Code*.

**A102.2 Boarding framing material.** Boarding framing material shall be minimum nominal 2-inch by 4-inch (51 mm by 102 mm) solid sawn lumber complying with the *International Building Code*.

**A102.3 Boarding fasteners.** Boarding fasteners shall be minimum  $\frac{3}{8}$ -inch (9.5 mm) diameter carriage bolts of such a length as required to penetrate the assembly and as required to adequately attach the washers and nuts. Washers and nuts shall comply with the *International Building Code*.

### A103 INSTALLATION

**A103.1 Boarding installation.** The boarding installation shall be in accordance with Figures A103.1(1) and A103.1(2) and Sections A103.2 through A103.5.

**A103.2 Boarding sheet material.** The boarding sheet material shall be cut to fit the door or window opening neatly or shall be cut to provide an equal overlap at the perimeter of the door or window.

**A103.3 Windows.** The window shall be opened to allow the carriage bolt to pass through or the window sash shall be removed and stored. The 2-inch by 4-inch (51 mm by 102 mm) strong back framing material shall be cut minimum 2 inches (51 mm) wider than the window opening and shall be placed on the inside of the window opening 6 inches minimum above the bottom and below the top of the window opening. The framing and boarding shall be predrilled. The assembly shall be aligned and the bolts, washers and nuts shall be installed and secured.

**A103.4 Door walls.** The door opening shall be framed with minimum 2-inch by 4-inch (51 mm by 102 mm) framing material secured at the entire perimeter and vertical members at a maximum of 24 inches (610 mm) on center. Blocking shall also be secured at a maximum of 48 inches (1219 mm) on center vertically. Boarding sheet material shall be secured

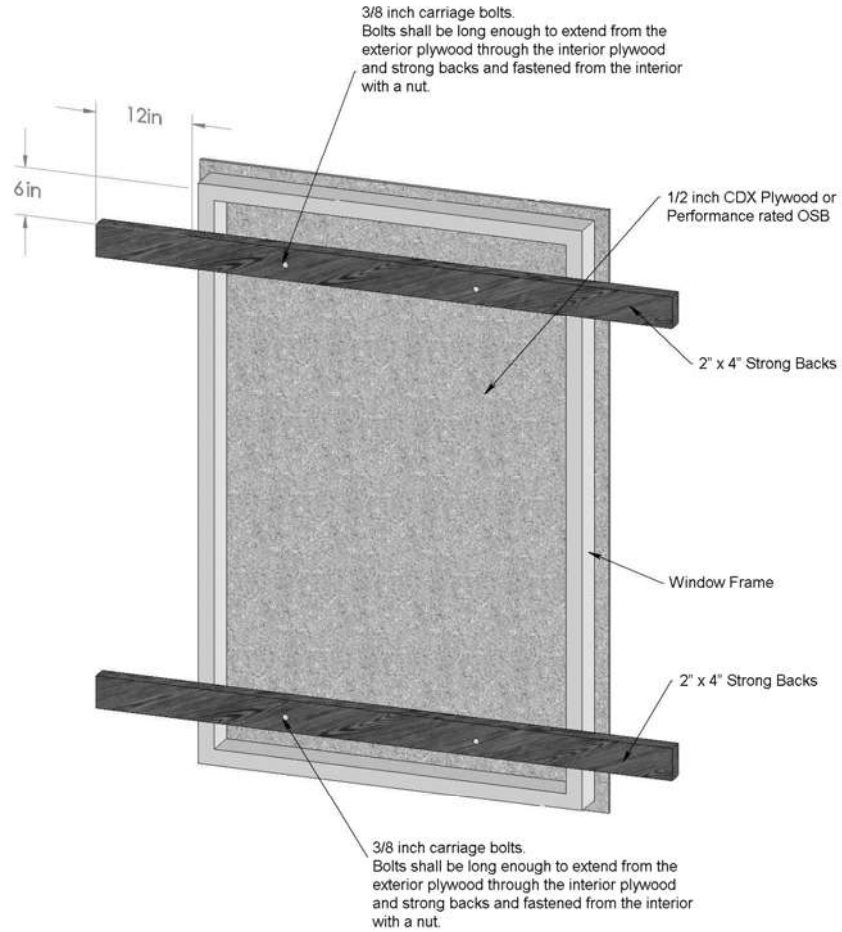
with screws and nails alternating every 6 inches (152 mm) on center.

**A103.5 Doors.** Doors shall be secured by the same method as for windows or door openings. One door to the structure shall be available for authorized entry and shall be secured and locked in an *approved* manner.

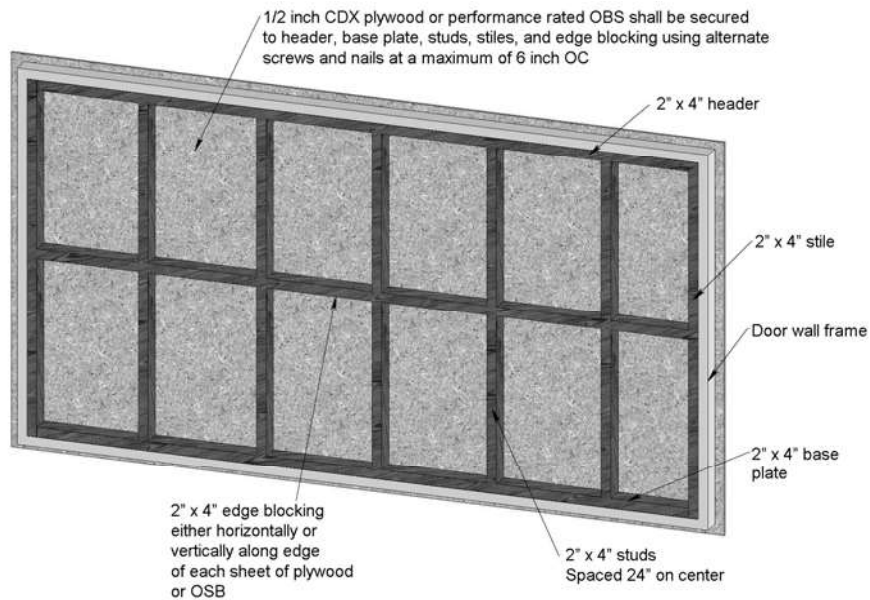
### A104 REFERENCED STANDARDS

IBC—12 International Building Code A102.1, A102.2, A102.3





**FIGURE A103.1(1)**  
**BOARDING OF DOOR OR WINDOW**



**FIGURE A103.1(2)**  
**BOARDING OF DOOR WALL**



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## EDITORIAL CHANGES – SECOND PRINTING

Page 25, Section [F] 704.2: now reads . . . **[F] 704.2 Smoke alarms.** Single- or multiple-station smoke alarms shall be installed and maintained in Group R or I-1 occupancies, regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of *bedrooms*.
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

Page 25, Section [F] 704.3: lines 1 and 2 now reads . . . **[F] 704.3 Power source.** In Group R or I-1 occupancies, single-station smoke alarms shall receive their primary power

Page 25, Section [F] 704.4: now reads . . . **[F] 704.4 Interconnection.** Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in Group R or I-1 occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.









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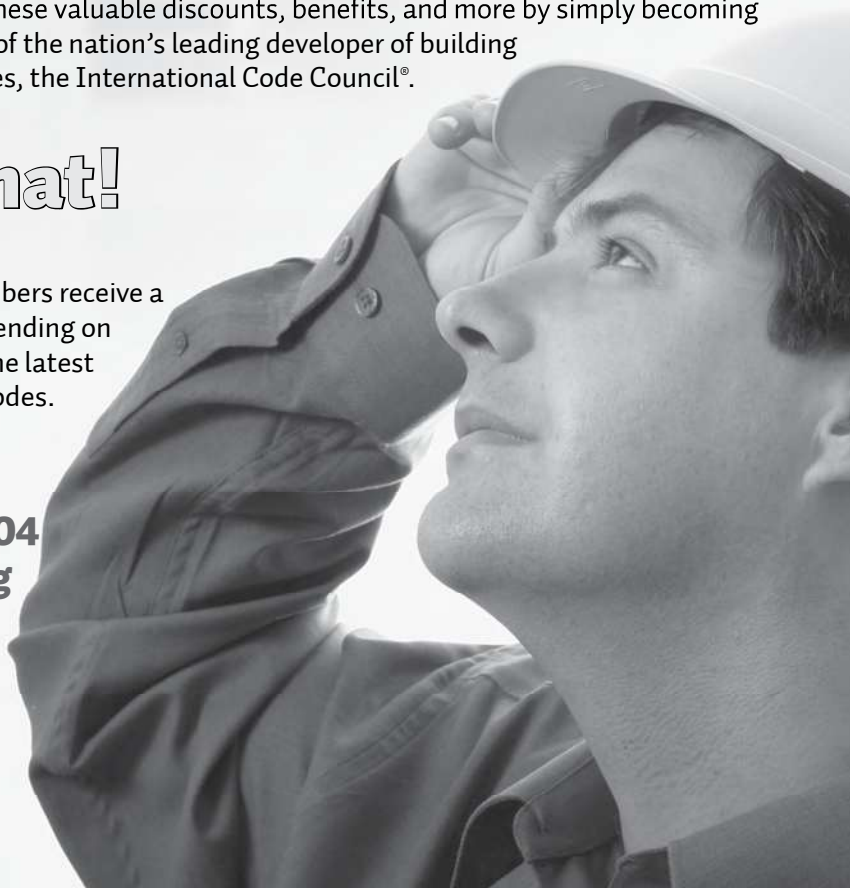
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## **Appendix B**

### **Masonry Study References**





Appendix B  
Masonry Study References

ASTM E 2270 - Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions

ASTM C 1496 - Standard Guide for Assessment and Maintenance of Exterior Dimension Stone Masonry Walls and Facades

ASTM E 2128 – Standard Guide for Evaluating Water Leakage of Building Walls

ASTM E 241 - Standard Guide for Limiting Water induced Damage to Buildings

ASTM STP 1444 – Building Façade Maintenance, Repair, and Inspection

- Farmer, M. C., ***“Unique Considerations for Stone Façade Inspection and Assessment”***
- Stieve, D. R., Diaz de Leon, A. E., and Drerup, M. J., ***“Assessing the Apparent Watertight Integrity of Building Facades”***
- Brom, A. P., ***“Guidelines for Inspection of Natural Stone Building Facades”***
- Chadwick, J. J. and McJunkin, J.T., ***“Façade Maintenance: Owners Techniques for Data Management”***
- Fong, K. L., and Louie, C., ***“Façade Ordinances and Historic Structures – Theoretical and Practical Conservation Issues in Inspection and Repair”***

ASTM Standardization News – August 2003 – How Safe are Building Facades; Inspecting for Unsafe Conditions

TMS – 1700-12 - Guide for Condition Assessment of Masonry Facades

ICRI Guideline No. 410.1 – Guide for the Evaluation of Masonry Façade Structures  
City Building Ordinances

- Eschenasy, D., ***“NYC Buildings - Façade Conditions – An Illustrated Glossary of Visual Symptoms”***
- NYC Buildings – Façade Inspection Safety Program
- City of Chicago Exterior Wall Ordinance
- Boston Façade Ordinance – Inspection of Exterior Walls and Appurtenances of Buildings Requiring Periodic Inspection

ICC - 2012 International Property Maintenance Code (IPMC)

Should you have any questions regarding this report, please feel free to contact us at your convenience.

Sincerely,

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## **Appendix C**

### **University Masonry Façade Survey Results**





## **APPENDIX C**





### University Masonry Façade Survey Results

#### **Final Survey Results – July 12, 2013**

1. Number of Responses: 13

#### **Building Inventory Size and Description**






2. How many buildings are in the inventory of your main Campus?

<b>Answer</b>	<b>0%</b>	<b>100%</b>	<b>Number of Response(s)</b>	<b>Response Ratio</b>
Less than 25			0	0.0 %
25-50			1	7.6 %
50-100			2	15.3 %
More than 100			9	69.2 %
Exact amount (insert in comment box)			1	7.6 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

#### **Comments:**

- We have over 550 buildings.
- We are a system of colleges and do not have a main campus. 23 colleges and 40 campuses.
- We currently have 267 buildings.

3. What is the approximate square footage of the University/College building inventory on the main campus?

<b>Answer</b>	<b>0%</b>	<b>100%</b>	<b>Number of Response(s)</b>	<b>Response Ratio</b>
Less than 1 Mil. Sq. ft.			1	7.6 %
1-4 Mil. Sq. ft.			2	15.3 %
4-8 Mil. Sq. ft.			3	23.0 %
More than 8 Mil. Sq. ft.			6	46.1 %
Exact amount (insert in comment box)			1	7.6 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

#### **Comments:**

- Actual square footage is 2,405,955 sq.ft.

4. How many buildings are constructed with masonry on the facade?

<b>Answer</b>	<b>0%</b>	<b>100%</b>	<b>Number of Response(s)</b>	<b>Response Ratio</b>
0-25%			0	0.0 %
25-50%			0	0.0 %
More than 50%			11	84.6 %
Exact amount (insert in comment box)			0	0.0 %
No Response(s)			2	15.3 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

#### **Comments:**



- Almost all buildings have brick masonry.
- 99% of the buildings have masonry facades.
- 25 buildings on campus have masonry facades.

5. How many buildings are constructed with stone masonry on the facade?

Answer	0%	100%	Number of Response(s)	Response Ratio
0-25%	<div><div></div></div>		9	69.2 %
25-50%	<div><div></div></div>		1	7.6 %
More than 50%	<div><div></div></div>		3	23.0 %
Exact amount (insert in comment box)			0	0.0 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

- Stone is only used as an accent material.

6. What is the anticipated service life of a typical University Building?

Answer	0%	100%	Number of Response(s)	Response Ratio
Approximately 25 years	<div><div></div></div>		1	7.6 %
Approximately 50 years	<div><div></div></div>		5	38.4 %
Greater than 100 years	<div><div></div></div>		6	46.1 %
Detailed answer (explain in comment box)	<div><div></div></div>		1	7.6 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

- Greater than 100 years for our world heritage historic structures that will continue to be preserved and renewed as needed. The majority of buildings will realistically be in the 50 to 100 year category; although student housing may be considered at 25 years.

7. Additional valuable building inventory metric(s) utilized by your institution (type below).

3 Response(s)

Comments:

- The replacement value of the building inventory for insurance purposes is \$3.5B.
- We analyze our buildings by sub-categories based on structural construction type; concrete, steel, etc.



## Human Resources

8. Inspection of University buildings are often performed in part by dedicated inspectors, grounds crew, building maintenance personnel, and other University employees. Approximately how many University Personnel are involved with inspection of the exterior facade of the University buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Less than 10	<div><div></div></div>		8	61.5 %
10-25	<div><div></div></div>		3	23.0 %
25-50	<div><div></div></div>		0	0.0 %
More than 50	<div><div></div></div>		2	15.3 %
Exact amount (insert in comment box)	<div><div></div></div>		0	0.0 %
No Response(s)	<div><div></div></div>		0	0.0 %
Totals			13	100%

Comments:

- This number represents personnel that are specifically dedicated to building inspection.

9. Commonly some portion of the exterior facade maintenance is performed by University Personnel. How many University Personnel are involved with performing maintenance repairs on the facades of the University Buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Less than 10	<div><div></div></div>		6	46.1 %
10-25	<div><div></div></div>		5	38.4 %
25-50	<div><div></div></div>		0	0.0 %
More than 50	<div><div></div></div>		0	0.0 %
Exact amount (insert in comment box)	<div><div></div></div>		0	0.0 %
No Response(s)	<div><div></div></div>		2	15.3 %
Totals			13	100%

Comments:

- Most building maintenance work is contracted out.

10. Additional valuable human resources metric(s) utilized by your institution (type below).




Comments:

N/A



## Budget Allocations




11. What is the University's approximate annual budget for the maintenance and repairs of buildings on the main campus?

Answer	0%	100%	Number of Response(s)	Response Ratio
Less than \$10 million			5	38.4 %
\$10-50 million			7	53.8 %
\$50-100 million			0	0.0 %
More than \$100 million			1	7.6 %
Exact amount (insert in comment box)			0	0.0 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

### Comments:

- This number is for facade maintenance and repairs only.
- This includes expenditures from local and state funds.
- This number includes labor allocated from our own full time staff.





12. What is the approximate percentage of the maintenance budget that is spent on inspection or evaluation of the buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Less than 1%			8	61.5 %
1-5%			4	30.7 %
5-10%			1	7.6 %
More than 10%			0	0.0 %
Exact amount (insert in comment box)			0	0.0 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

### Comments:

N/A

13. What is the approximate percentage of the maintenance budget that is spent on facade repairs of the buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Less than 5%			7	53.8 %
5-10%			4	30.7 %
10-15%			1	7.6 %
More than 15%			1	7.6 %
Exact amount (insert in comment box)			0	0.0 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

### Comments:

N/A



---

14. Additional valuable budget metric(s) utilized by your institution (type below).

---

1 Response(s)

Comments:

- Certain exterior envelope projects could be funded with Maintenance Reserve funds allocated by the state, as a supplemental resource.

### Established Practices and Frequency

15. Is the anticipated building service life documented in University design requirements provided to architects at the time of construction?

Answer	0%	100%	Number of Response(s)	Response Ratio
No	<div><div></div></div>		2	15.3 %
Yes	<div><div></div></div>		11	84.6 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

N/A

---

16. Does the University review original construction documents for targeting and identifying potential maintenance problem areas on the exterior?



Answer	0%	100%	Number of Response(s)	Response Ratio
No	<div><div></div></div>		1	7.6 %
Yes, but only after problems arise	<div><div></div></div>		3	23.0 %
Yes, as an integral part of the inspection process	<div><div></div></div>		5	38.4 %
Specific design review process (explain in comment box)	<div><div></div></div>		4	30.7 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

- The College has a technical standards book that documents the requirements for building exterior walls and roofs. Each stage of design is reviewed and commented on by Facilities O&M staff and project managers.
- Capital Construction Project Managers review design details and discuss potential issues with Maint. & Oprs. supervision and skilled tradesman for review & recommendation. Also - design specs. are reviewed and updated periodically to reflect "Best Practices".
- Ongoing review during all stages of design by capital projects personnel, maintenance and utilities personnel.
- Designs are reviewed by a limited number of university staff.



17. Does the University have a documented policy or program for the general inspection of building facades that is performed in house?

Answer	0%	100%	Number of Response(s)	Response Ratio
Yes			2	15.3 %
No			11	84.6 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

- Only for a limited number of problematic buildings.




18. If yes to Question 17, how are the inspections of facades typically performed?

2 Response(s)

Comments:

- Inspections are performed according to the requirement of the City of Philadelphia Facade Inspection Ordinance.
- Inspections are primarily performed visually from the ground and from lift in some areas.




19. Facades are often inspected in a number of ways, either visually from the ground, “hands-on” from a mobile lift platform, or potentially include probe openings to evaluate concealed conditions. Which method below best describes the University’s preferred method of inspection?

Answer	0%	100%	Number of Response(s)	Response Ratio
Facades visually inspected from the ground only			3	23.0 %
Facades visually inspected from the ground, with problem areas inspected hands-on from lift			6	46.1 %
Facades inspected visually and hands-on; over a percentage of the façade			0	0.0 %
A combination of visual and hands-on inspection with supplemental probe openings to evaluate concealed conditions			4	30.7 %
Specific hands-on inspection process (explain in comment box)			0	0.0 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

N/A

20. On average, how often are the facades inspected?

Answer	0%	100%	Number of Response(s)	Response Ratio
5 years or more			4	30.7 %
Every 2-5 years			6	46.1 %
Every other year			1	7.6 %



Less than 2 years		2	15.3 %
Specific inspection schedule (explain in comment box)		0	0.0 %
No Response(s)		0	0.0 %
<b>Totals</b>		<b>13</b>	<b>100%</b>

Comments:

- Inspections are not performed regularly, only if problems are detected.
- Some problematic buildings are inspected semi-annually.

21. On average, how often are masonry facades completely re-pointed (removal of pointing mortar and replaced with new mortar)?

Answer	0%	100%	Number of Response(s)	Response Ratio
Never			3	23.0 %
On approximately a 25-year cycle			1	7.6 %
On approximately a 50-year cycle			2	15.3 %
Only when mortar problems arise			6	46.1 %
Specific re-pointing schedule (explain in comment box)			1	7.6 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

Comments:

- Re-pointing is a continual process for historic buildings.

22. On average, how often are the masonry facades cleaned?

Answer	0%	100%	Number of Response(s)	Response Ratio
Never			1	7.6 %
Only when staining or organic growth becomes unsightly			9	69.2 %
On approximately a 5-10 year schedule			1	7.6 %
On approximately a 10-20 year schedule			1	7.6 %
Specific cleaning schedule (explain in comment box)			1	7.6 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

Comments:

- Façade cleaning is typically performed as part of a facade repair or restoration project.
- Cleaning of the façade is not performed regularly.
- Our masonry is painted. Repainting is performed on approx. 10-year cycle.

23. On average, how often are exterior sealants completely replaced on the buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Never			1	7.6 %






On approximately a 5-10 year schedule		0	0.0 %
On approximately a 10-20 year schedule		1	7.6 %
Only when sealant problems arise		10	76.9 %
Specific schedule (explain in comment box)		1	7.6 %
No Response(s)		0	0.0 %
<b>Totals</b>		<b>13</b>	<b>100%</b>

Comments:  
N/A

---

24. On average, how often are windows completely replaced in the buildings?




Answer	0%	100%	Number of Response(s)	Response Ratio
Less than 25 years			0	0.0 %
25-35 years			3	23.0 %
More than 35 years			7	53.8 %
Specific schedule (explain in comment box)			2	15.3 %
No Response(s)			1	7.6 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

Comments:

- Windows are replaced as needed.
- Windows are replaced only when needed.
- Windows are replaced when needed or when problems arise.

---

25. On average, how often are your buildings completely renovated?

Answer	0%	100%	Number of Response(s)	Response Ratio
Less than 25 years			0	0.0 %
25-35 years			1	7.6 %
More than 35 years			11	84.6 %
Specific schedule (explain in comment box)			1	7.6 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

Comments:

- Building renovations are performed when needed and as resources allow.

---

26. Additional valuable maintenance metric(s) utilized by your institution (type below).

0 Response(s)

Comments:  
N/A



## Common Issues

27. Has there been a need to re-clad portions of any of your buildings due to problems with the facade?

Answer	0%	100%	Number of Response(s)	Response Ratio
No			2	15.3 %
Yes, fewer than 5% of the buildings			11	84.6 %
Yes, greater than 5% of the buildings			0	0.0 %
Opportunity to provide more detail (insert in comment box)			0	0.0 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

N/A

28. Have you had any problems with efflorescence or staining on your masonry buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
No			0	0.0 %
Yes, fewer than 5% of the buildings			12	92.3 %
Yes, greater than 5% of the buildings			1	7.6 %
Opportunity to provide more detail (insert in comment box)			0	0.0 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

N/A

29. Have you had any problems with systemic or widespread leakage on your masonry buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
No			4	30.7 %
Yes, fewer than 5% of the buildings			7	53.8 %
Yes, greater than 5% of the buildings			2	15.3 %
Opportunity to provide more detail (explain in comment box)			0	0.0 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

N/A



30. Have buildings in the University's inventory exhibited premature failure of the following conditions? Check all that apply:

Answer	0%	100%	Number of Response(s)	Response Ratio
Mortar deficiencies (cracked, loose, eroded, discolored, disintegrated, missing)	<div></div>		7	70.0 %
Masonry unit deficiencies (cracks, crazing, pitting, spalling, delaminating)	<div></div>		7	70.0 %
Sealant deficiencies (cracks, tears, bulging, discoloring, missing)	<div></div>		7	70.0 %
Opportunity to list additional common issues (insert in comment box)	<div></div>		1	10.0 %
Totals			10	100%

Comments:

- Our primary failures are due to poor design of masonry wall flashing and window flashing.
- Failures have only occurred in a couple of buildings that have thermal movement.
- We have experienced failed shelf angles.

31. Additional valuable issue metric(s) utilized by your institution (type below).

1 Response(s)





Comments:

- Nearly all of our masonry wall failures are caused by the following:
  1. Improperly installed, or lack of, masonry wall ties.
  2. Improperly designed wall and roof flashing, although installed per plans and specifications.
  3. The use of joint sealants as the primary method of preventing water intrusion into the wall.



## New Construction







32. Does the University have a design review process for the construction of masonry facades and building envelopes for the newly constructed buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Not at this time			3	23.0 %
Yes, carried out in house			6	46.1 %
Yes, fulfilled by a third party			3	23.0 %
Opportunity to provide more detail (explain in comment box)			1	7.6 %
No Response(s)			0	0.0 %
<b>Totals</b>			<b>13</b>	<b>100%</b>

### Comments:

- Building Envelope design review is a very recent development for us.
- Historically, we have not performed building envelope design review, but since August 2012, we have begun using a third party for these specific reviews.

33. Does the University include the following considerations in the design review process (please check all that apply)?

Answer	0%	100%	Number of Response(s)	Response Ratio
Peer review of the plans and specifications			9	81.8 %
Air and moisture/water barrier continuity			7	63.6 %
Constructability and sequencing			10	90.9 %
Material durability and compatibility			10	90.9 %
Provisions for expansion control			8	72.7 %
Hygrothermal analysis (dew point location within building envelope)			4	36.3 %
Opportunity to provide additional scope of work (explain in comment box)			0	0.0 %
<b>Totals</b>			<b>11</b>	<b>100%</b>



Comments:

- Design review is sub-contracted out to a third party.
- Design review is performed in-house, but we have been hesitant to force A&E to change plans.

34. Does the University have a design standard that includes requirements, guidelines or principles that are provided to Architects or Engineers for new building design?

Answer	0%	100%	Number of Response(s)	Response Ratio
No			1	7.6 %
No, but RFP's for each new building design identifies the design requirements			1	7.6 %
Yes, but it does not typically include masonry facade or building envelope requirements			3	23.0 %
Yes, and it includes requirements for masonry facades and building envelopes			5	38.4 %
Specific policy/scope for University design standards (explain in comment box)			3	23.0 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

- In general, Facilities Design Guidelines are updated annually. Per project; Design Guidelines are provided for RFP's, Concept and Site in order to define the program and palette.
- Design guidelines are provided, but we need to continue to develop them.
- Design guidelines are currently being developed and will be integrated into the design and construction standards.

35. Does the University have a construction observation process for masonry facades and building envelopes for newly constructed buildings?

Answer	0%	100%	Number of Response(s)	Response Ratio
Not at this time			0	0.0 %
Yes, carried out in house			9	69.2 %
Yes, fulfilled by a third party			3	23.0 %
Opportunity to provide more detail (explain in comment box)			1	7.6 %
No Response(s)			0	0.0 %
Totals			13	100%

Comments:

- We also have a third party involved in construction observation.
- We do not have a construction observation process at this time, but this program is currently being established (both in-house and 3rd party).



36. Does the University include the following considerations in the construction observation process (please check all that apply)?

Answer	0%	100%	Number of Response(s)	Response Ratio
Facilitate preconstruction and regular meetings	<div></div>		13	100.0 %
Review of shop drawings and submittals	<div></div>		12	92.3 %
Field construction observation, verification and documentation	<div></div>		12	92.3 %
Field performance testing of representative and critical components and systems	<div></div>		11	84.6 %
Establishment of non-conformance issues, discussions and resolutions	<div></div>		12	92.3 %
Opportunity to provide additional scope of work (explain in comment box)			0	0.0 %
Totals			13	100%

Comments:  
N/A

37. Additional valuable new construction metric(s) utilized by your institution (type below).  
0 Response(s)

Comments:  
N/A

Roof Considerations (optional)

38. How often are the roof systems inspected (explain below)?  
11 Response(s)

- Comments:
- Flat Roofs are inspected annually by staff.
  - Annual inspections.
  - In house inspection every 4 years.
  - Semi-Annual Documented inspection process with work orders.
  - Annually inspected.
  - Annually inspected.
  - Monthly inspections.
  - Annual inspections.
  - Roofs are inspected as leaks occur.
  - Semi annually inspections or at the time of an issue.
  - Annually inspected.



---

39. What percentage of the roof inspections are performed by the University's own forces (explain below)?

11 Response(s)

Comments:

- Problems on roof are inspected by a consultant.
- 0% inspected by the university, this is a contracted service.
- Third party hired for roof inspection, replacement and new construction.
- All roof inspections performed by university.
- 80% of roof inspections performed by university.
- 100% of roof inspections performed by university. We also have all roofs scanned annually.
- 100% of roof inspections performed by university.
- 100% of roof inspections performed by university.
- 100% of roof inspections performed by university.
- 100% of roof inspections performed by university.
- 100% of roof inspections performed by university, and also with consultant.

---

40. What is the expected estimated service life of a typical building roof system (explain below)?

11 Response(s)

Comments:

- 25 years for a flat roof, 50 years for a slate roof.
- 25 years.
- 20 years max.
- 20 years.
- 20-25 years on average.
- 25-50 years.
- Membrane roof: 20-25 years; Slate roof: 100 years; Shingle roof: 20-25 years.
- 20 years.
- 30 years.
- 20-25 years is expected, but normally not achieved.
- 25 years.



---

41. How often are nondestructive surveys (such as infrared thermography) performed on roof or wall systems (explain below)?

11 Response(s)

Comments:

- On leaking roofs only.
  - As required; when visual inspection does not locate an existing leak.
  - Nondestructive surveys are performed as needed.
  - Only when leak history exists.
  - Nondestructive surveys are performed a maximum of 2-3 times over the life of the roof.
  - Nondestructive surveys are never performed.
  - Nondestructive surveys are never performed.
  - Nondestructive surveys are performed every 2-5 years.
  - Nondestructive surveys are performed as necessary.
  - Nondestructive surveys are performed 10% of the time.
  - Nondestructive surveys are rarely performed.
- 

42. What is the typical warranty requested for new roof systems installed on campus buildings (explain below)?

11 Response(s)

Comments:

- 25 year warranty requested on flat roofs.
  - 20 year warranty requested.
  - 20 years.
  - 20 years.
  - 20 years.
  - 20 years.
  - 25 years on membrane roof.
  - 30 years.
  - 20 years.
  - 20-25 years.
  - Depends on the roof material; 20 - 25 years is preferred.
- 

43. Other considerations (explain below).

0 Response(s)

Comments:

N/A



## **Appendix D**

### **Hokie Stone Policy Directive Response**

**October 30, 2012**








RECEIVED

OCT 31 2012

Vice President for  
Administrative Services

ORIGINAL

## Memorandum

To: Sherwood Wilson  
From: Mike Coleman   
Date: October 30, 2012  
CC: Charles Steger, James Barkley, Mark Gess, Kay Heidbreder, Mark Helms, Leigh LaClair, Jason Soileau  
Subject: Hokie Stone Policy Directive Response

As required in the policy directive for Hokie Stone issued on October 18, 2012, this memo includes the requested plan. The policy directive as defined has three specific requests that are common to Hokie Stone but very different.

Therefore the response has been separated into three sections as per the directive:

**During Construction:** This task will involve VT Facilities Services, University Design and Construction (UDC), and the appropriate skilled resources. Included in this task are seven projects currently under construction with Hokie Stone and/or repair.

1. **Project Identification:** The seven buildings in construction included in this plan are as follows:
  - a. Center for Performing Arts
  - b. Signature Engineering Building
  - c. HABBI-1
  - d. Southwest Chiller Plant
  - e. Davidson Hall
  - f. McComas Hall
  - g. Perry Street Garage
2. **Inspection Plan:** The following is the inspection plan for each of the facilities under construction and/or repair:
  - a. The Office of University Planning reviews and approves the building "mock-up" for each project with the UDC Project Management, project construction and design teams to ensure construction and aesthetics requirements.
  - b. UDC Project Management staff and/or third party vendors under the direction of UDC Project Management staff are on site full time during construction to provide daily inspections for compliance with contract documents.

*Invent the Future*



- c. A third party vendor under the direction of UDC Project Management staff provides special inspections required by code.
  - d. A third party envelope inspector is engaged and works under the direction of the UDC project management staff to perform review submittals, mock-up and periodically inspects the Hokie Stone installation during construction.
  - e. The Authority having jurisdiction for building code while on site making inspections provides code compliance inspections.
3. Inspection Plan Process: UDC has or will develop a Standard Operating Procedure for the construction envelope inspection plan to ensure each of these facilities are inspected and documentation of these inspections are scheduled and documented within its business enterprise maintenance management system, HokieServ.
- a. Mock up inspections will be documented, recorded and distributed to all parties.
  - b. Daily inspection forms will be used and tracked in the system with the appropriate fields and/or tools for pictures or other pertinent field documentation.
  - c. Inspectors will be equipped with mobile technology that will allow for marking checkpoints as they perform the inspection and also allow for pictures of construction conditions to be recorded and taken instantly.
  - d. If a daily inspection was to generate an issue, it will be entered on the project issue log and will be managed through HokieServ.
  - e. Currently VTFS can manually query reports on this plan via HokieServ that are exportable to Excel and, if need be, develop a more defined long-term custom report.

**Construction Contract Review:** There are ongoing discussions between VT Legal Counsel and Morin and Barkley LLP Attorneys at Law to develop services required for them to perform a comprehensive review and revision of the Virginia Tech construction documents.

1. Review Scope: This review will be focused on professional and non-professional services for the four methods of project delivery used by VT Facilities Services:

- a. Construction Manager
- b. Design Build
- c. Design, Bid, Build
- d. PPEA

2. Review Timeline: These services are expected to begin once a contract has been initiated between VT Legal Counsel and Morin and Barkley. The duration of this task is expected to be from two to four months with the result being a senior level report defining recommended next steps along with recommended changes in the current VT contract documents.



**Building Envelope Inspection:** This task will involve VT Facilities Services, Facilities Operations (FO), and the appropriate skilled resources. Included in this task are fourteen facilities, both Equipment and General Fund and Auxiliary facilities, all located on the Blacksburg campus. Regardless of the type of facilities, FO will perform the Building Envelope Inspection Plan defined below.

1. **Building Identification:** The fourteen buildings included in the building envelope inspection plan are as follows:
  - a. Hahn Hall North
  - b. Torgersen Hall
  - c. McComas Hall
  - d. Cheatham Hall Addition
  - e. Cochrane Hall Dining Addition
  - f. Latham
  - g. VBI Phase I
  - h. VBI Phase II
  - i. Smith Career Center
  - j. Student Services
  - k. New Residence Hall East
  - l. Peddrew-Yates Residence Hall
  - m. Payne Hall
  - n. Durham Hall
  - o. Holtzman Alumni Center/Skelton Conference Center/The Inn at Virginia Tech
  - p. Harper Hall
  - q. West Side Stadium Expansion
2. **Inspection Plan:** The following is the building envelope inspection plan for each of the above facilities:
  - a. Each Hokie Stone building façade will be inspected bi-annually for loose and sprawling stone, loose pointing mortar and for any and all changes in the overall condition of the façade from the previous inspection.
  - b. FO - Building Trades and Grounds Department utilizing its Building Trades and Roofing Shops resources will perform inspections.
  - c. These FO staff members conducting these inspections are experienced craftsmen working under the supervision of experienced shop supervisors.
  - d. In the event something was to present itself outside of the depth or experience of FO, FO does have access to professional and non-professional services that are on term and/or service contracts that specialize in building envelop and structural issues.

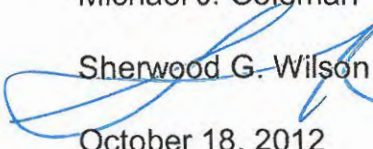


3. Inspection Plan Process: FO has or will develop a Standard Operating Procedure for the building envelope inspection plan to ensure each of these facilities inspections and documentation of these inspections are scheduled and documented within its business enterprise maintenance management system, HokieServ.
- a. Preventative Maintenance work orders will be automatically generated within HokieServ bi-annually for completion of the façade inspections.
  - b. The Hokie Stone façade of each building will be identified as “Equipment” of the building in HokieServ.
  - c. Checkpoints will be contained at each of the defined phases defined in the work order and must be completed prior to the work order being marked work complete. These checkpoints are designed to identify all critical points of the façade to be inspected.
  - d. Inspections of unique features that are building specific will also be added in the notes log of the work order phase along with any pertinent information discovered during the inspection.
  - e. Inspectors will be equipped with mobile technology that will allow for marking checkpoints as they perform the inspection and also allow for pictures of façade conditions to be taken and instantly attached to the work order for documentation and corrective action planning.
  - f. If an inspection was to generate a corrective maintenance need, a corrective maintenance work order will be issued for all items requiring corrective action found during the inspection process within HokieServ.
  - g. All of these work orders will be connected to the façade “Equipment” or data management that will enable cost tracking and reporting.
  - h. Currently VTFS can manually query reports on this plan via HokieServ that are exportable to Excel and, if need be, develop a more defined long-term custom report.

Attachment: October 18, 2012 Policy Directive



**MEMORANDUM**

**TO:** Michael J. Coleman  
**FROM:**  Sherwood G. Wilson  
**DATE:** October 18, 2012  
**SUBJECT:** Policy Directive

Based on our recent review of projects, I am directing you to enact the following policy changes effective immediately:

1. During construction of the Hokie Stone wall system on capital construction, we will have daily inspections by qualified staff with supporting documentation to ensure compliance with drawings and specifications;
2. In conjunction with legal counsel, and using an independent, third party expert, perform a comprehensive review and revision, as necessary, of our existing construction contracts for technical and performance accountability for all methods of project delivery; and
3. Visual, physical, and documented maintenance inspections will be conducted biannually to ensure the integrity of the building envelope on the 14 buildings impacted by Hokie Stone issues.

Please prepare a plan and tell me how you will accomplish these directives by November 2, 2012.

c: Charles Steger  
James Barkley  
Mark Gess  
Kay Heidbreder  
Mark Helms  
Leigh LaClair





***Update on:***

# **INDOOR ATHLETICS PRACTICE FACILITY**



## 2013

---

### Summer:

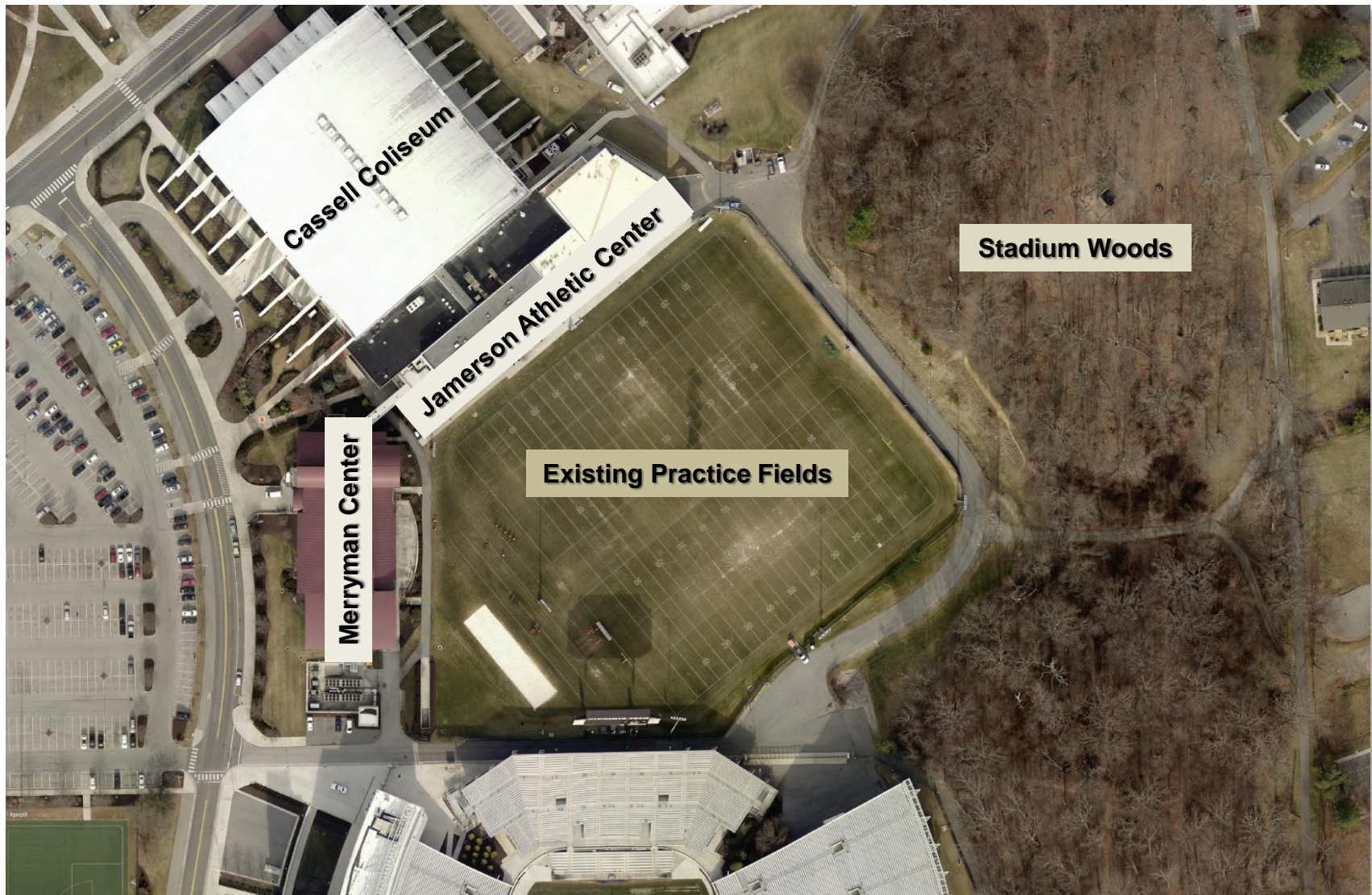
Site Studies presented to BOV Buildings & Grounds Committee June 4, 2013.

OUP **investigated site options** at the **existing practice fields**, per Athletics Department's request, with a requirement for **minimal tree impact** along the edge of Stadium Woods.

Athletics Field Site gained **approval from Virginia Tech Arboretum Committee** in a letter dated August 9, 2013.



# Existing Practice Field



## INDOOR ATHLETICS PRACTICE FACILITY

Virginia Tech: Office of University Planning



# Option 1: Full-Access Drive



## SITE NOTES

1. Stadium entrance pavilion/ shelter
2. Game day plazas with seat walls
3. New access drive- Permeable pavement (+/- 12' beyond existing)
4. Gameday Plaza/ Access drive
5. Upgraded paths to bike trail
6. Existing Cranwell bike trail
7. Football Locker Room/ Jamerson loading dock
8. Outdoor field observation (accessed via building)
9. Overhead doors- width of fields
10. Potential bioretention area
11. Low retaining wall- if needed
12. New trail lighting
13. Vehicle gate
14. Impacted major tree (White Oak)
15. Reforested area
16. New scoreboard footer
17. Relocated walk



PERMEABLE PAVING EXAMPLES

## INDOOR PRACTICE FACILITY SITE PLAN- OPTION 1

Virginia Tech Office of University Planning Not to Scale 07/15/13

# INDOOR ATHLETICS PRACTICE FACILITY

Virginia Tech: Office of University Planning



# Option 2: Partial-Access Drive



## SITE NOTES

1. Stadium entrance pavilion/ shelter
2. Game day plazas with seat walls
3. New fire access drive
4. Gameday Plaza/ Access drive
5. Upgraded paths to bike trail
6. Existing Cranwell bike trail
7. Football Locker Room/ Jamerson loading dock
8. Outdoor field observation (accessed via building)
9. Overhead doors- width of fields
10. Potential bioretention area
11. New trail lighting
12. Vehicle gate
13. New scoreboard footer
14. New fire access road
15. Reforested area
16. Impacted major tree (White Oak)

## INDOOR PRACTICE FACILITY SITE PLAN- OPTION 2

Virginia Tech Office of University Planning Not to Scale 07/15/13

# INDOOR ATHLETICS PRACTICE FACILITY

Virginia Tech: Office of University Planning







# **Virginia Tech Sustainability Annual Report**

## **2012 - 2013**



**Office of University Planning - Sustainability**

**September 9, 2013**



# Virginia Tech Sustainability Annual Report

## 2012-2013

The Virginia Tech Office of Energy and Sustainability is pleased to present the Virginia Tech Sustainability Annual Report for 2012 - 2013. The purpose of this report is to provide a summary status on implementation of the Virginia Tech Climate Action Commitment and Sustainability Plan (VTCAC&SP).

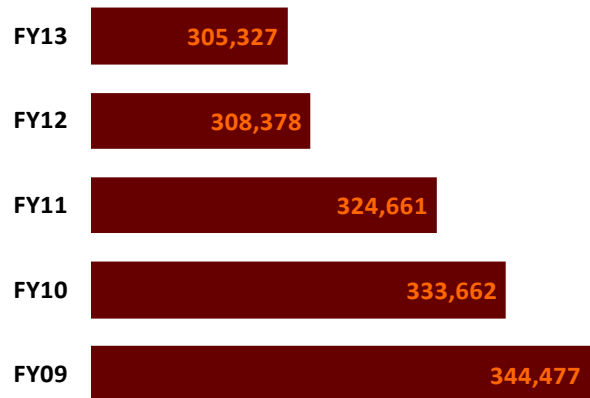
### A. KEY SUSTAINABILITY METRICS

1. **Greenhouse Gas (GHG) Emissions:** "Virginia Tech will establish a target for reduction of **campus GHG emissions** to 80% below 1990 emission level (**38,000 tons**) by 2050..." (VTCAC&SP)

#### Comments

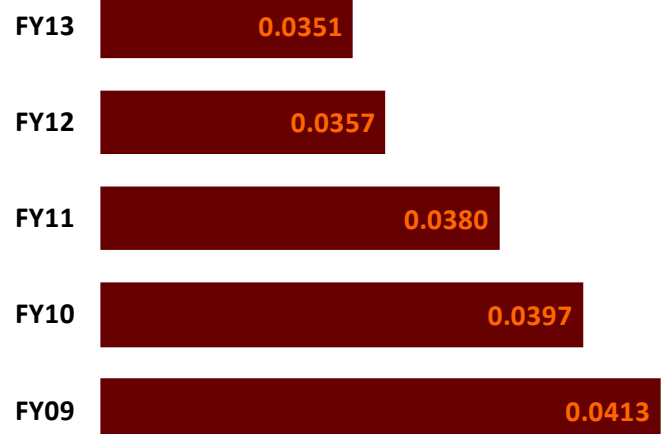
- **Slight overall reduction** (1%) from FY2012:
  - 13.8% reduction in boiler fuel-related GHG emissions due to increased natural gas (and comparably less coal) consumption
  - Reduction achieved despite continued full-year unavailability of VT turbine-generator
  - **Reduction achieved despite a much more severe winter** (22% increase in Heating Degree Days)
  - Favorable purchased electricity GHG emissions coefficient due to less coal-heavy APCO fuel mix

#### Total GHG Footprint (Tons CO<sub>2e</sub>)



#### GHG Footprint - Normalized (Tons CO<sub>2e</sub> / GSF)

- GHG emission percentages by fuel source:
  - Purchased Electricity 58.0%
  - Coal 23.2%
  - Natural Gas – Steam Plant 6.9%
  - Commuting 5.6%
  - Natural Gas – Buildings 3.2%
  - All Others 3.2%





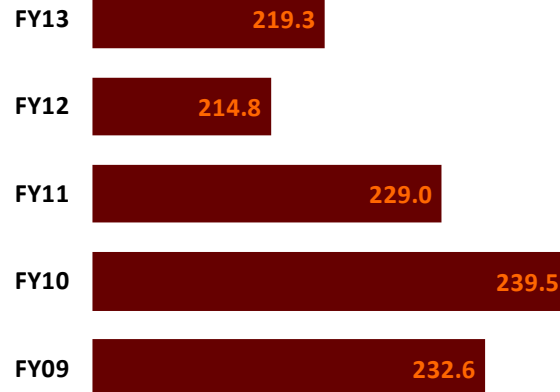
## Virginia Tech Sustainability Annual Report 2012-2013

2. **Energy Use Intensity (kbtu's/GSF):** "Virginia Tech will improve electricity and heating efficiency of campus facilities and their operations..." (VTCAC&SP)

### Comments

- 2.1% increase over FY2012:
  - Boiler fuel held flat despite a 22% increase in Heating Degree Days
  - Slight reduction (1.4%) in overall campus electricity consumption
  - Full-year **unavailability of VT turbine-generator estimated to have negative impact** of 7.9 kbtu/GSF
- ESCO Performance Contract project (\$5.33 million for energy reduction projects across five campus buildings) approximately 80% complete at fiscal year-end

### Energy Use Intensity (EUI) (kbtu's / GSF)

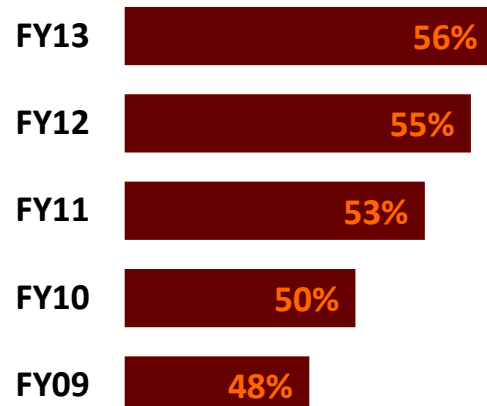


3. **Alternative Transportation Use:** "Virginia Tech will improve transportation energy efficiency on campus through parking, fleet, and **alternative transportation** policies..." (VTCAC&SP)

### Comments

- Virginia Tech again recognized nationwide with a **Gold "Race to Excellence" award** by The Best Workplaces for Commuters; a program managed by National Center for Transit Research and designed to encourage sustainable transportation.
- Virginia Tech among 58 colleges and universities in 30 states designated a **bicycle friendly university**. This recognition was given by League of American Bicyclists, which designated Virginia Tech at the Bronze Level for the commitment to promoting and providing a more bicycle friendly campus.
- The percentage of faculty & staff that use alternative transportation for FY2013 is 22% and the percentage of undergraduate and graduate commuter students that use alternative transportation is 72%.

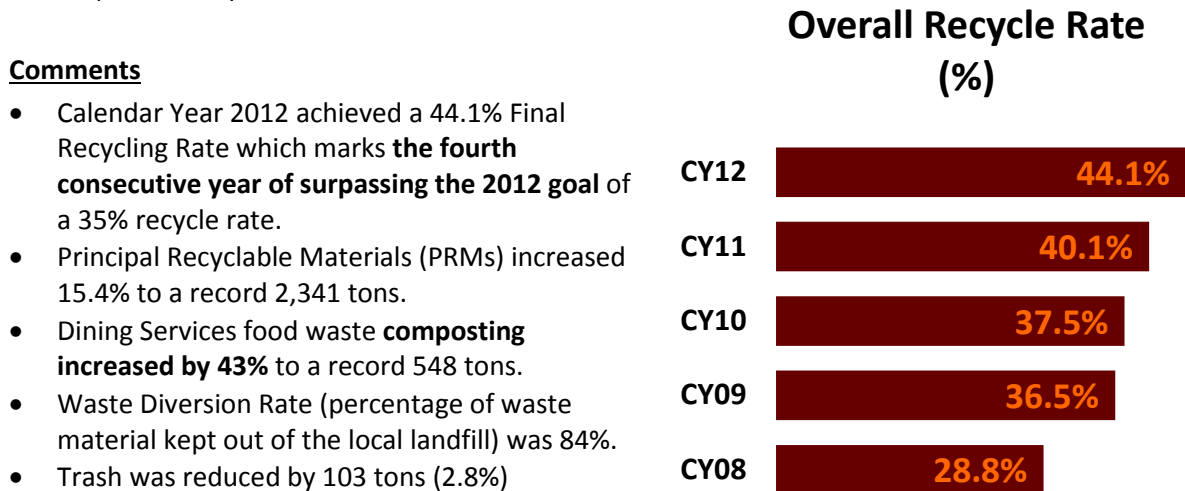
### Alternative Transportation Use (Total % of Campus Population Using Alternative Transportation as Primary Access to/from Campus)



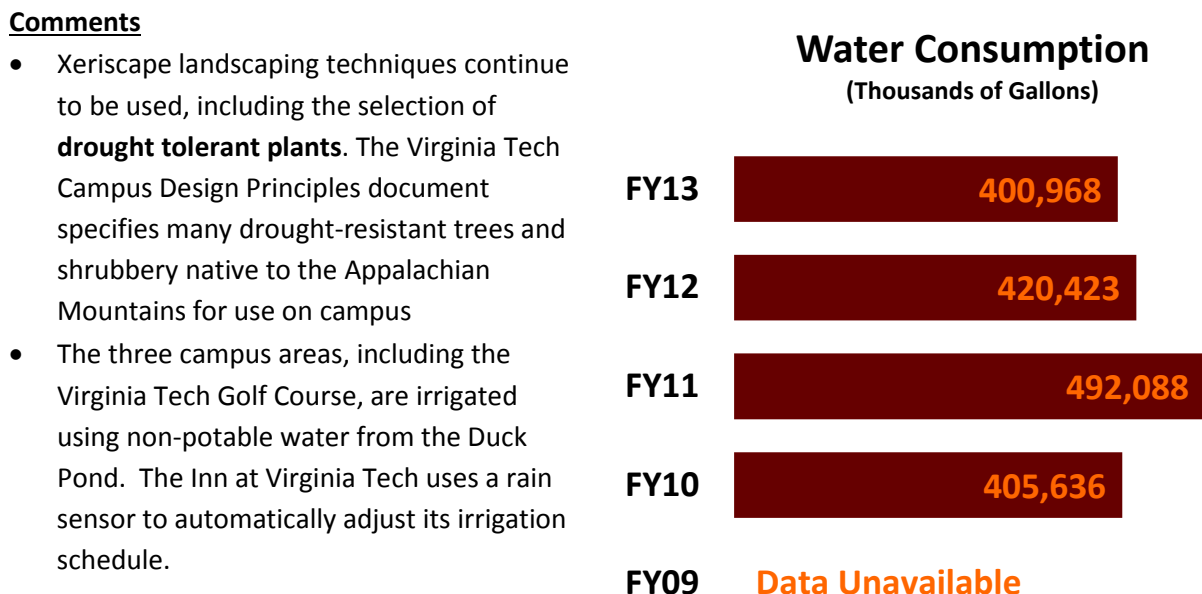


## Virginia Tech Sustainability Annual Report 2012-2013

4. **Recycling:** “...Virginia Tech Recycling will adopt a goal of **35% recycle rate by 2012** and 50% by 2025.” (VTCAC&SP)



5. **Water Consumption:** “Virginia Tech will engage students, faculty and staff through education and involvement to reduce consumption of energy, **water**, and materials in academic and research buildings, dining and residence halls, and other facilities.” (VTCAC&SP)





**Office of Energy & Sustainability  
2013 Highlights**





# 2013 SUSTAINABILITY *Annual Report*







## Virginia Tech Climate Action Commitment and Sustainability Plan

Energy & Sustainability Committee

*Revised May 9, 2013*

***Sustainability Annual Report to be provided per:  
Presidential Policy Memorandum No. 262 Revision 1  
May 9, 2013***

### **VTACAC&SP Incorporates Three Objectives:**

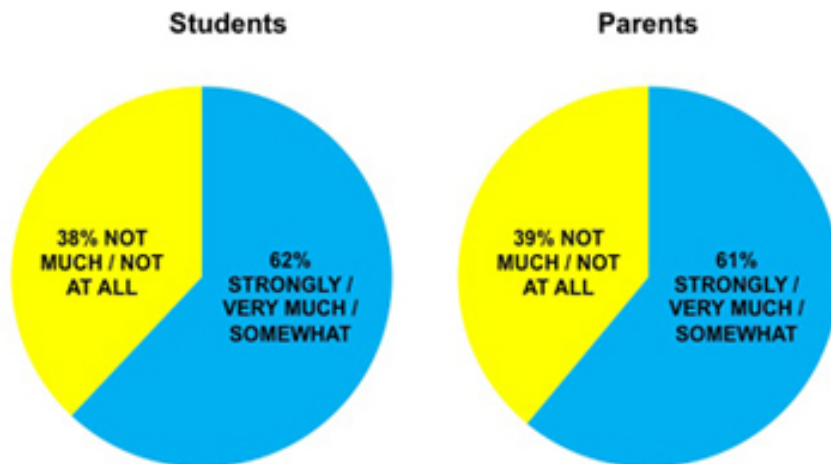
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1. Statement of Virginia Tech's Climate Action Commitment **specific to the university**
2. Action plan to **achieve the goals of commitment**
3. Action plan to **enhance sustainability programs & culture**



Excerpt from *The Princeton Review's* 2013 "College Hopes and Worries Survey"

**If you (your child) had a way to compare colleges based on their commitment to environmental issues (from academic offerings to practices concerning energy use, recycling, etc.), how much would this contribute to your (your child's) decision to apply to or attend a school?**



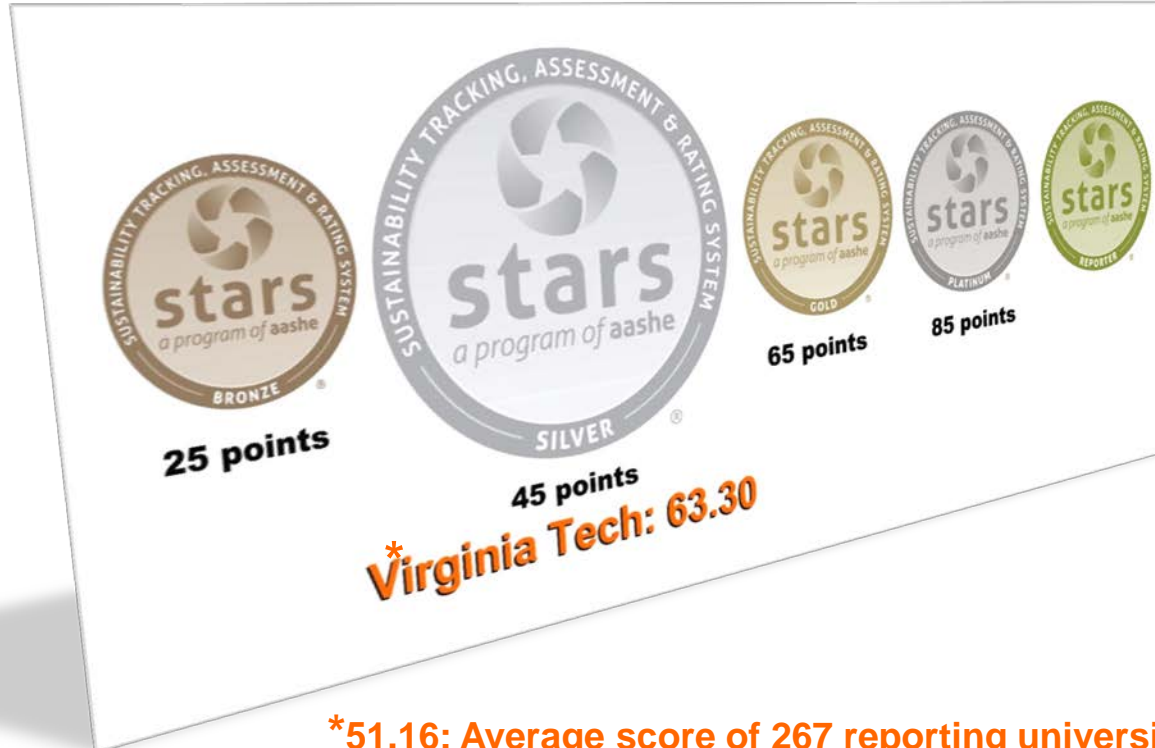
Among respondents overall (students and parents combined), a solid majority, 62%, said having such information would contribute "Strongly," "Very Much," or "Somewhat" to their decisions while 38% of them said it would contribute "Not Much" or "Not at all." Students have placed higher value in knowing about colleges' commitments to the environment than parents have.

## Students Care



## VIRGINIA TECH'S BRAGGING RIGHTS

- **Score increased** from its first rating in 2011, **just missing a Gold Rating by < 2 points**
- VT is in the **top 20%** of all 267 reporting universities
- Score is the **highest achieved to date by any college or university in Virginia**
- Score is the **3rd highest among Atlantic Coast Conference institutions**



**\*51.16: Average score of 267 reporting universities**

### What is STARS?

A transparent, self-reporting tool for colleges and universities to

**MEASURE SUSTAINABLE PROGRESS**

in the following areas:

**Education & Research, Operations,  
Planning, Administration &  
Engagement, and Innovation**





# 2013 LEED CERTIFICATIONS



## **Virginia Tech Research Center -- Arlington**

LEED Gold Certified (Core and Shell) 2012

LEED Silver Certified (Interior) 2013



## **Lavery Hall -- Blacksburg**

LEED Silver Certified (New Construction) 2013



## **Veterinary Medicine Instruction Addition**

LEED Silver Certified (New Construction) 2013





# SUSTAINABILITY EVENTS

## EARTH WEEK 2013

COMING AT YOU APRIL 22-26

Brought to you by the Environmental Coalition @ Virginia Tech

GO GREEN!






## Sustainability Week

VirginiaTech  
Invent the Future

Blacksburg  
a special place

Sustainable  
BLACKSBURG



The Environmental Coalition @ Virginia Tech  
Proudly Presents

## EARTH WEEK 2013

### APRIL 22-26

ALL WEEK LONG: Fun events on the drill field every day. Dining Specials at Farms & Fields. Movies in the evening. Prizes. Get Involved.

**Hokie Nation: Green Generation**

Monday: April 22 ENERGY	Tuesday: April 23 TRANSPORTATION	Wednesday: April 24 FOOD	Thursday: April 25 COMMUNITY/ART	Friday: April 26 CLIMATE
08 Guided Tours of Lumenhaus Award winning solar house across Parking Structure Lawn 10-11am	08 Meet up early at Blacksburg Library then ride out	08 Local Foods Breakfast at Gilliam 7-8am Student meet-up @Bum	08	08
11 Tree Planting with President Steger + Mayor Rordam Henderson Lawn 11:30-12:30	11 Transportation Fair on the Squidfield NEXT Bike Permitted Alternative Transportation Displays and More! 10-5pm	11 Work Day @ Sustainable Food Corp Garden Behind Squidfield Plantation 12-2pm	11 Art Show in Squares 2nd Floor hallway 10-4pm	11 Chat with Bill McKibben Sage in Fog 1040 12-1pm
01 Guided Tours of Lumenhaus Award winning solar house across Parking Structure Lawn 3-4pm	01 Local Food Fair Farmer meet & greet-Dee's Place 4-5pm	01 V.E.R.T. - Film at the Lyric Your Environmental Road Trip 3:30-5:30pm	01 Farmer's Market Steger & Rordam (Next to Baum's Marzone's) 5-6pm	01 Informational Session on Responsible Investment Fog 1040 5-6pm
06 Chef Series Demo Sustainable Chef Series of Wood End Market 6:30-7pm	06 Senator Phillip Packett (D-Russell County) Trans Dominion railway proposal Sageperson 1000 6-8pm	06 Vanishing of the Bees Film Screening Sageperson 1000 8-10pm	06 Art Auction and Reception Squares hallway Jamaicans Room 4-6pm	06 Weather Radio Launch with VSTATE on Drillfield 2:30-3:30pm
09 SWITCH Film Screening + Panel Discussion Sageperson 1000 7-10pm	09	09 GREEN PIRE Film Screening w/ Sierra Club Sageperson 1040 7:30-9:30pm	09 Stadium Woodstock Featuring J.R. Ché Developed Sustainability 7-9pm	09

Events on the Drillfield All Day! 10-3pm



## Get In The Game: Recycle

### Feb 3 - Mar 30, 2013

Sponsored By:


- Office of Energy & Sustainability
- SGA
- Division of Student Affairs
- Environmental Coalition

VISIT:  
[www.facilities.vt.edu/sustainability](http://www.facilities.vt.edu/sustainability)


VirginiaTech  
Invent the Future

## YTOSS: 2013

A student-led sustainability program of  
the YMCA at Virginia Tech



1 | YTOSS | ©2010 YMCA of the USA



the  
YMCA

FOR YOUTH DEVELOPMENT  
FOR HEALTHY LIVING  
FOR SOCIAL RESPONSIBILITY

- OES Internship Program
- Gobblerfest
- Lights Out/Power Down
- Sustainability Guide for New Students
- New Student Orientation Leaders



# GREEN RFP PROGRAM

The intent of the Green RFP program is to direct a variety of existing university financial resources to **Student Driven Sustainability Initiatives** each year to promote sustainability at Virginia Tech.

- **22 student proposals totaling more than \$155,000** since FY 2012
- **10 student proposals totaling more than \$92,000** for FY 2013 = **60% > previous year**
- **Preference is given to proposals** that support the Virginia Tech Climate Action Commitment and Sustainability Plan and **that produce achievable savings.**





# GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARD



## 2013 GOVERNOR'S ENVIRONMENTAL EXCELLENCE AWARD

Virginia Tech

WHEREAS, Article XI of the Constitution of Virginia states that "it shall be the Commonwealth's policy to protect its atmosphere, lands, and waters from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people of the Commonwealth;" and

WHEREAS, the Commonwealth seeks to recognize those who have demonstrated leadership, innovation, and commitment to implement pollution prevention practices to reduce environmental impacts and improve our natural environment; and

WHEREAS, pollution prevention is a cost-effective and environmentally sound approach to environmental management that strives to eliminate or reduce pollution at its source by minimizing the use of energy, water, and other natural resources through increased efficiency and conservation;

NOW, THEREFORE, I, Robert F. McDonnell, Governor, do recognize Virginia Tech as a Gold Medal recipient of the 2013 Governor's Environmental Excellence Award for its demonstrated commitment to the stewardship of Virginia's natural resources through its Sustainability Program.

  
Governor

  
Secretary of Natural Resources



Award recognizes **Environmental & Conservation Leadership** in 2 categories: **Sustainability & Land Conservation.**

Selection based on: **Environmental Benefit, Stakeholder Involvement, Public Outreach, Transferability, & Innovation.**





## QUESTIONS OR COMMENTS?





BUILDING AND GROUNDS COMMITTEE  
September 9, 2013  
Capital Project Status Report

Project Name	Project Description	Total Project Cost	Non-General Funds	Project Team	Contract Completion Date	Project Status
DESIGN						
Agriculture Programs Relocation	This project was initiated for planning under a blanket authorization to accommodate the required relocation of the Dairy Program from Southgate Drive to Kentland Farm.	\$14,000,000	\$14,000,000	TBD	TBD	The Virginia Tech Foundation (VTF) is funding and managing the design and construction of this project. Contracts for project management, design services, and construction mangement have been executed. The university will lease land to VTF and will lease back the improvements for use by the Dairy Science program. Preliminary design documents have been submitted for review.
				TBD		
Classroom Building	This project provides for the design and construction of an academic building containing 73,000 SF of state-of-the-art instructional space to accommodate unmet demand for multi-discipline general assignment classrooms and labs. The new academic building will contain approximately 21 flexible lecture and laboratory rooms of various sizes and configurations to accommodate multiple teaching methods. The building will provide approximately 2,500 student stations with wireless capability throughout.	\$2,000,180	\$2,000,180	EYP Architecture & Engineering - Washington D.C.	TBD	Funding has been authorized through preliminary design only. Preliminary design is complete. The project is on hold pending cost reconciliation with the Bureau of Capital Outlay Management (BCOM).
				W M Jordan, Inc. - Newport News, VA		
Fire Alarm Systems and Access	This project provides for critical life safety improvements in several educational and general facilities on campus. Fire alarm systems will be installed or expanded in several campus buildings including Randolph Hall, War Memorial Hall, Food Science and Technology, Norris Hall, Newman Library, Lane Hall, Patton Hall, Litton Reaves Hall, Whittemore Hall, Architecture Annex and Wallace Annex.	\$980,574	\$0	Multiple A/E Firms	TBD	Funding has been authorized through preliminary design only. Design services for Randolph Hall, War Memorial Hall, Food Science and Technology, Norris Hall, Patton Hall, Litton Reaves Hall, Whittemore Hall, Architecture Annex and Lane Hall are contracted and in progress. Design contracts for Newman Library, Lane Hall and Wallace Annex will be negotiated.
				Multiple Contractors		
Kentland Facilities Improvement Phase I	The project includes new construction of three buildings to replace six deteriorated buildings. The three new buildings include an 11,000 GSF metabolism research laboratory, a 7,700 GSF applied reproduction facility, and 10,200 GSF of arena and animal holding spaces.	\$152,000	\$0	TBD	TBD	Procurement of A/E design services is in progress.
				TBD		
Renovate/Renew Academic Buildings	This project is to renovate three existing campus buildings - Sandy Hall, Performing Arts Building and the front section 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 without building additional campus space.	\$2,359,000	\$0	Glavè & Holmes Associates- Richmond, VA	TBD	A/E design firm selected but contract execution has been delayed until negotiations are completed with the Bureau of Capital Outlay Managment (BCOM), since BCOM has reduced the construction budget from \$20 million to \$12 million. The procurement process for the Construction Manager is in progress.
				TBD		
Sciences Building Laboratory I	This project provides for design and construction of a new 80,000 SF building to house research and instructional space for the Department of Science.	TBD	TBD	TBD	TBD	A request for proposals will be advertised to initiate procurement of the A/E and Construction Manager contracts upon a release of funding from the Department of Planning and Budget.
				TBD		
Upper Quad Residential Facilities	This project provides for the demolition and reconstruction of Brodie and Rasche residence halls to serve the Corps of Cadets. The new residence halls totaling approximately 220,000 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 (footprint) of the existing Rasche Hall and Brodie Hall. Both buildings will provide double 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. BOV approval will be requested at a future meeting to demolish Thomas Hall and Montieth Hall as part of this project.	\$5,850,000	\$5,850,000	Clark Nexsen- Charlotte, NC	TBD	Schematic design is complete for review and approval. Construction documents for demolition and early site work for Rasche Hall have been submitted for permit review and contractor pricing. Demolition is scheduled to begin in October 2013.
				Barton Malow Company- Charlottesville, VA		



Project Name	Project Description	Total Project Cost	Non-General Funds	Project Team	Contract Completion Date	Project Status
CONSTRUCTION						
Campus Fiber Optic Improvements Project	This project is for a new fiber-optic backbone and building connections which will increase capacity and diversity to ensure adequate and reliable service to the university.	\$2,000,000	\$2,000,000	Virginia Tech Network Infrastructure & Services	January 30, 2014	Construction is nearing completion to accomodate wiring connections and equipment installation. Efficiencies and cost savings have allowed expansion of the number of buildings receiving fiber feeder upgrades to increase from 38 to 56 buildings. Equipment purchases are being finalized. Installation and ancillary work is anticipated to be complete in January 2014.
				Virginia Tech Network Infrastructure & Services		
Center for the Arts	This project provides for design and construction of a new 92,000 GSF Performing Arts Center and the renovation of Shultz Hall for a 1,300-seat performance auditorium, a visual arts gallery, creative technologies program and support spaces.	\$100,087,000	\$72,700,448	Snohetta AS – New York, NY with STV Group, Inc. – Douglasville, PA	September 6, 2013	Construction is approximately 95% complete. Interior finish work is complete in multiple locations. Installation of the exterior rain screen concrete panels is almost complete. Plaster work on the monumental spiral stair located is being completed. Ceiling systems are nearing completion. Elevators are undergoing final inspection. The project received a partial temporary certificate of occupancy for the TV Studio on July 15, 2013.
				Holder Construction Company – Atlanta, GA		
Human and Agricultural Biosciences Building I (HABBI)	This project provides for a new 92,500 GSF advanced agricultural research laboratory facility.	\$53,759,344	\$0	Lord, Aeck & Sargent, Inc. – Atlanta, GA	November 9, 2013	Overall construction is approximately 85% complete. Concrete decks and column construction is 100% complete. Lab equipment and furniture installation is in progress. Hokie Stone installation is nearing completion. The project is on schedule.
				Skanska USA Building, Inc. - Durham, NC		
Renovate Davidson Hall	This project provides for the demolition of the deteriorated and outdated center and rear section additions to Davidson Hall. The original building remains and a new replacement addition of 44,845 GSF will be constructed to provide modern laboratory and research space.	\$31,118,739	\$0	Einhorn Yafee Prescott-Washington, DC	January 16, 2014	Overall construction is approximately 73% complete. Structural steel and concrete deck pours are complete. Mechanical equipment installation has begun. Exterior stone and masonry installation is ongoing. The project is on schedule.
				Barton Malow Company-Charlottesville, VA		
Signature Engineering Building	This project provides for a new 154,935 GSF state-of-the-art, technology enhanced flagship building for the College of Engineering to include research, classroom and office space.	\$95,218,249	\$47,609,125	Zimmer Gunsul Frasca Architects LLP- Washington, DC	December 14, 2013	Overall construction is approximately 75% complete. Structural steel and concrete are 98% complete. Construction of the building envelope (masonry, precast panels, metal panels, and Hokie Stone) is in progress. Mechanical-Electrical-Plumbing rough-in, wall framing, drywall and interior finishes are ongoing. The project is on schedule.
				Gilbane Building Company- Richmond, VA		
Unified Communications and Network Renewal Project	This project provides for communication infrastructure and equipment enhancements over five years. The scope includes upgrading the Internet Protocol (IP) Network, the cable plant, and equipment rooms in 41 buildings throughout campus to provide for replacement of outdated equipment and upgrade of campus communications systems.	\$16,508,000	\$16,508,000	Multiple A/E Firms	2016	Space allocation, architectural design and construction activities are underway for the addition and expansion of data rooms to house technology upgrades in designated campus buildings. Wiring and equipment upgrades are phased for completion building by building. Fifty-four buildings have been completed and put on-line out of the approximate 145 buildings on the target list. The project is scheduled for completion in Fall 2016.
				Various Contractors		



Project Name	Project Description	Total Project Cost	Non-General Funds	Project Team	Contract Completion Date	Project Status
CLOSE-OUT						
Academic and Student Affairs Building	This 77,500 GSF project provided a new dining facility, academic instruction areas, and other student space within a three-story facility.	\$45,153,000	\$45,153,000	Burt Hill Kosar Rittleman Associates – Washington, D.C.	July 23, 2012	Construction is substantially complete. Punch list items are complete and all warranty items are currently being addressed. Pending items include a food odor issue in the ICTAS building next door. Anticipated project close out is Fall 2013.
				Skanska USA Building, Inc. – Durham, NC		
Infectious Disease Research Facility	This project provided a 15,700 GSF facility to accommodate infectious disease research laboratory space, lab office space and support areas.	\$10,163,000	\$6,163,000	CUH2A Architecture, Engineering, Planning- Bethesda, MD	October 9, 2011	Construction is substantially complete. Ongoing site improvements relating to stormwater management and landscaping will delay final completion and project closeout until Fall 2013.
				Branch & Associates, Inc.- Roanoke, VA		
Chiller Plant I	This project expands the campus chilled water infrastructure and provides for the design and construction of a new 16,655 GSF chiller plant in the south west side of campus to serve the new Human and Agricultural Biosciences Building (HABBI) building and other buildings in the life sciences precinct.	\$20,097,729	\$8,039,092	Burns and Roe Service Corporation – Virginia Beach, VA	June 15, 2013	Construction is substantially complete. Final completion is pending commissioning and landscape punch list items. The chiller plant is fully operational and currently providing chilled water to HABBI, ICTAS II, and Life Sciences I. Commissioning of the chillers and cooling towers will take place once HABBI is occupied.
				The Whiting-Turner Contracting Co. – Baltimore, MD		
McComas Exterior Wall Structure, Phase III	The project extends the previous work on the McComas Exterior Wall Structure in an effort to alleviate wide spread water infiltration due to failure of the masonry veneer construction, flashing, sealants, mortar joints, and materials.	\$3,100,000	\$3,100,000	Whitlock Dalrymple Poston & Associates- Manassas, VA	August 1, 2013	Construction is substantially complete and the building is fully occupied. Final project completion is pending receipt and installation of long lead time equipment targeted for October 2013.
				Carolina Restoration & Waterproofing, Inc. Charlotte, NC		
Phase IV of Oak Lane Community	This project will design and construct Phase IV of the Oak Lane Community for a total project cost of \$23.5 million. Construction of the Sigma Phi Epsilon house and related site improvements is the first in an anticipated multi-phase development of five new Greek houses to be located east of Oak Lane and adjacent to the golf course.	\$23,500,000	\$23,500,000	Thompson + Litton- Radford, VA (Infrastructure Improvements)	April 18, 2013	The house is substantially complete. The associated sub-project for site work, infrastructure, storm water management and landscaping improvements is also substantially complete. Final completion for both projects is pending completion of punch list by contractor.
				DCI/Shires Inc.- Bluefield, WV (Infrastructure Improvements)		



**RESOLUTION ON APPOINTMENT TO THE  
VIRGINIA TECH/MONTGOMERY REGIONAL AIRPORT AUTHORITY**

**WHEREAS**, the Virginia Tech/Montgomery Regional Airport Authority consists of five directors who are responsible for the management and operation of the Authority. One director is appointed by each of the political subdivisions of the Towns of Blacksburg and Christiansburg and the County of Montgomery, one director by the University, and one at-large director appointed jointly by the Virginia Polytechnic Institute and State University Board of Visitors, the Town Councils, and the Board of Supervisors to serve at large; and

**WHEREAS**, L. Allen Bowman, who serves as the director appointed jointly by the Virginia Polytechnic Institute and State University Board of Visitors, the Town Councils, and the Board of Supervisors to serve at large, has a term expiring August 31, 2013;

**NOW, THEREFORE, BE IT RESOLVED**, that L. Allen Bowman be reappointed as the at-large representative to Virginia Tech/Montgomery Regional Airport Authority for a four-year term expiring August 31, 2017.

**RECOMMENDATION:**

That the above resolution reappointing L. Allen Bowman as the at-large director to the Virginia Tech/Montgomery Regional Airport Authority be approved.

September 9, 2013



## **Committee Minutes**

### **FINANCE AND AUDIT COMMITTEE**

**Duck Pond Room, The Inn at Virginia Tech**

**September 9, 2013**

#### **Finance Closed Session**

**Board Members Present:** Mr. Jim Chapman, Mr. B. K. Fulton, Ms. Deborah Petrine, Mr. Michael Quillen

**VPI & SU Staff:** Ms. Kay Heidbreder, Ms. Sharon Kurek, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Dr. Charles W. Steger

1. Motion for Closed Session
- \* 2. Ratification of Personnel Changes Report: The Committee met in Closed Session to review and take action on the quarterly personnel changes report.

The Committee recommended the personnel changes report to the full Board for approval.

#### **Finance Open Session**

**Board Members Present:** Mr. Jim Chapman, Mr. B. K. Fulton, Ms. Deborah Petrine

**VPI & SU Staff:** Ms. Mary Beets, Mr. Allen Campbell, Mr. Al Cooper, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Ms. Annabelle Fuselier, Ms. Natalie Hart, Ms. Kay Heidbreder, Mr. Tim Hodge, Ms. Sharon Kurek, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Laura Neff-Henderson, Ms. Lisa Royal, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Mr. Ken Smith, Mr. Jeb Stewart, Mr. Brad Sumpter, Mr. Chris Yianilos

1. Motion to Reconvene in Open Session
2. Approval of Items Discussed in Closed Session: The Committee reviewed and took action on items discussed in closed session.
3. Opening Remarks and Approval of Minutes of the June 3, 2013 Meeting: The Committee reviewed and approved the minutes of the June 3, 2013 meeting.
4. Update on JLARC Study on Higher Education Cost Efficiency: The Committee received an update on the JLARC Study on Higher Education Cost Efficiency. The 2012 General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) to conduct a study on cost efficiency of the 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 directs JLARC to conduct the study identified 14 areas to consider including both academic and non-academic factors that affect the cost of higher education operations. The study is to be conducted over a period of two years and is expected to be completed by November 30, 2014. The committee received highlights of the first report issued by JLARC namely *Trends in Higher Education Funding, Enrollment, and Student Costs report*, and university observations of the report. As JLARC releases additional reports, the university will bring information from the reports and university observations to the reports to the Committee. The Committee also heard the status of the second report on non E&G fees and auxiliary operations; JLARC is issuing the second report today and the university will provide a detailed analysis of that report at the Committee's next meeting.

5. Update on Impact of Implementation of New GASB Statements Related to Accounting and Financial Reporting for Pension Plans: The Committee received a preliminary briefing on the impact of implementation of new Governmental Accounting Standards Board (GASB) statements related to accounting and financial reporting for pension plans. In June 2012, GASB issued two new standards for accounting and reporting pension activity for state and local governments. GASB Statement No. 67 covers accounting and reporting by pension plans, and GASB Statement No. 68 covers accounting and reporting of pension activity by governmental employers participating in those plans such as the university. The implementation of these statements will have a significant impact on the university's financial statements. The Virginia Retirement System must implement Statement No. 67 in fiscal year 2014, while the Commonwealth and its various state agencies (including the university) and localities must implement Statement No. 68 in fiscal year 2015. The state will provide additional information on the impact on Virginia Tech later during the current year. The university is closely monitoring this issue and will provide an update to the Committee when additional information is available.
- \* 6. Approval of Potential State Budget Initiatives for 2014-16: The Committee reviewed for approval the potential state budget initiatives for 2014-16. In preparation for the 2014 General Assembly session and the fiscal year 2014-16 budget, the administration develops budget requests for consideration by the Governor for inclusion in the Executive Budget proposal. The Governor will present the Executive Budget to the General Assembly on December 16, 2013.

Consistent with previous guidance and prior practice, the university has developed a list of potential state budget requests designed to advance the vision of the university's long range plan. The proposals on this list are consistent with the initiatives included in the six-year operating plan, which was submitted to the state in July 2013.

Several important statewide issues are traditionally addressed centrally and are not included in Virginia Tech's list of amendments. The issues that are normally coordinated by the State Council of Higher Education for Virginia (SCHEV) and the



Department of Planning and Budget (DPB) include the following: faculty and staff salaries, base budget adequacy, equipment trust fund, maintenance reserve, operation and maintenance of new facilities, and student financial assistance.

These proposed initiatives are expected to meet the criteria for submission to the Executive Budget. However, the final budget request submission will be modified as necessary to consider Administration guidance. The university may elect to submit all or some of these initiatives as decision packages for consideration in the Executive Budget process or as amendments during the 2014 General Assembly Session. If any material additions are made to the request because of new opportunities or state guidance, these changes would be reviewed subsequently with the Board of Visitors.

The Committee recommended the potential state budget initiatives to the full Board for approval.

- \* 7. Approval of Year-to-Date Financial Performance Report (July 1, 2012 – June 30, 2013): The Committee reviewed the Year-to-Date Financial Performance Report for July 1, 2012 – June 30, 2013. For the fourth quarter, budget adjustments were made to reflect revisions to projected revenues and expenditures. Tuition and fee revenues were slightly lower than the revised budget. Revenues for Intercollegiate Athletics are higher than projected due to higher than forecasted revenues from conference allocation, football ticket sales, basketball settlements, and multimedia revenue. Expenditures for Athletics are lower than projected due to timing of operating expenses due to debt service refinancing.

The university successfully closed its fiscal year in accordance with guidance and requirements of the Commonwealth, with a balanced budget for its Educational and General operations, while fully utilizing its General Fund appropriations. 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.

For the quarter ending June 30, 2013, \$149.6 million had been expended for Educational and General capital projects, and \$21.6 million had been expended for Auxiliary Enterprises capital projects. Total Capital outlay expenditures for the year ending June 30, 2013 totaled \$171.2 million.

The Committee recommended the Year-to-Date Financial Performance Report to the full Board for approval.

- \* 8. Resolution Authorizing the Signature of Contractual Documents: The Committee reviewed for approval a resolution authorizing the Vice President for Finance and CFO as the Chief Contracting Officer of the university. The resolution also gives authority to the Chief Contracting Officer to designate individuals in positions, as deemed appropriate, to execute specific types of contracts and agreements, as they relate to their functional areas. The President is also authorized to sign all contracts and agreements. The President's Chief of Staff shall serve as the



Contract Review Officer and will be authorized to sign contractual agreements up to \$1 million in value.

The Committee recommended the Resolution Authorizing the Signature of Contractual Documents to the full Board for approval.

### **Joint Open Session**

**Board Members Present:** Mr. Jim Chapman, Mr. William Fairchild, Mr. B. K. Fulton, Mr. William Holtzman, Ms. Deborah Petrine, Mr. Michael Quillen, Mr. John Rocovich

**VPI & SU Staff:** Mr. Bob Broyden, Mr. Allen Campbell, Mr. Al Cooper, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Dr. Elizabeth Flanagan, Major General Randal D. Fullhart, Ms. Annabelle Fuselier, Mr. Tom Gabbard, Mr. Mark Gess, Ms. Natalie Hart, Mr. Larry Hincker, Mr. William Hinson, Mr. Tim Hodge, Ms. Sharon Kurek, Ms. Leigh LaClair, Ms. Heidi McCoy, Mr. David McKee, Dr. Scott Midkiff, Mr. Ken Miller, Dr. Joe Merola, Ms. Laura Neff-Henderson, Ms. Kim O'Rourke, Ms. Lisa Royal, Mr. Jason Soileau, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Mr. Ken Smith, Ms. Susan Steeves, Dr. Charles W. Steger, Mr. Jeb Stewart, Mr. Brad Sumpter, Dr. Sherwood Wilson

- \* 1. Ratification of the 2014-2020 Capital Outlay Plan: At its March 2013 meeting, the Committees approved the university's list of potential projects for inclusion in the 2014-2020 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 has proceeded accordingly and has met the state's June 21, 2013 deadline for submission of the plan. The \$2.6 billion total plan reflects the long-term needs of the university and positions the university with options to respond to various funding abilities of the state in the future. The projects in the first biennium may be used by the state to update its capital outlay plan and to make funding decisions in the 2014 budget session. Projects funded entirely with nongeneral funds may be approved by the Board on an as needed basis. The projects in the second and third biennia are for planning purposes. The Committees reviewed for ratification the 2014-2020 Capital Outlay Plan as submitted to the state.

The Committees recommended the 2014-2020 Capital Outlay Plan to the full Board for approval.

- \* 2. Approval of Resolution for Upper Quad Project: In March 2013, the Board of Visitors approved a \$5.85 million planning authorization for the Upper Quad Residential Facilities project. The project replaces the existing four facilities: Rasche Hall, Brodie Hall, Thomas Hall, and Monteith Hall, with two modern residence halls. Each building is envisioned to be approximately 97,000 square feet. The proposed implementation strategy for the project is a three phase approach. The first phase involves razing and replacing Rasche with a modern five story residence hall. The second phase involves razing and replacing Brodie with a modern five story residence hall. The final phase involves razing Monteith and Thomas. At the end of



the project, the two new residential facilities replace the existing bed inventory with modern space. As with all self-supporting projects, the university has developed a financing plan to support the project. The university has developed a long range financial model to support new debt service on this project and other residential program costs within the university's six-year operating plan. This funding plan calls for the use of debt which may be serviced from Residential Programs auxiliary revenue. The total project funding is \$90 million, and the plan is sufficient to cover this amount. This request is for an \$84.15 million authorization supplement to raze the existing four buildings and construct two new residence halls for the Upper Quad Residential Facilities project.

The Committees recommended the Resolution for Upper Quad Project to the full Board for approval.

- \* 3. Approval of Resolution for Planning the Marching Virginians Practice Facility: The existing practice facility for the Marching Virginians is an exposed natural turf field without indoor changing rooms, restrooms, and storage. The proposed solution envisions three components: an approximately 4,330 gross square foot facility that will include restrooms, lockers, an instrument storage room, and a drum line room with storage for percussion instruments; an approximately 3,500 gross square foot outdoor covered pavilion to provide shelter during inclement weather; and a lighted soccer- size field of artificial turf. The estimated total project costs of this phase, inclusive of design and construction, are \$4.75 million. The College of Liberal Arts and Human Sciences has worked conjointly with Recreation Sports and Intercollegiate Athletics on a collaborative shared use and funding plan to support this phase of the project. At this time, the university is requesting a planning authorization of \$400,000 for the project and funding sources are available and sufficient to cover these costs.

The Committees recommended the Resolution for Planning the Marching Virginians Practice Facility to the full Board for approval.

### **Audit Closed Session**

**Board Members Present:** Mr. Jim Chapman, Mr. B. K. Fulton, Ms. Deborah Petrine, Mr. Michael Quillen

**VPI & SU Staff:** Ms. Kay Heidbreder, Ms. Sharon Kurek, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Dr. Charles W. Steger

1. Update on Fraud, Waste, and Abuse Cases: The Committee met in Closed Session to receive an update on the outstanding fraud, waste, and abuse cases.
2. Discussion with the Director of Internal Audit: The Committee met in Closed Session with the Director of Internal Audit to discuss audits of specific departments and units where individual employees were identified.



## **Audit Open Session**

**Board Members Present:** Mr. Jim Chapman, Mr. B. K. Fulton, Ms. Deborah Petrine

**VPI & SU Staff:** Mr. Allen Campbell, Mr. Al Cooper, Mr. John Cusimano, Mr. Brian Daniels, Dr. John Dooley, Ms. Annabelle Fuselier, Mr. Tim Hodge, Ms. Sharon Kurek, Dr. Scott Midkiff, Mr. Ken Miller, Ms. Laura Neff-Henderson, Ms. Kim O'Rourke, Ms. Lisa Royal, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Dr. Charles W. Steger, Mr. Jeb Stewart

1. Opening Remarks and Approval of Minutes of the June 3, 2013 Meeting: The Committee reviewed and approved the minutes of the June 3, 2013 meeting.
2. Review and Acceptance of University's Update of Responses to all Previously Issued Internal Audit Reports: The Committee reviewed the university's update of responses to all previously issued internal audit reports. At the June meeting, the university reported that as of March 31, 2013, the university had 21 open recommendations. Nine audit comments have been issued since then. As of June 30, 2013, the university has addressed 10 comments, leaving 20 open recommendations in progress. The Committee received a briefing at the meeting that reviewed the status of the outstanding comments, including the comments that have been addressed since June 30, 2013. The university is on track to complete the resolution of the outstanding audit comments in accordance with the scheduled completion dates.

The Committee accepted the report.

3. Presentation, Discussion, and Acceptance of Internal Audit Department's Annual Status Report for the Fiscal Year ended June 30, 2013: The Committee reviewed the Internal Audit Department's Status Report as of June 30, 2013. This report documents the Committee's review of the effectiveness of the internal audit function, as evidenced by the audit coverage information detailed in the annual report, including staffing resources, financial budget, training, objectivity and reporting relationships as required by the Committee's Audit Charter. In addition to conducting scheduled audits, compliance reviews, and advisory services, the audit department participated in annual audit activities, fraud audits, and professional development activities. Twenty-five audit projects or 96 percent of the audits in the fiscal year 2012-13 audit plan have been completed. One project, a risk-based audit of IT Interfaces and Wires, is currently underway and will be carried forward to fiscal year 2013-14. The Committee also received an overview of cost containment recommendations, recurring audit issues, and surveys results for evaluating Internal Audit services.

The Committee accepted the report.

4. Review and Acceptance of the 2014 Audit Plan: The Committee reviewed the proposed audits for the approval of the audit plan for fiscal year 2014. Internal



Audit conducted its annual risk assessment to identify the entities that should receive audit attention in fiscal year 2013-14. Internal Audit also created a university-wide information technology risk assessment and audit plan mapped to the ISO 27002 standard, an information technology standard published by International Organization for Standardization (ISO) that is considered best practice for developing and maintaining enterprise-wide IT security. Senior management had the opportunity to provide input on areas for consideration in the preparation of the audit plan. Approximately 11,650 direct hours will be devoted to audits, planning, and reviews. Twenty-one audits and five compliance reviews are proposed for 2013-14. Internal Audit's goal is to complete 85 percent of the audit plan.

The Committee accepted the report.

5. Review and Acceptance of the following Internal Audit Reports/Memos Issued: The Committee reviewed and accepted the following Internal Audit Reports:
  - a. Athletics: NCAA Compliance: The audit received a rating of improvements are recommended. Audit recommendations were issued to management where opportunities for further improvement were noted in the areas of certification of compliance and extra benefits awareness.
  - b. Human Resources: Compensation and Performance Management: The audit received a rating of improvements are recommended. An audit recommendation was issued to management where opportunity for further improvement was noted in the area of monitoring overtime for exempt employees.
  - c. International Affairs: The audit received a rating of improvements are recommended. Audit recommendations were issued to management where opportunities for further improvement were noted in the areas of Personnel Activity Reports (PARs), cost transfers, and Education Abroad.
  - d. IT: Outsourced Cloud Services: The audit received a rating of improvements are recommended. An audit recommendation was issued to management where opportunity for further improvement was noted in the area of planning for outsourced cloud services.
  - e. Virginia Tech Transportation Institute: The audit received a rating of immediate improvements are needed. Audit recommendations were issued to management where opportunities for further improvement were noted in the areas of safety training, use of federally-owned computers, and accountability for all petty cash funds.
  - f. Virginia Cooperative Extension: The audit received a rating of significant improvements are needed. Audit recommendations were issued to management where opportunities for further improvement were noted in the



areas of funds handling, conflict of interest, and forms and background checks for 4-H volunteers.

- g. IT: Mobile Device Security: The audit received a rating of improvements are recommended. Low-priority recommendations were issued to management where opportunities for improvement were identified for providing sufficient guidance to the university community on securing mobile devices and for implementation of configuration settings through the email environment to help protect devices from unauthorized access.
  - h. College of Engineering: The compliance review received a rating of improvements are recommended. Audit recommendations were issued to management where opportunities for further improvement were noted in the areas of fiscal responsibility, wage payroll, overtime compensation, leave reporting, P14 appointments, funds handling, and information technology.
  - i. College of Liberal Arts and Human Sciences: The compliance review received a rating of significant improvements are needed. Audit recommendations were issued to management where opportunities for further improvement were noted in the areas of fiscal responsibility, wage payroll, overtime compensation, leave reports, P14 appointments, purchasing card expenditures, funds handling, information technology, and state vehicle management.
6. Update on Federal Audit of National Science Foundation Research Funds: At the June 3, 2013 meeting, the Finance and Audit Committee received a report about the federal audit of the National Science Foundation research funds. The audit is currently in progress. In the spring of 2013 the Office of the Inspector General (OIG) for the National Science Foundation (NSF) announced it would perform "cost incurred performance audits" of eleven institutes of higher education that have received significant funding from NSF. This report provides an update on the status of this audit. Based on the current status of their work, final results of this audit are not expected until early in 2014.
7. Discussion of the Current Status of the June 30, 2013 Audit of the University's Financial Statements: The Committee received a report on the current status of the audit of the university's financial statements for 2012-13. The audit is proceeding according to schedule and the auditors will report the results of the audit at the November meeting. At this time, the university is not aware of any significant issues related to the audit.

**\*Requires full Board approval.**

There being no further business, the meeting adjourned at 11:45 a.m.



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

### **FINANCE AND AUDIT COMMITTEE**

**June 30, 2013**

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

The report includes outstanding recommendations from Compliance Reviews and Audit Reports. Consistent with the report presented at the 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 high or medium priority recommendations for each audit in order of the original target completion date, and with an explanation for those having revised target dates or revised priority levels. Attachment C charts performance in implementing recommendations on schedule over the last seven years. The 100 percent on-schedule rate for fiscal year 2013 reflects closing 27 of 27 recommendations by the original due date.

The report presented at the June 3, 2013 meeting covered Internal Audit reports reviewed and accepted through March 31, 2013 and included 21 open medium and high priority recommendations. Activity for the quarter ended June 30, 2013 resulted in the following:

Open recommendations as of March 31, 2013	21
Add: Medium & High priority recommendations accepted June 3, 2013	9
Subtract: recommendations addressed since March 31, 2013	10
Remaining open recommendations as of June 30, 2013	<u>20</u>

While this report is prepared as of the end of the quarter, management continues to receive updates from Internal Audit regarding auditee progress on action plans. Through August 13, 2013, Internal Audit has closed two of the 20 outstanding medium and high priority recommendations. The remaining 18 open recommendations are progressing as expected and are on track to meet their respective target due dates. Management is working jointly with all the units and providing assistance as needed to ensure the action plans are completed timely.



**ATTACHMENT A**

**Open Recommendations by Priority Level**

**FINANCE AND AUDIT COMMITTEE**

**June 30, 2013**

Report Date	Audit Name	Audit Number	Total Recommendations						
			ISSUED	COMPLETED	OPEN				
					Extended		On-schedule		Total
					High	Medium	High	Medium	Open
22-Aug-12	Equine Medical Center	12-1061	7	3			3	1	4
07-Mar-13	Animal and Poultry Sciences	13-1089	3	1				2	2
07-Mar-13	IT Disaster Recovery	13-1097	3				2	1	3
07-Mar-13	University Scholarships and Financial Aid	13-1099	3				3		3
03-May-13	Athletics Department	13-1100	1				1		1
14-May-13	Records Management Services	13-1118	4				3	1	4
15-May-13	Graduate Education	13-1091	3				2	1	3
<b>Totals:</b>			<b>24</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>6</b>	<b>20</b>



**ATTACHMENT B**

**Internal Audit Open Recommendations**

**FINANCE AND AUDIT COMMITTEE**

**June 30, 2013**

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised		
15-May-13	1	13-1091	Graduate Education	Plans of Study	Medium		1-Jul-13		1	
14-May-13	2	13-1118	Records Management Services	Vault Access	Medium		1-Aug-13		1	
07-Mar-13	3	13-1089	Animal and Poultry Sciences	Environmental Health and Safety	Medium		31-Aug-13		1	
07-Mar-13	4	13-1089	Animal and Poultry Sciences	Personally Identifying Information	Medium		31-Aug-13		1	
15-May-13	5	13-1091	Graduate Education	Exceptional Tuition Remission Approval	High		31-Aug-13		1	
15-May-13	6	13-1091	Graduate Education	CollegeNET Funds Handling	High		31-Aug-13		1	
22-Aug-12	7	12-1061	Equine Medical Center	Ineffective Operating Procedures	High		1-Sep-13		1	
14-May-13	8	13-1118	Records Management Services	Records Security	High		1-Oct-13		2	
14-May-13	9	13-1118	Records Management Services	Social Security Number Destruction	High		1-Oct-13		2	
07-Mar-13	10	13-1099	University Scholarships and Financial Aid	Federal Work Study	High		31-Oct-13		2	
07-Mar-13	11	13-1099	University Scholarships and Financial Aid	Overawards	High		30-Nov-13		2	
03-May-13	12	13-1100	Athletics Department	Vehicle Management	High		1-Dec-31		2	
14-May-13	13	13-1118	Records Management Services	Records Center Operations	High		15-Dec-31		2	
07-Mar-13	14	13-1099	University Scholarships and Financial Aid	General Scholarships	High		31-Dec-13		2	
07-Mar-13	15	13-1097	IT Disaster Recovery	Inadequate Backup and Recovery Procedures	High		2-Jan-14		2	
07-Mar-13	16	13-1097	IT Disaster Recovery	Incomplete Division of Information Technology DRP Documentation	Medium		2-Jan-14		2	
22-Aug-12	17	12-1061	Equine Medical Center	Perpetual Inventory	High		15-Feb-14		2	



**ATTACHMENT B**

**Internal Audit Open Recommendations**

**FINANCE AND AUDIT COMMITTEE**

**June 30, 2013**

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised		
22-Aug-12	18	12-1061	Equine Medical Center	Separate Accounting System	High		15-Feb-14		2	
22-Aug-12	19	12-1061	Equine Medical Center	Past Due Notifications	Medium		15-Feb-14		2	
07-Mar-13	20	13-1097	IT Disaster Recovery	Undefined University Policy and Procedures for Disaster Recovery Planning	High		1-Mar-14		2	

- (1) As of June 30, 2013, 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.
- (2) Target date is beyond current calendar quarter. Management has follow up discussions with the auditor to monitor progress, to assist with actions that may be needed to meet target dates, and to assess the feasibility of the target date.

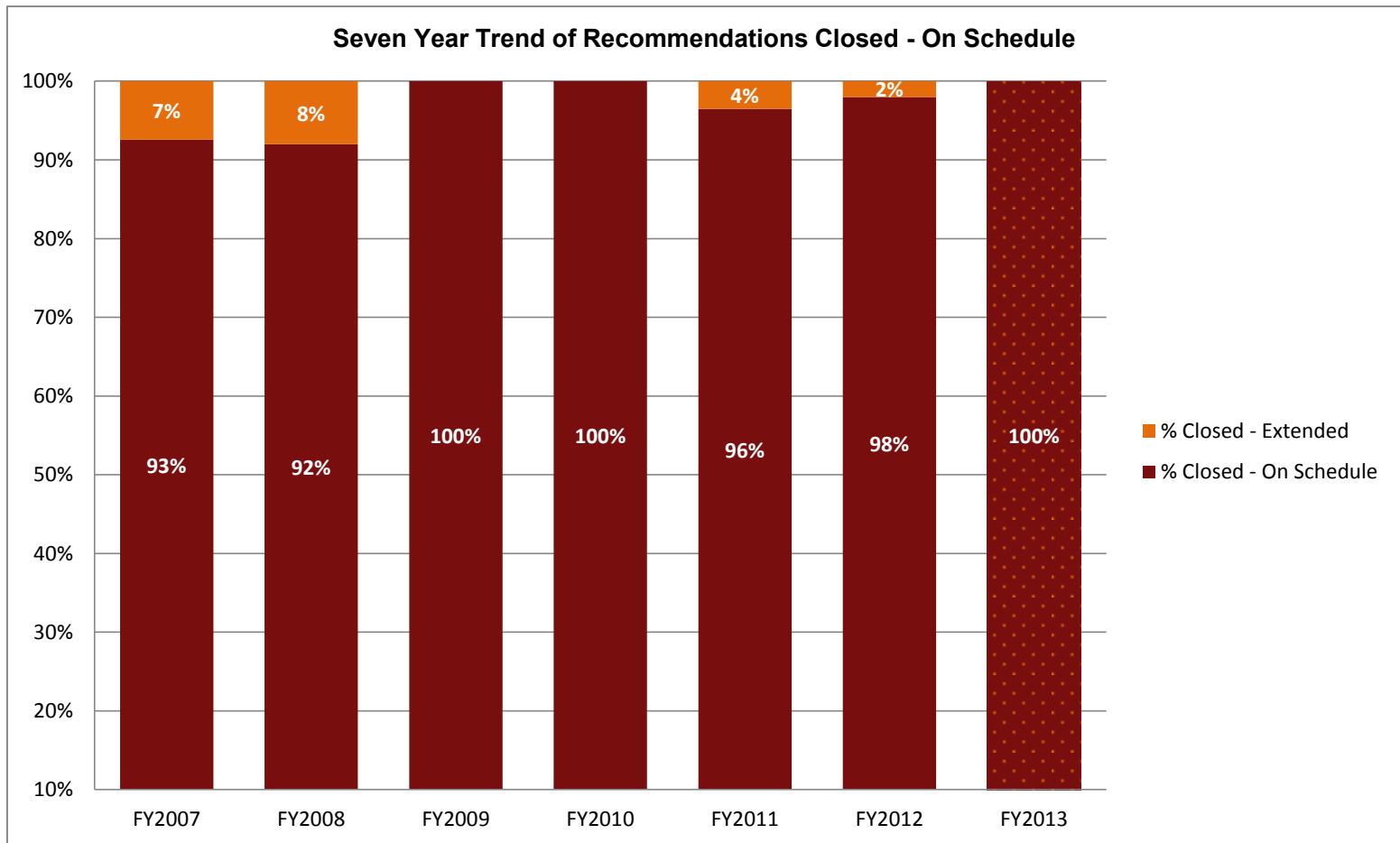


## ATTACHMENT C

### Management Performance and Trends Regarding Internal Audit Recommendations

#### FINANCE AND AUDIT COMMITTEE

June 30, 2013





**Internal Audit Department Annual Status Report  
for the Fiscal Year Ended June 30, 2013**

**FINANCE AND AUDIT COMMITTEE**

**August 21, 2013**

**Mission Statement – Scope of Work**

The mission of the Virginia Tech Department of Internal Audit is to provide independent, objective assurance and advisory services designed to add value and improve the university's operations. Additionally, 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.

Internal Audit reports functionally to 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 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 2012-13, 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 2012-13, 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 Internal Audit considered its independence or objectivity to have been 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 2012-13, 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 2012-13 annual audit plan at a level consistent with the resources of the Department of Internal Audit. Twenty five audit projects on the fiscal year 2012-13 audit plan have been completed. During the fiscal year, one additional project was added to the audit plan at management's request. Due to personnel turnover and management concurrence, Internal Audit deferred four projects, Real Estate Management and Architecture, Office of Sponsored Programs Pre-Award, Chemistry Service Centers, and Gift Accounting Funds Handling. The risk based audit of Career Services was reclassified and completed as an advisory service project.

For fiscal year 2012-13, Internal Audit completed 96 percent of its audit plan as depicted in Exhibit 1. One project, a risk-based audit of IT: Interfaces and Wires, is currently underway. This project will be carried forward into fiscal year 2013-14 due to scheduling conflicts of participating entities at fiscal year-end.

### **Exhibit 1 FY 2012-13 Completion of Audit Plan**

<b>Audits</b>	
Total # of <b>Audits</b> Planned	28
Total # of Supplemental Audits	1
Total # of Carry Forwards	1
Total # of Planned <b>Audits</b> Canceled and/or Deferred	4
Total <b>Audits</b> in Plan as Amended	26
Total <b>Audits</b> Completed	25
<b>Audits</b> - Percentage Complete	96%
Note: Includes Compliance and Advisory Reviews	



Exhibit 2 displays the distribution of direct audit hours (77%) by category. The indirect hours for administration, computer/network support, training, and compensated absence hours (23%) are not included in this chart.

**Exhibit 2**  
**FY 2012-13 Distribution of Direct Audit Hours**

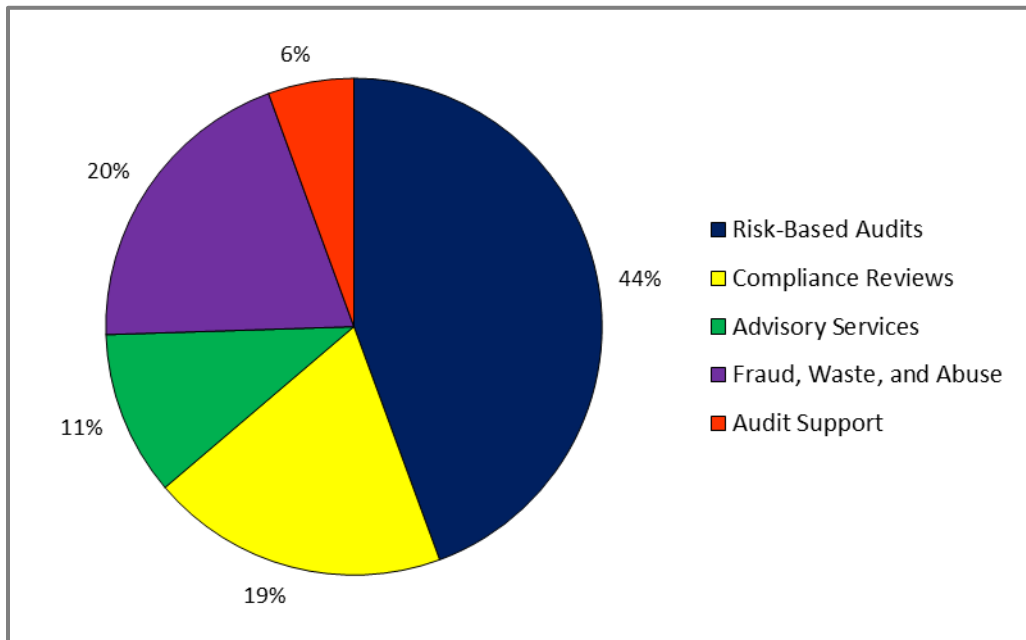




Exhibit 3 illustrates the difference between actual and planned hours during fiscal year 2012-13. Since additional effort was spent on compliance reviews and fraud, waste, and abuse, Internal Audit spent less than the planned effort in the other planned areas as turnover in personnel necessitated. The increase in compliance review effort included training two new graduate assistants in understanding university policies and conducting audits. The overall effort spent on fraud, waste, and abuse investigations was more than anticipated as several outstanding cases were closed due to the temporary hire of an additional Fraud Specialist.

**Exhibit 3**  
**FY 2012-13 Actual vs. Planned Hours**

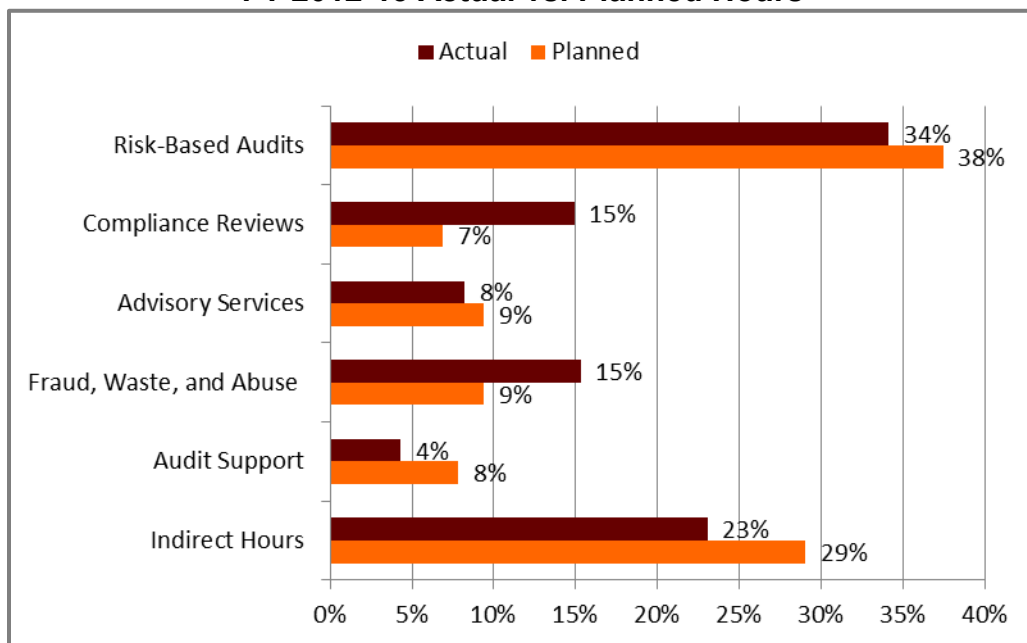




Exhibit 4 below displays the status of the fiscal year 2012-13 audit plan as amended. All compliance review projects have been completed, while one risk-based audit is in progress.

**Exhibit 4**  
**FY 2012-13 Audit Plan Status**

<b>Audit Project</b>	<b>Risk Ranking</b>	<b>Report Issue Date</b>	<b>BOV Mtg</b>
<b>Risk-Based Audits</b>			
Animal and Poultry Sciences (APSC)	High	3/7/2013	Mar-13
Athletics: NCAA Compliance *	High	8/13/2013	Sep-13
Financial Reporting and Cost Accounting	High	4/25/2013	Jun-13
Fish and Wildlife Conservation (FWC)	High	2/13/2013	Mar-13
Graduate Education	High	5/15/2013	Jun-13
Human Resources: Comp. & Performance Mgmt.	High	8/9/2013	Sep-13
International Affairs	High	8/8/2013	Sep-13
IT: Disaster Recovery	High	3/7/2013	Mar-13
IT: Interfaces and Wires	High	<i>In Progress</i>	
IT: Outsourced Systems	High	8/14/2013	Sep-13
Office of Sponsored Programs *	High	<i>Deferred</i>	
Office of the University Bursar *	High	5/6/2013	Jun-13
Psychology	High	1/31/2013	Mar-13
University Scholarships and Financial Aid * (USFA)	High	3/7/2013	Mar-13
Virginia Tech Transportation Institute (VTTI)	High	8/16/2013	Sep-13
Real Estate Management and Architecture	Medium	<i>Deferred</i>	
Records Management	Medium	5/14/2013	Jun-13
Virginia Cooperative Extension (VCE)	Medium	7/30/2013	Sep-13
IT: Mobile Device Security	Medium	8/20/2013	Sep-13
Career Services	Low	<i>Advisory</i>	
<b>Compliance Reviews</b>			
Athletics Department		5/3/2013	Jun-13
College of Engineering (COE)		8/16/2013	Sep-13
College of Liberal Arts and Human Sciences (CLAHS)		8/14/2013	Sep-13
Virginia-Maryland Regional College of Veterinary Medicine (VMRCVM)		2/27/2013	Mar-13
<i>*Annual Audit on Different Components</i>			

Additionally, Internal Audit responded to management's requests for advisory services and consultative guidance including the following topics: Virginia Tech Carillion Research Institute, Vice President for Undergraduate Education information technology (IT), Construction Contracts, and Copier Management.



## Management Corrective Actions (MCAs)

Internal Audit conducts follow-up on management's implementation of agreed upon improvements for dozens of 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. 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 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 Finance and Audit Committee receives the higher priority recommendations and associated MCAs. However, Internal Audit and management closely monitor all outstanding recommendations to ensure they are adequately addressed by the responsible parties.

Of the 92 MCAs generated during audits issued in fiscal year 2012-13, Internal Audit categorized 17 as high priority (18%). 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 253 days and are on track for completion. Audits for fiscal year 2012-13 resulted in recommendations with ratings of High, Medium, or Low MCAs as follows:

### Exhibit 5 Inventory of MCAs

Beginning # of MCAs	35
MCAs added	92
MCAs closed	<u>77</u>
Current open inventory of MCAs	50

Note: The open inventory above includes 20 open MCAs from the reports presented to the Finance and Audit Committee at this September meeting. Additionally, 13 of the 50 open MCAs are categorized as either low-priority recommendations, observations for central administration identified during audits, or recommendations resulting from advisory service projects that are excluded from status reports of previously issued recommendations shared with the Finance and Audit Committee.

## Cost Containment and Revenue Enhancement Recommendations

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

- Advisory Project: Contract Review – Internal Audit performed extensive work related to a contract review under Attorney Client Privilege in which it identified that



a vendor erroneously collected from \$9–20 million in excess of the amount allowed per contract terms. An external expert consultant validated our analysis of the amount that the vendor retained in excess of the amount allowed per the contract and renewal letter terms. This matter is in the midst of ongoing criminal and civil litigation.

- Construction Contracts Review – Internal Audit performed a review of construction contracts, discovering areas Virginia Tech could potentially recover costs of approximately \$821,000. The project also identified instances in which university management could contain costs in the future by direct activity and/or best practice.
- Athletics - Numerous older computers and other fixed assets beyond their useful life were stored with no plan for disposal. Athletics management will transfer all unused equipment to be sold through Surplus Property. A process has been established with the Office of Budget and Financial Planning to recover revenue generated from sales of NCAA funded student-athlete computers through a specific surplus fund created for this purpose.
- Graduate Education – Internal Audit noted that documenting, monitoring, and retaining funding exception requests will help the Graduate School and university departments make effective funding decisions regarding the use of tuition remission and sponsored funding. Enhanced monitoring of specific Banner reports will help ensure that more tuition remission funding is available for graduate assistantships without alternate funding sources, and assist the Graduate School in identifying and evaluating restriction exceptions for students on assistantships where a portion is paid from sponsored research. Thus, ensuring tuition remission expenditures for voluntary cost sharing are fully captured and complete in external research expenditure reports. Additionally, it was also noted that timely completion of proper reconciliations and deposit processes will help ensure all application fees are remitted by third-party vendors.
- Records Management – A benchmark was performed to compare Virginia Tech's Records Management Services to those of four peer universities. One university, with a similar records management program structure to Virginia Tech utilized a third-party vendor to perform cost-effective onsite destruction of records (shredding of documents). With effective contract management and proper oversight and accountability, outsourcing of such services could be a more efficient and economical means of record destruction.
- University Scholarships and Financial Aid – Internal Audit noted that full utilization of the scholarships funds available will help to achieve the long term strategic plans and goals of the university by attracting and enrolling a diverse qualified student body. Additionally, full utilization of Federal Work Study funds would ensure that federal funding levels for the program remain the same for the upcoming aid year, ultimately benefitting the student.
- Compliance Reviews – Internal Audit issued recommendations related to improving the accuracy of leave and overtime compensation calculations that had resulted in overcompensating employees in several compliance reviews.



## Recurring Audit Issues

The same or similar issues noted below were identified in multiple audit reports issued in fiscal year 2012-13. The data in Exhibit 6 will be shared with managers 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 6**  
**Recurring Audit Recommendations**

Recommendation	Occurrences	Audits
Documentation and Communication of Policies and Procedures	11	Athletics: NCAA Compliance
		FWC
		Graduate Education
		Human Resources
		IT: Disaster Recovery
		IT: Outsourced Systems
		Psychology
		Records Management Services
		USFA
		VCE
		VTTI
Funds Handling	7	APSC
		COE
		CLAHS
		VMRCVM
		Graduate Education
		VCE
		VTTI
Emergency and Disaster Preparedness	5	CLAHS
		Graduate Education
		IT: Disaster Recovery (2)
		VTTI
Physical, Environmental, and Data Security	5	COE
		CLAHS
		Records Management Services (2)
		VMRCVM
Personnel Activity Reports	4	APSC
		FWC
		International Affairs
		VTTI
Scholarship and Federal Fund Utilization	4	Graduate Education (2)
		USFA (2)
Cost Transfers	3	FWC
		International Affairs
		VTTI
Lab Training and Safety	3	APSC
		FWC
		VTTI



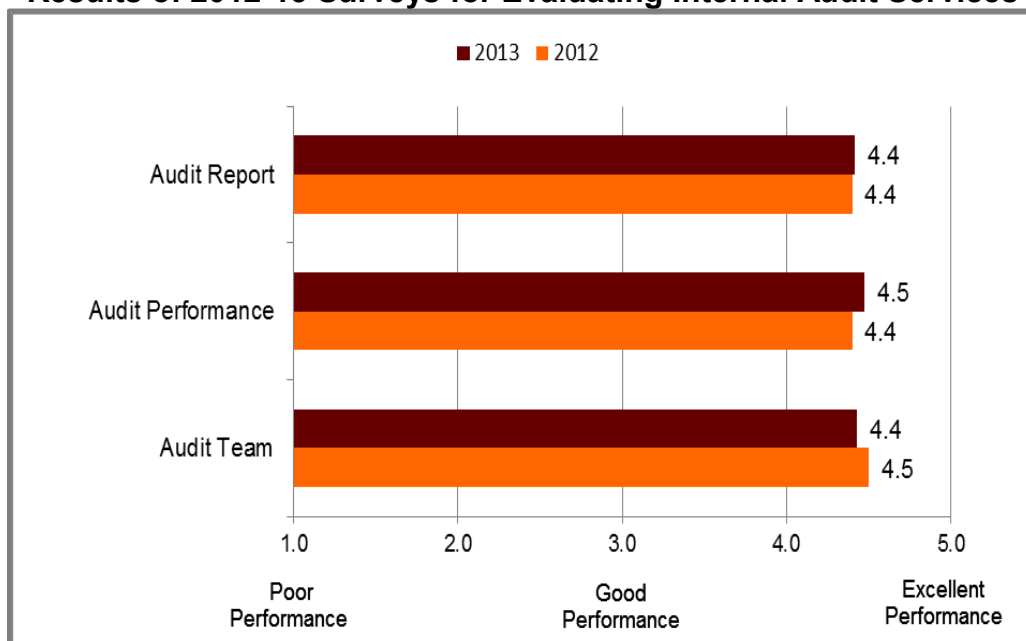
Recommendation	Occurrences	Audits
University Compliance Areas: Employee Compensation and Leave Reporting, Fiscal Responsibility, and Vehicle Management	4	Athletics Department
		COE
		CLAHS
		VMRCVM

## Results of Surveys for Evaluating Internal Audit Services

Each audit and compliance review client department head is e-mailed a link to an online survey requesting their assistance in evaluating the quality of audit services provided by 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:

<u>Audit Team</u>	Demonstrated technical proficiency, approached audit with objective and professional manner, and conclusions and opinions were logical;
<u>Audit Report</u>	Written clearly and contained adequate explanations for the observations, and recommendations improved or added value to the department's operation;
<u>Audit Performance</u>	Discussed the preliminary audit objectives, scope, and timing of the 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.

**Exhibit 7**  
**Results of 2012-13 Surveys for Evaluating Internal Audit Services**





Overall customer ratings were very favorable as overall results fell between excellent and good performance. Attaining a cumulative average score of 4.4 on a 5-point scale exceeded Internal Audit's goal of a 4.0 rating on survey feedback. Comments provided by clients showed appreciation of the audit process, the communication during the audit, or the professionalism, competence, accommodation, flexibility, helpfulness, and knowledge shown by the audit team. Survey respondents recommended improvements in timing of audit projects, and enhancing the familiarization with client backgrounds and business processes. Another respondent noted that the audit process resulted in a greater recognition of the need for consistency and communication amongst university organizations.

## **Fraud Waste & Abuse**

Internal Audit conducts reviews of all state hotline and internal complaints alleging fraud, waste, and abuse. During fiscal year 2012-13, Internal Audit received 26 cases, nine state hotline and 17 internal complaints. Seventeen cases from fiscal year 2012-13 were closed, along with 23 cases from fiscal years 2010-11 and 2011-12. For the 40 cases completed, 3 of 22 (14%) hotline cases were substantiated and 6 of 18 (33%) internally reported cases were substantiated. While approximately 56 percent of internally reported fraud, waste, and abuse allegations have historically been substantiated, only 26 percent of state hotline cases have historically been substantiated for a combined average of 40 percent since 2003-04.

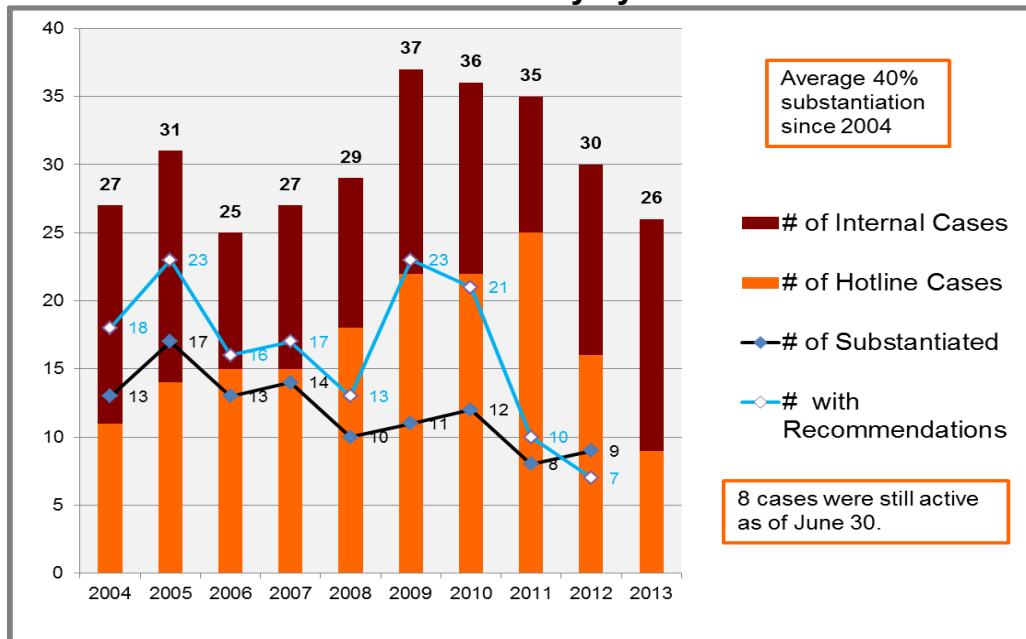
Internal Audit makes recommendations of improvements related to business practices, communication, and management that improve the overall operating environment of Virginia Tech. Historically for the past 10 years, Internal Audit made recommendations in 91 percent of substantiated cases. In cases where there is insufficient evidence for fraud, waste, and abuse, Internal Audit still made recommendations in 28 percent of cases. Overall, on average, Internal Audit made recommendations in 51 percent of cases.

While the fraud, waste, and abuse caseload increased over the first half of the past ten-year span, attributable most likely to the recessionary effects, the last five years have seen a downward trend in quantity. The number of reported cases is now consistent with levels last experienced in fiscal year 2006-07. Since fiscal year 2003-04, over 75 percent of the allegations investigated by Internal Audit fall within five general categories: leave or time abuse, abuse of authority, improper use of university resources, conflict of interest, or theft or embezzlement.

Exhibit 8 displays the number of fraud, waste, and abuse reviews performed for hotline and internal complaints for fiscal years 2003-04 through 2012-13, the number of substantiated cases, and the number of cases with recommendations for management.



### Exhibit 8 Fraud, Waste, and Abuse Case Volume Summary by Fiscal Year



### Staffing / Resources

Internal Audit entered fiscal year 2012-13 staffed with a Director, Associate Director, five auditors, two Graduate Assistants, and a part-time wage Senior Fraud Specialist. During the year, an Assistant Director, Staff IT Auditor, Staff Auditor, and Coordinator for Administrative Operations were hired. A former Associate Director of Internal Audit was hired as a part-time Senior Fraud Specialist on a month-to-month basis to help with the fraud caseload. A Senior Auditor transitioned from the University Audit Team to the IT Audit Team. At fiscal-year end, searches were underway for a Staff Auditor and an Audit Manager due to recent vacancies.

David W. Crotts, Senior Auditor, sat for and passed the Certified Information Systems Auditor (CISA) exam, officially receiving certification in February 2013. David was also nominated for the Institute of Internal Auditor's Top 20 Auditors under the age of 30, one of approximately 300 nominees.

Aparna Yellapantula, Staff Auditor, accepted a temporary, four-month consultative assignment within the Office of Enrollment and Degree Management. Aparna was specifically requested for the position during a leadership transition due to her expertise in assessing the overall control environment in University Scholarships and Financial Aid. During her assignment, she reported directly to the Vice Provost for Enrollment and Degree Management.



In conjunction with a project conducted under presidential work papers, Internal Audit retained the services of an outsourced audit firm. The expertise of the outsourced provider enhanced efficiencies and provided significant proficiency to a subject requiring industry-specific knowledge. This cross-functional audit approach was beneficial in its end result, also presenting a developmental opportunity for Internal Audit staff members who coordinated the assignment.

Internal Audit facilitated the physical transition of its office space from the former location in Southgate Center to a suite in the newly constructed North End Center. This process involved numerous hours devoted to assessment and consultation with building officials, office design, furnishing selection, logistical preparation and communication, and final move-in coordination. The new office provides a pleasant, safe, and centrally located work environment.

Internal Audit staff has approximately 150 years of combined professional experience in accounting, auditing, and IT and over 65 years of service to Virginia Tech. Our staff offers an extensive background with expertise in such functional areas as IT; fraud and forensic; 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 Internal Audit staff.

**Exhibit 9**  
**Certification and Advanced Degrees held by Internal Audit**

<b>Certification and Advanced Degrees</b>	
<b>Professional Certifications</b>	
4	Certified Public Accountants (CPA)
4	Certified Fraud Examiners (CFE)
2	Certified Information Systems Auditor (CISA)
1	Certified Internal Auditor (CIA)
1	Certified Forensics Analyst (GCFA)
1	Certified Research Administrator (CRA)
<b>Advanced Degrees</b>	
2	Master of Business Administration (MBA)
1	Master of Education (MEd)

To further develop the audit staff's professional skills, Exhibit 10 illustrates the types of continuing professional education (CPEs) that staff participated in during fiscal year 2012-13. Internal Audit ensures each staff member annually receives 40 hours of CPEs to meet professional certification requirements. On average this fiscal year, staff members completed 53 hours of CPEs.



**Exhibit 10**  
**Fiscal Year 2012-13 Professional Development**

Type of Training	Number of CPEs
Fraud	209
Communication	126
Higher Education	80
Auditing	65
Specialized Applications	52
Management	44
Information Technology	36
Ethics	9
Personal Development	9
Specialized Knowledge	8
Research	6

Exhibit 11 illustrates the allocation of effort by position. The higher administrative percentage for management is due to time spent managing the office, personnel, and constituent relations. The IT audit staff has a higher administrative percentage due to computer and network support, office relocation, and ongoing administrative duties performed by the newly hired Staff IT Auditor who continued to serve as the Administrative Coordinator during the position's vacancy. The Fraud Specialists are employees without benefits, hired specifically to focus on investigative matters.

**Exhibit 11**  
**Allocation of Effort by Position**

	Number of Audit Professionals	Direct Audit	Audit Support	Administrative, Training, Computer/Network Support	Compensated Absences
Management	3	39%	21%	29%	11%
IT Audit Staff	2	49%	9%	28%	13%
Operational Audit Staff	6	77%	3%	7%	13%
Fraud Specialists	2	91%	1%	4%	4%
Blended Average	13	63%	9%	16%	12%

Exhibit 12 compares Internal Audit's expenditures from fiscal year 2011-12 with expenditures for fiscal year 2012-13. The expenditures for salaries and benefits increased due to the addition of four positions (Assistant Director, a part-time Senior Fraud Specialist, a second Graduate Assistant, and a wage Undergraduate Assistant). Equipment expenses in fiscal year 2012-13 were one-time items related to audio/visual equipment for the new North End Center office space. Operating expenses increased due in large part to new purchases related to the North End Center transition. The personnel



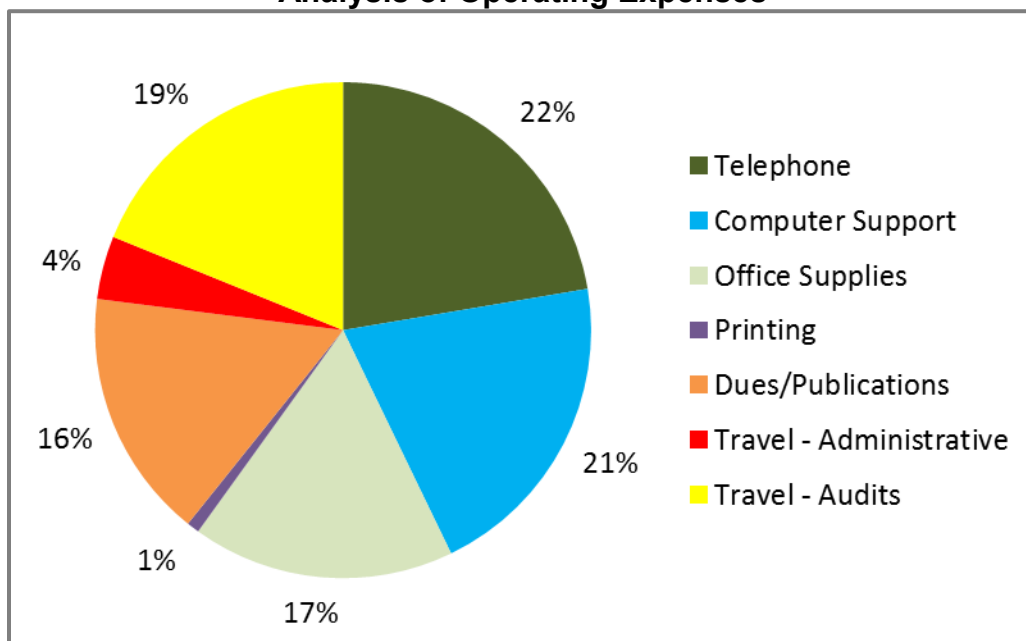
expenses in both years were attributable to recruitment and relocation costs. Training costs were considerably higher in fiscal year 2012-13 due to deferred expenses from the prior year being realized. This increase is directly attributable to a departmental goal to provide staff-wide professional education, and training to the four newly hired employees. Audit software expenses in fiscal year 2010-11 were slightly higher as license renewal fees for audit software increased.

**Exhibit 12  
Analysis of Expenditures**

	<b>FY 2011-2012</b>	<b>FY 2012-13</b>
Salaries and Benefits	\$987,328.64	\$1,010,928.20
Equipment	1,399.00	12,258.00
Operating Expenses	20,605.56	39,258.18
Personnel Expenses	5,000.00	1,846.27
Training	22,427.76	42,607.53
Audit Software	11,740.00	12,919.95
Outsourced Audit Services	-	72,310.69
<b>Total</b>	<b>\$1,048,500.96</b>	<b>\$1,192,128.82</b>

Exhibit 13 shows an analysis of operating expenses. Over 60 percent of operating expenses resulted from basic costs to support the department including telephone, computer support, office supplies, and printing. Travel expenses for off-site audits will remain an ongoing cost as audit effort will continue to be dedicated to activity outside of Blacksburg.

**Exhibit 13  
Analysis of Operating Expenses**







# Internal Audit

Annual Update

September 9, 2013





# 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 findings and responds by developing action plans to address concerns





# Exh. 1: FY 2012-13 Completion of Audit Plan

<b>Audits</b>	
Total # of <b>Audits</b> Planned	28
Total # of Supplemental Audits	1
Total # of Carry Forwards	1
Total # of Planned <b>Audits</b> Canceled and/or Deferred	4
Total <b>Audits</b> in Plan as Amended	26
Total <b>Audits</b> Completed	25
<b>Audits</b> - Percentage Complete	96%

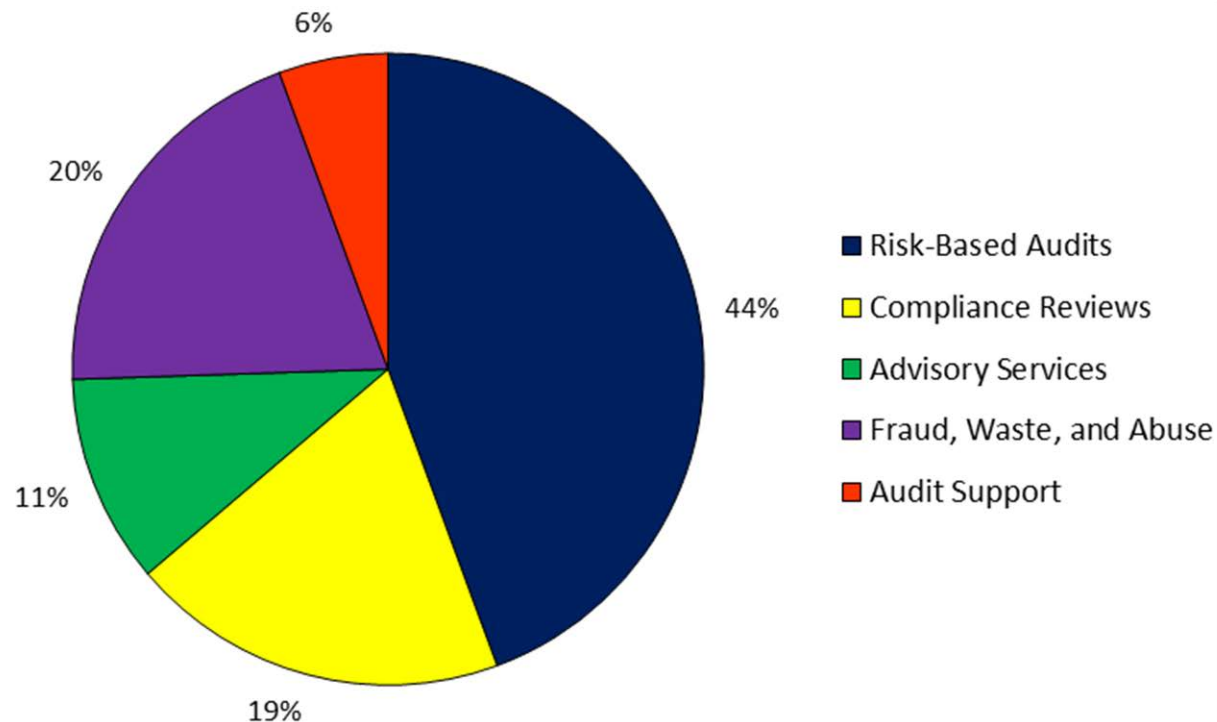
*Note: Includes Compliance and Advisory Reviews*





# Exh. 2: Distribution of Direct Audit Hours

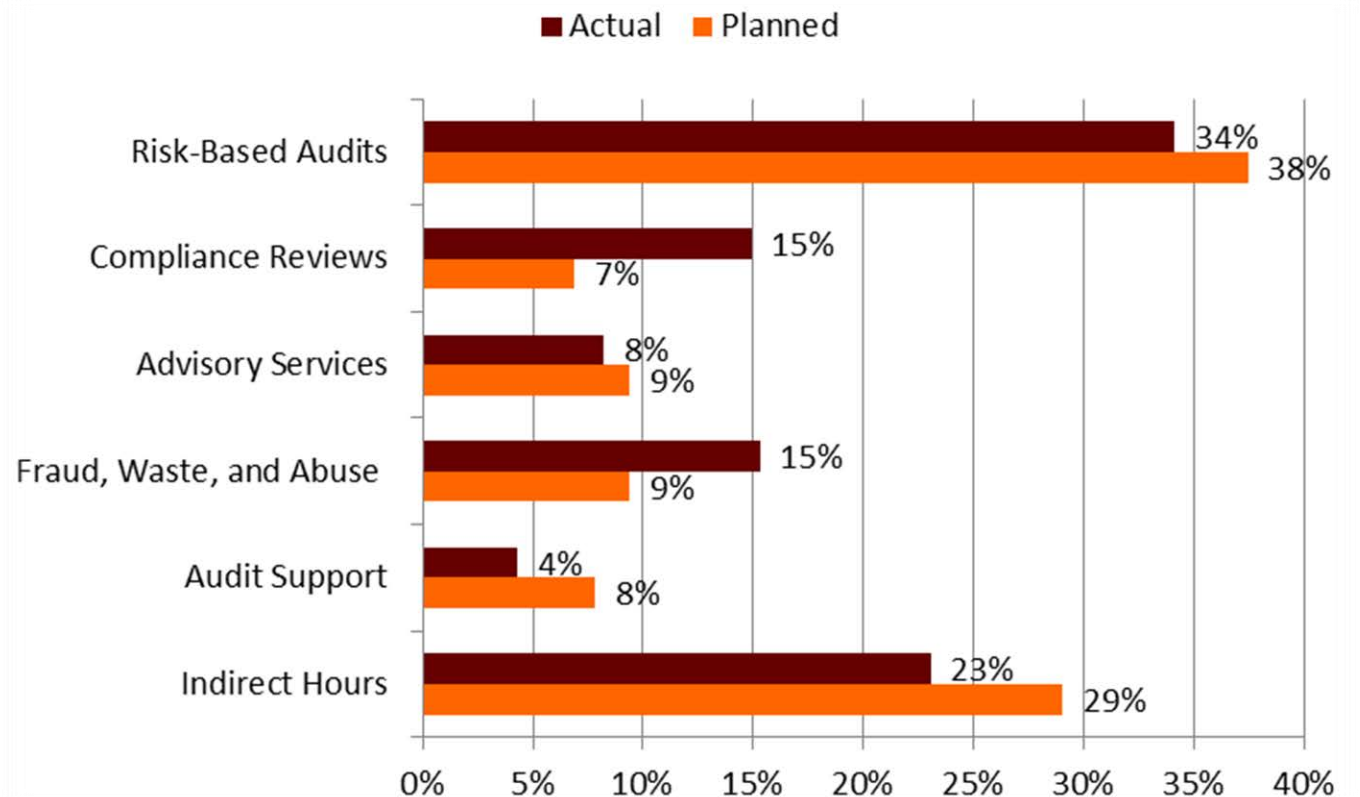
(Excludes Indirect Hours for Administration, Training, Leave, and Computer Support)







# Exh. 3: FY 2013 Actual vs. Planned Hours







# 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





# Management Corrective Actions (MCAs)

- The Finance and Audit Committee receives the higher priority recommendations and associated MCAs
- Audit and management closely monitor all outstanding recommendations





## Exh. 5: Inventory of MCAs

Beginning # of MCAs	35
MCAs added	92
MCAs closed	<u>77</u>
Current open inventory of MCAs	50





# Recommendations for Containing Costs

- **Advisory Project: Contract Review** – Extensive work related to a contract review under Attorney Client Privilege; identified that a vendor erroneously collected from \$9–20 million in excess of the amount allowed per contract terms. An external expert consultant validated our analysis of the amount that the vendor retained in excess of the amount allowed per the contract and renewal letter terms. This matter is in the midst of ongoing criminal and civil litigation.





# Recommendations for Containing Costs

- **Construction Contract Review** – Internal Audit discovered areas Virginia Tech could potentially recover costs of approximately \$821,000. Also identified instances in which university management could contain costs in the future by direct activity and/or best practice.





# Recommendations for Containing Costs

- **Athletics** – Fixed assets disposal
- **Graduate Education** – Tuition remission
- **Records Management** – Third-party alternatives
- **University Scholarships and Financial Aid** – Scholarship utilization





# Recommendations for Containing Costs

- **Compliance Reviews** – Internal Audit issued recommendations related to improving the accuracy of leave and overtime compensation calculations that had resulted in overcompensating employees in several compliance reviews.





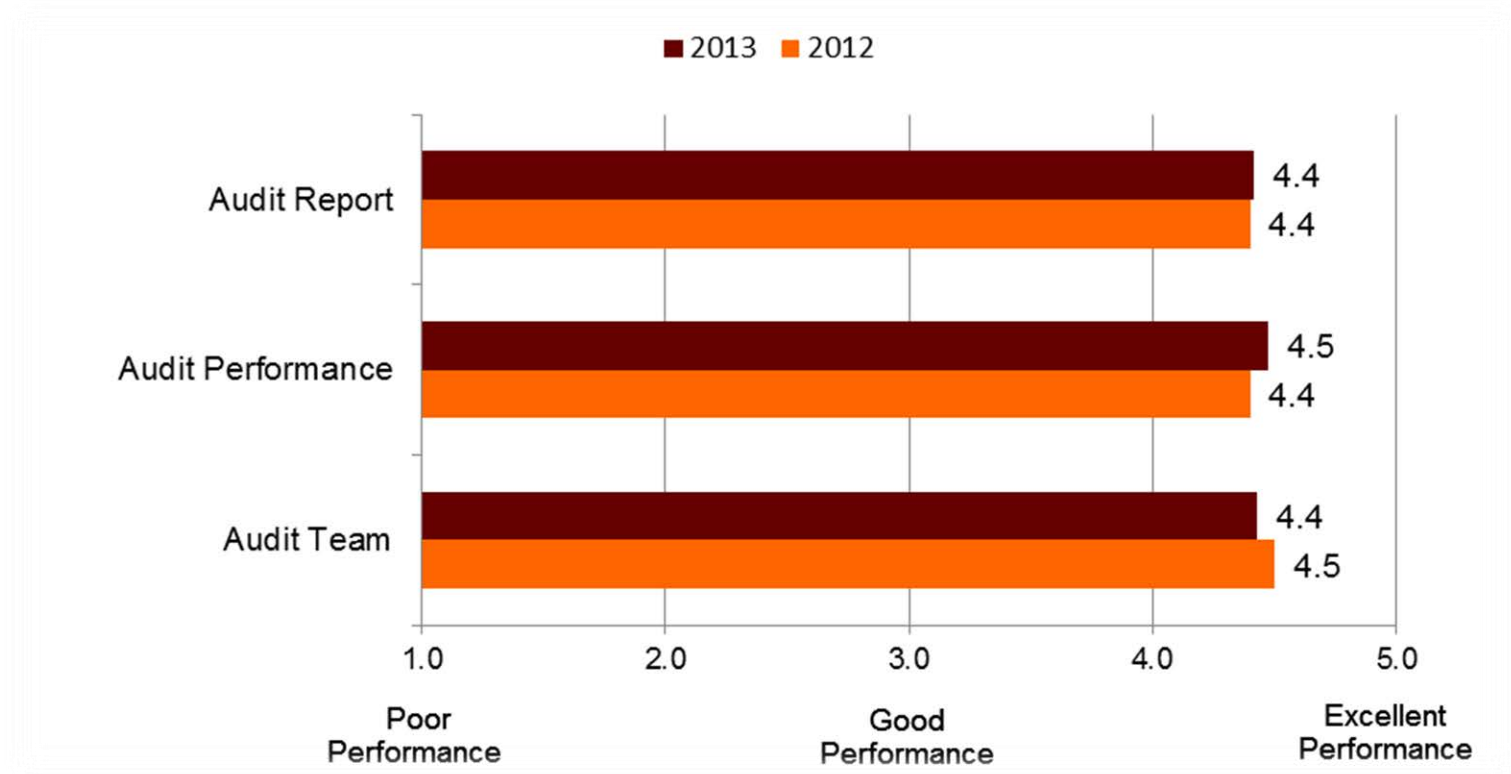
# Exh. 6: Recurring Audit Issues

Recommendation	Occurrences
Documentation and Communication of Policies and Procedures	11
Funds Handling	7
Emergency and Disaster Preparedness	5
Physical, Environmental, and Data Security	5
Personnel Activity Reports	4
Scholarship and Federal Fund Utilization	4
Cost Transfers	3
Lab Training and Safety	3
University Compliance Areas	4





# Exh. 7: Survey Results







# Survey Comments

- 9 comments from respondents
  - Overall – Appreciated the audit process, the communication during the audit, or the professionalism, competence, accommodation, flexibility, helpfulness, and knowledge shown by the audit team.
  - 2 – Recommended improvements
    - Timing of audit projects
    - Enhancing the familiarization with client backgrounds and business processes





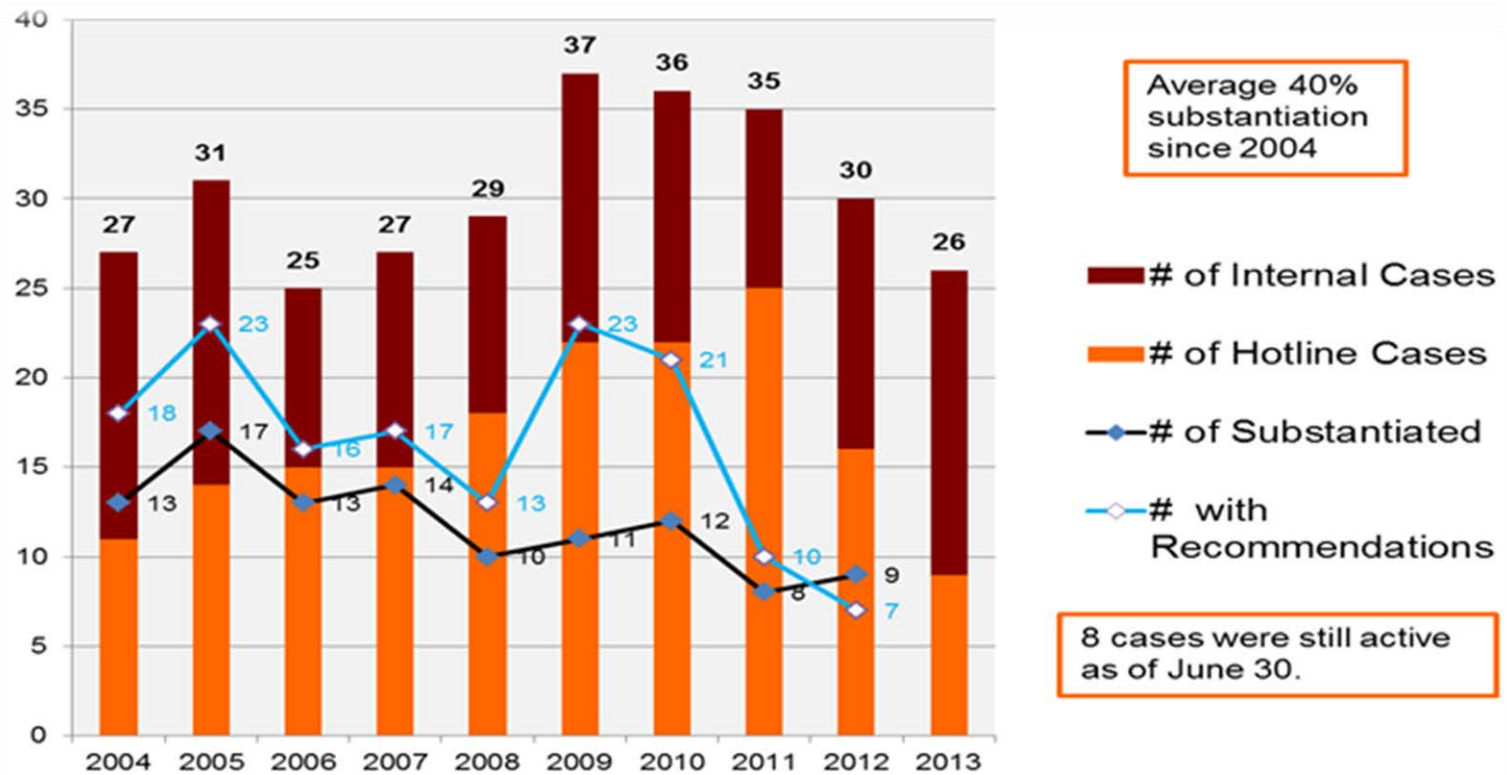
# Fraud, Waste, and Abuse (FWA)

- Received 26 cases in FY 2012-13
- Closed 17 from FY 2012-13
- Closed 23 from FY 2010-11 and FY 2011-12
- For the 40 completed:
  - 3 of 22 (14%) of hotline cases were substantiated
  - 6 of 18 (33%) of internally reported cases were substantiated





# Exh. 8: FWA Case Volume Summary







# Fraud, Waste, and Abuse (FWA)

- Over 75% of allegations fall within five general categories:
  - Leave or time abuse
  - Abuse of authority
  - Improper use of university resources
  - Conflict of interest
  - Theft or embezzlement





# Internal Audit Staff Experience

- Combined 150 years of professional experience in accounting, auditing, and information technology
- Combined 65 years of service to Virginia Tech





# Internal Audit Staff Achievements

- **David W. Crotts**, Senior Auditor, became CISA certified in February 2013. David was also nominated for the Institute of Internal Auditor's Top 20 Auditors under the age of 30, one of approximately 300 nominees.
- **Aparna Yellapantula**, Staff Auditor, accepted a temporary assignment within the Office of Enrollment and Degree Management. Aparna was specifically requested due to her expertise in control environment assessment.





## Exh. 9: Staff Education

<b>Certification and Advanced Degrees</b>	
<b>Professional Certifications</b>	
4	Certified Public Accountants (CPA)
4	Certified Fraud Examiners (CFE)
2	Certified Information Systems Auditor (CISA)
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<b>Advanced Degrees</b>	
2	Master of Business Administration (MBA)
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# Exh. 10: Staff Professional Development

Types of Training	Number of CPEs
Fraud	209
Communication	126
Higher Education	80
Auditing	65
Specialized Applications	52
Management	44
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Ethics	9
Personal Development	9
Specialized Knowledge	8
Research	6





# Exh. 11: Allocation of Effort by Position

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Blended Average	13	63%	9%	16%	12%





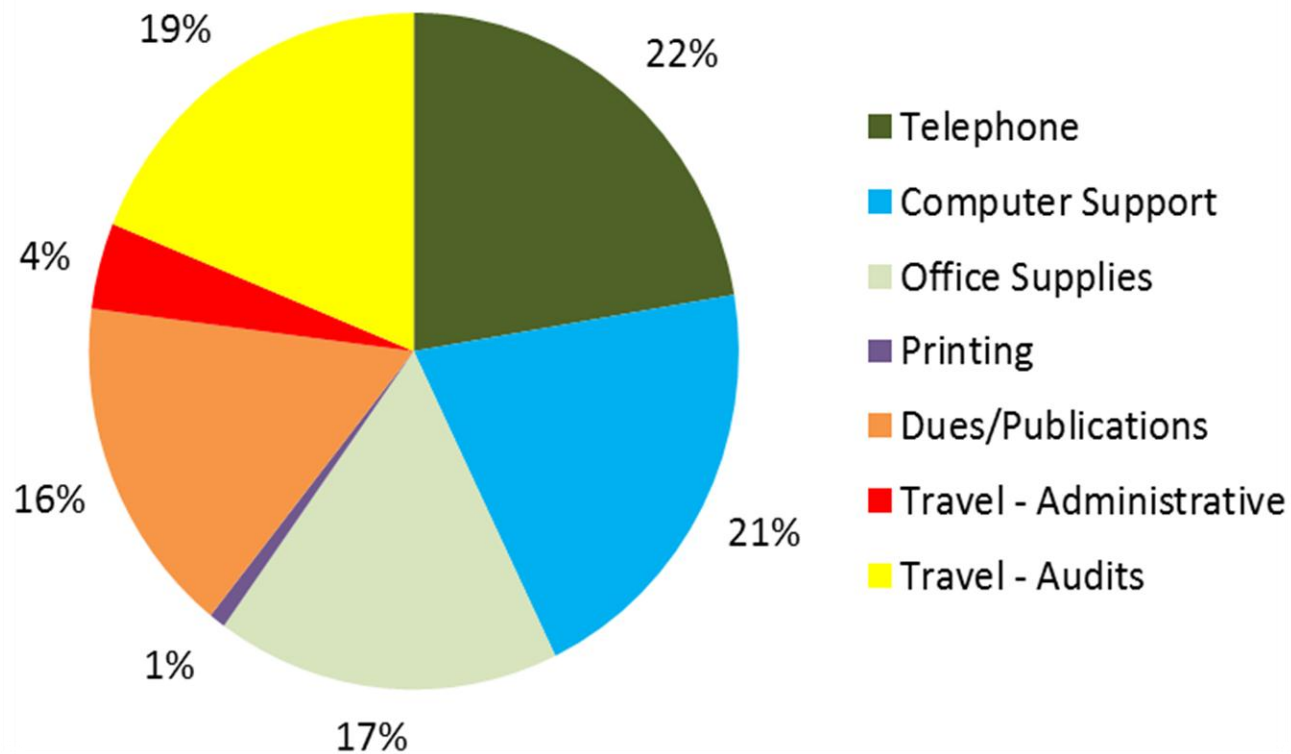
## Exh. 12: Analysis of Expenditures

	FY 2011-2012	FY 2012-2013
Salaries and Benefits	\$ 987,328.64	\$1,010,928.20
Equipment	\$ 1,399.00	\$ 12,258.00
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Personnel Expenses	\$ 5,000.00	\$ 1,846.27
Training	\$ 22,427.76	\$ 42,607.53
Audit Software	\$ 11,740.00	\$ 12,919.95
Outsourced Audit Services	\$ -	\$ 72,310.69
<b>Total</b>	<b>\$1,048,500.96</b>	<b>\$1,192,128.82</b>





# Exh. 13: Operating Expenses





## **Internal Audit Proposed Audit Plan for Fiscal Year 2013-14**

### **FINANCE AND AUDIT COMMITTEE**

**July 30, 2013**

Internal Audit presents the fiscal year 2013-14 audit plan to the Finance and Audit Committee for approval. Internal Audit is not necessarily expecting to be able to fully complete its ambitious plan for the year, but continually strives for productivity gains.

Internal Audit management conducted its annual risk assessment to identify the entities that should receive audit attention in fiscal year 2013-14. Senior management had the opportunity to provide input on areas for consideration in the preparation of the audit plan. Additionally, a five-year core audit plan was developed to ensure Internal Audit provides adequate coverage related to the university's critical areas. See the Proposed Five-Year Core Audit Plan on Schedule 4. The Core Audit Plan includes several multi-year audits that will allow for annual reviews of selected components of the entities with high external compliance risk and complex operations. These entities are University Scholarships and Financial Aid, Research, Human Resources, and Intercollegiate Athletics.

Internal Audit also created a university-wide information technology (IT) risk assessment and audit plan document mapped to the ISO 27002 standard, an information security standard published by the International Organization for Standardization (ISO) that is considered to be a best practice for developing and maintaining enterprise-wide IT security. Internal Audit consulted IT senior management during the development of the assessment and plan document to ensure that audit coverage was maximized and properly targeted. See the Proposed Five-Year Core Audit Plan on Schedule 5. The Core Information Technology Plan includes audits that are topical in nature and each audit will include coverage of the four high-level risk domains that were identified during the risk assessment. These domains are: student systems, finance and administrative systems, human resource systems, and research systems.

Given existing resources, an estimated 11,650 direct hours will be devoted to audits, planning and reviews (Schedule 1). Based on the risk assessment and feedback from management, the proposed audit plan (Schedule 2) includes a balance of high, medium, and low risk entities along with advisory services and compliance reviews (Schedule 3). A description of the preliminary audit scope for projects on the fiscal year 2013-14 plan is detailed in Schedule 6. Internal Audit's goal is to complete 85 percent of the audit plan. The proposed audit plan may be modified based on the external audit environment or changes in regulations, management, or resources.

#### **RECOMMENDATION:**

That the fiscal year 2013-14 proposed audit plan be accepted by the Finance and Audit Committee.



**AUDIT PERSONNEL AVAILABLE HOURS FOR FISCAL YEAR 2013-14**

<b>Sources of Effort Available:</b>	<b>No. of Employees</b>	<b>Annual Hours</b>	<b>Total Hours</b>	<b>Percent Of Effort</b>
Audit Staff *	7	2,080	13,860	86.63%
Wage Auditor	1	1,500	1,500	9.37%
Graduate Assistant	1	640	640	4.00%
<b>Total Available - Fully Staffed</b>	<b>9</b>		<b>16,000</b>	<b>100.00%</b>

\* Adjusted for Anticipated Vacancies due to Staff Turnover (2 auditors for 2 months)

**Planned Application of Effort:**

Performing Scheduled Audits	6,000	37.50%
Compliance Reviews	1,100	6.88%
Advisory Services / Management Requests	2,000	12.50%
Reviews of Alleged Fraud, Waste, and Abuse	1,500	9.37%
Annual Audit Activities (Follow-up, Inventory)	750	4.69%
Continuous Monitoring	300	1.87%
<b>Total Direct Hours - Audit, Planning, and Review</b>	<b>11,650</b>	<b>72.81%</b>
Vacations, Holidays, and Sick Leave	2,125	13.28%
Training and Professional Development	550	3.44%
Administrative Tasks, Network Maintenance	1,675	10.47%
<b>Total Indirect Hours</b>	<b>4,350</b>	<b>27.19%</b>
<b>Grand Total Hours of Effort</b>	<b>16,000</b>	<b>100.00%</b>



**AUDIT PLAN FOR FISCAL YEAR 2013-14**  
**RISK BASED AUDITS**

<b>ENTITIES</b>	<b>LAST AUDIT</b>	<b>RISK</b>	<b>HOURS</b>
Aerospace and Ocean Engineering	2009	High	350
Athletics – Operations *	2010	High	300
Research: BioSafety *	N/A	High	250
Computer Science	2009	High	350
Conflict of Interests / Conflict of Commitment	2010	High	300
Continuing and Professional Education	2008	High	300
Human Resources: Hiring and Termination *	2009	High	250
IT: Banner Applications	2009	High	300
IT: PCI Compliance	2009	High	250
IT: Windows Server Security	various	High	400
Purchasing and Accounts Payable	2008	High	300
Student Residency Status	N/A	High	300
University Scholarships and Financial Aid *	2010	High	300
Alson H. Smith Jr. and Middleburg ARECs	2000	Medium	300
Facilities Work Order System	N/A	Medium	200
Fleet and Parking Services	2007	Medium	300
Housing and Residence Life	2007	Medium	300
Human Development	2008	Medium	250
IT: Wireless Security	2008	Medium	250
University Planning (Real Estate / Architecture)	2005	Medium	250
Institute for Society, Culture, and Environment	N/A	Low	200
<b>Total Hours Needed</b>			<b><u>6,000</u></b>
<b>Total Audits Planned</b>			<b>21</b>

\* Entity receives an annual audit on different components of their operation.



**FIVE-YEAR COMPLIANCE REVIEW PLAN  
FOR FISCAL YEARS 2013-14 THROUGH FISCAL YEAR 2017-18**

<b>Audit Entity (Senior Management Areas)</b>	<b>Last Review</b>	<b>Hours of Effort</b>				
		<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>
Athletics	2013					250
College of Agriculture and Life Sciences	2009	300				
College of Architecture and Urban Studies	2012				250	
College of Business	2010		200			
College of Engineering	2013					300
College of Liberal Arts and Human Sciences	2013					300
College of Natural Resources and Environment	2009	200				
College of Science	2010		250			
College of Veterinary Medicine	2013					250
Office of the President	2011				150	
Office of the Provost	2012				200	
University Libraries	2011			200		
Vice President and Dean for Graduate Education	2008	200				
Vice President and Dean for Undergraduate Education	2011			250		
Vice President for National Capital Region	2011			150		
Vice President for Administration	2010		300			
Vice President for Alumni Relations	2010		150			
Vice President for Development and University Relations	2011			250		
Vice President for Diversity and Inclusion	2009	150				
Vice President for Finance	2012				250	
Vice President for Information Technology	2009		200			
Vice President for Outreach and International Affairs	2011			300		
Vice President for Research	2012				300	
Vice President for Student Affairs	2009	250				
<b>Total Budgeted Hours</b>		<b>1100</b>	<b>1100</b>	<b>1150</b>	<b>1150</b>	<b>1100</b>
<b>Number of Reviews</b>		<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>4</b>

NOTE: Compliance reviews include all departments reporting to the respective senior management area.



**PROPOSED FIVE-YEAR CORE AUDIT PLAN  
FOR FISCAL YEAR 2013-14 THROUGH FISCAL YEAR 2017-18**

Area	2014	2015	2016	2017	2018
<b>Enrollment Services</b>	Financial Aid – Inst. and Stud. Eligibility, Title IV Return, Quality Assur.	Financial Aid – Federal Prog., Dept. Schol., Fin. Reporting	Financial Aid – State and Inst. Prog., Overaward	Financial Aid – Inst. and Stud. Eligibility, Title IV Return, Quality Assur.	Financial Aid – Federal Prog., Dept. Schol., Fin. Reporting
	Student Residency Status	Departmental Scholarships	Admissions	Registrar	Graduate Education
<b>Research</b>	Inst. for Society, Culture, and Environment	Fralin Life Science Institute	ICTAS	VTCRI	VBI
	Conflict of Interests / Conflict of Commitment	Export and Secure Research Compliance	ICAM	Animal Care and Resources	OSP Project Set-Up, Billing, A/R, Close-Out
	BioSafety	Cost Sharing	Effort Reporting	Cost Transfers	Lab Safety
<b>Human Resources / Payroll</b>	Hiring and Termination	Leave Accounting	Benefits	Payroll Transactions	Compensation and Classification
<b>Auxiliary Enterprises/ Student Support</b>	Housing and Residence Life	Health and Counseling Centers	The Inn at Virginia Tech	Dining	Recreational Sports
	Continuing and Professional Education	VT Electric Services	Telecommunications (CNS)	Student Centers and Activities	Licensing and Trademarks
	Athletics – Operations	NCAA – Financial Aid	NCAA – Eligibility	NCAA – Recruiting	Athletics – Compliance
<b>Facilities Management</b>	University Planning (Real Estate / Architect.)	EHSS	Police	Construction Management	Records Management
	Facilities Work Order System	Facilities Operations	Printing and Mail Services	Emergency Preparedness	Building Official
	Fleet and Parking Services	Renovations			
<b>Procurement and Payment / Financial</b>	Purchasing and Accounts Payable	Controller's Office – General Accounting	Controller's Office – Fixed Assets	Controller's Office – Risk Management	Bursar
<b>Academic Units</b>	Computer Science	Materials Science and Engineering	Crop and Soil Environmental Sciences	Engineering Science and Mechanics	Sustainable Biomaterials
	Human Development	Civil and Environmental Engineering	Electrical and Computer Engineering	Geosciences	VT-Wake Forest Schl of Biomed. Eng. & Science
	Aerospace and Ocean Engineering	School of Education	Physics	Biochemistry	Entomology
		College of Veterinary Medicine	Building Const. / Myers-Lawson Schl of Const.	Biological Systems Engineering	School of Public and International Affairs
<b>Off-Campus Locations</b>	Alson H. Smith Jr. and Middleburg ARECs	VCE – Southeast District	Reynolds Homestead	VCE – Northern District	Eastern Shore / Virginia Seafood ARECs



**PROPOSED FIVE-YEAR CORE INFORMATION TECHNOLOGY AUDIT PLAN  
FOR FISCAL YEAR 2013-14 THROUGH FISCAL YEAR 2017-18**

Year	Audit	ISO 27002 Coverage Areas											
		Risk Assessment	Security Policy	IT Security Organization	Asset Management	Human Resources	Physical and Environmental Security	Communications and Operations Management	Access Control	Information Systems Acquisition, Development, and Maintenance	Business Continuity	IT Security Incident Management	Compliance
2014	Banner Applications		✓				✓	✓					
2014	Windows Server Security							✓					
2014	PCI Compliance								✓				
2014	Wireless Security						✓	✓	✓				
2015	IT Security Incident Response			✓	✓		✓	✓	✓	✓			
2015	Network (RLAN, Routers & Firewalls)						✓	✓	✓				
2015	Project Management						✓		✓				
2015	Employee Access Life Cycle			✓	✓								
2016	FERPA/HIPAA			✓			✓					✓	
2016	Oracle Database			✓					✓				
2016	Printer Security						✓	✓					
2016	UNIX Server Security							✓					
2017	Banner Applications		✓				✓	✓					
2017	COOP Review	✓		✓	✓		✓				✓		
2017	General Controls Review			✓		✓	✓					✓	
2017	Surplus Property						✓						
2018	Disaster Recovery	✓		✓	✓		✓				✓		
2018	External Interfaces & Wire Transfers								✓				
2018	Mobile Device Security			✓			✓	✓					
2018	Outsourced Systems						✓		✓				

Note: Audits will include coverage of all critical or sensitive risk domains (Student, Finance, Human Resources, and Research) of the university.

IT Audits that will include decentralized scope coverage across campus



## **PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2013-14 AUDIT PLAN**

The description of the preliminary audit scope for projects on the fiscal year 2013-14 audit plan is detailed below. However, the preliminary scope is subject to change as the audit objectives are based on identified business goals and objectives, potential risks, and processes designed to mitigate those risks during the audit planning process. The annual expenditures and revenues referenced below reflect fiscal year 2011-12 data.

### ***Academic Reviews***

Periodic Reviews of Colleges, Schools, and Departments: The objective of these audits is to assure sound business practices are in place and processes comply with university policies. These reviews will focus on the unit's business objectives and will evaluate controls and business risks. Tests of records may include core business functions such as contract and grant administration, service centers, health and safety, facility security, conflict of interest, and systems and network security as applicable, to determine if processes effectively manage risks, safeguard assets, and comply with policies.

### ***Aerospace and Ocean Engineering***

The Department of Aerospace and Ocean Engineering offers degrees in two unique disciplines, with more than 570 undergraduate students and 125 graduate students enrolled. Total expenditures for the department were \$9 million, with sponsored research totaling \$4.7 million, representing a 31 percent increase since 2007. The department has extensive facilities including wind tunnels, water tunnels, structural test equipment, high-performance computer systems, and state-of-the-art spacecraft simulators. Aerospace and Ocean Engineering was last audited as part of a college-wide review in 2009.

### ***Computer Science***

The Department of Computer Science in the College of Engineering performs extensive research, both within computer science and between computer science and other disciplines. The department had total expenditures of \$12.3 million and sponsored research totaling \$5.1 million, representing a 151 percent increase since 2007. Computer Science recently completed a \$1 million renovation to provide an integrated space for undergraduate learning, projects, collaboration, and networking. Computer Science was last audited as part of a college-wide review in 2009.

### ***Human Development***

The Department of Human Development is committed to understanding and improving the lives of people of all ages through education, research, and outreach activities. Primary research focus includes adult development and aging, child and adolescent development, family studies, and marriage and family therapy. Total expenditures for this department within the College of Liberal Arts and Human Sciences were \$4.3 million. Human Development was last audited as part of a college-wide review in 2008.



## **PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2013-14 AUDIT PLAN**

### ***Alson H. Smith Jr. and Middleburg Agricultural Research and Extension Centers (ARECs)***

The Middleburg Agricultural Research and Extension (MARE) Center and the Alson H. Smith Jr. Center, with combined expenditures of \$2.9 million including sponsored research totaling \$1.4 million, are among Virginia Tech's 11 ARECs that are geographically disbursed throughout Virginia. The MARE center was used primarily for beef cattle research for 40 years, but was rededicated to equine research and teaching in 1992. In 2010, the MARE center launched a new undergraduate student learning experience in equine sciences that serves as the cornerstone for its teaching program. The mission of the Alson H. Smith Jr. AREC is to creatively use science and contemporary technology to solve horticultural crop production problems, develop and disseminate knowledge, train new researchers and industry leaders, and improve the quality of life of Virginia's citizens. The last audit of these activities was in 2000.

### ***Athletics – Operations***

Virginia Tech sponsors 21 varsity sports at the NCAA Division I level. The department's operating revenues were approximately \$70.7 million and expenditures were \$67 million. Internal Audit conducts a complete audit of Athletics over a four-year period. This audit will include reviews of the processes and controls related to: complimentary and voided tickets, ticket sales and service fees, and employment contract payments (coaches' bonuses). The last operational audit of Athletics was in 2010.

### ***Research: Biosafety***

Institutional Biosafety Committees (IBCs) provide institutional oversight of research involving biohazardous agents. The Virginia Tech IBC is comprised of faculty, staff, and community representatives with research responsibility. The IBC is charged with the planning and implementation of the campus Biosafety Program to ensure the health and safety of all personnel working with biohazardous agents, as well as federal compliance in many areas including infectious agents (bacteria, viruses, etc.), biologically derived toxins, and human and non-human primate blood and body fluids. The IBC drafts campus biosafety policies and procedures and reviews individual research protocols for biosafety concerns. This activity has never been audited.

### ***Conflict of Interests / Conflict of Commitment***

A conflict of interest occurs when a faculty or staff employee is in a position to advance their own interest, or that of their family or others, to the detriment of the university. A conflict of commitment arises when the external activities of a faculty or staff employee are so demanding of their time, attention, or focus that they interfere with the individual's responsibilities to the university. External activities consistent with faculty expertise and the mission of the affiliated department, however, can enhance professional development and enrich the academic experiences of students. Given these potential benefits, Virginia Tech has encouraged innovation and entrepreneurial activity in support of the broad missions of the institution. Virginia Tech's policies and procedures related to these areas of potential conflict are designed to promote and safeguard the



## **PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2013-14 AUDIT PLAN**

interests, integrity, and reputation of the university and its faculty, staff, and students. The last audit of these activities was in 2010.

### ***Continuing and Professional Education***

Continuing and Professional Education at Virginia Tech works with members of the university's teaching and research faculty as well as with academic, government, business, and community leaders to offer customized programs. Continuing and Professional Education programs are held regularly at nine locations around the Commonwealth and, in some cases, all around the world. Continuing and Professional Education had \$15.2 million in revenue representing an 84 percent increase over the previous five years. Furthermore, contract and grant activity has grown from \$80,000 to \$8 million since 2008. The last audit of this area was in 2008.

### ***Facilities Work Order System***

The system, entitled HokieServ, is used to manage approximately 30,000 work orders generated annually through Facilities Services. The system interfaces with HokieMart as a vendor to receive departmental Internal Service Requests and as a purchaser associating all transactions with the related work orders. All departmental and foundation billing is routed directly from HokieServ to the Banner general ledger and accounts receivable systems. This audit will focus on the workflow of the incorporated business processes as well as the provisioning of access and data integrity for the HokieServ system. This system has never been audited.

### ***Fleet and Parking Services***

The mission of Fleet Services, with revenues of \$2.9 million, is to provide high quality, safe, clean, and economical vehicles for Virginia Tech faculty, staff, and students to use for official university business. The mission of Parking Services is to provide safe and convenient parking areas for members of the university community and guests. The three main sources of parking revenue at Virginia Tech, totaling more than \$7.1 million, are permit fees, fine revenues, and meter revenues. These activities were last reviewed in 2007.

### ***Housing and Residence Life***

The mission of Housing and Residence Life is to provide inclusive communities that engage students in exceptional living and learning experiences within safe, clean, and well-maintained environments that foster a sense of belonging. Housing and Residence Life supports approximately 9,000 on-campus residents. Housing and Residence Life had expenditures of \$10 million. This review will include a review of liability, health and safety, and summer conferences under the purview of this unit. The last audit of this activity was in 2007.

### ***Human Resources: Hiring and Termination***

The university fulfills its land-grant mission of transforming knowledge to practice through technological leadership and by fueling economic growth and job creation locally, regionally, and across Virginia. Human Resources supports the 8,000



## **PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2013-14 AUDIT PLAN**

employees of the university at the primary and satellite campuses and research stations throughout Virginia and the world. Human Resources has developed specific processes at the employee, departmental, and university level to ensure compliance with complex state and federal requirements related to hiring and terminating employees. The last audit of these activities was in 2009.

### ***IT: Banner Applications***

The applications within Banner – Student, Finance, Human Resources, Financial Aid, and Advancement – assist Virginia Tech in recording and maintaining comprehensive data for its students, employees, alumni, and donors. This audit will focus on reviewing the effectiveness of the university's enterprise system environment and ensuring its critical information is securely accessible while safeguarding against loss, abuse, and corruption. The last audit with coverage in this area was in 2009.

### ***IT: Payment Card Industry (PCI) Compliance***

Virginia Tech departments are increasingly utilizing credit/debit cards as a method for receiving payment for goods or services provided. In order to process payment, the department must capture, transmit, and sometimes store sensitive cardholder information. The PCI's Data Security Standard (DSS) establishes a comprehensive set of requirements designed to enhance data security for payment accounts and reduce the risk of stolen cardholder information, either at rest or in transit. The risk of noncompliance with these requirements is the loss of the ability to accept credit card payments for various activities. PCI Compliance was last audited in 2009.

### ***IT: Windows Servers***

Servers are used to perform a variety of tasks, from network attached file storage or collaborative database hosting to processing email or print requests. As such, servers often present significant risks when not properly secured. A large percentage of business servers operate on the Windows platform. This audit will focus on Windows server security across the enterprise by selecting servers in various administrative, academic, and research departments. While this topic has previously been audited as part of broader reviews, there has been no dedicated audit of Windows servers.

### ***IT: Wireless Security***

Wireless networks are difficult to secure as they do not have a defined perimeter and radio signals can extend beyond the intended perimeter, thus leaking through the physical boundaries of a business. Wireless access points installed by students, employees, or the public can bypass wireless security controls with a direct connection into the university network. Additionally, artificial wireless access points can mislead students and employees into connecting through an unsanctioned device, which increases the risk of loss or theft of data. This audit will assess the security for existing wireless networks that help ensure the confidentiality, integrity, and availability of information for the university. The last audit of this activity was in 2008.



## **PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2013-14 AUDIT PLAN**

### ***Institute for Society, Culture, and Environment***

The Institute for Society, Culture and Environment (ISCE) supports targeted creative, interactive, multi- and interdisciplinary research endeavors involving the social sciences, humanities, and the arts. Research extends from public policy to personal identity and includes explorations of race, ethnicity, class, and gender. ISCE administers a Summer Scholars program in support of interdisciplinary teams to address issues of social and individual transformation, with awards ranging from \$15,000 to \$30,000, and expected to result in a viable proposal to an outside funding group. This audit will include a review of ISCE's sponsored research, the Summer Scholars program, and the financial and administrative activity of the institute. This institute has never received dedicated audit coverage.

### ***Purchasing and Accounts Payable***

The Purchasing and Accounts Payable functions are overseen by the Procurement Department and Controller's Office respectively. Although managed separately, this audit will focus on the processes to make a purchase that involves both functions as transactions flow from one to the other. The Procurement Department provides an efficient and responsive Purchasing activity to obtain high quality goods and services at reasonable costs, all in support of the university's instructional, research, and public service programs. Accounts Payable processed and disbursed payments for approximately 262,000 invoices totaling more than \$674 million. Accounts Payable also pre-audits disbursement documents in accordance with state and university policy and procedures and makes decisions regarding the payment of the invoices. The last audit of these activities was in 2008.

### ***Student Residency Status***

Eligibility for in-state tuition privileges is governed by the Code of Virginia, with provisions of this law set forth, defined, and discussed in the State Council of Higher Education for Virginia's Domicile Guidelines. Several units are responsible for applying these guidelines at Virginia Tech, including the Graduate School, the Office of the University Registrar, Undergraduate Admissions, and the Virginia Maryland Regional College of Veterinary Medicine. Consistency across these independent processes is vital to ensure external compliance and equity amongst the student body. No dedicated audit has been conducted of this activity.

### ***University Planning (Real Estate / Architecture)***

The Office of University Planning has four planning divisions, including Architecture, Sustainability, Transportation, and Real Estate. This audit will primarily focus on the divisions of Architecture and Planning. The major functions of the Architecture division include providing guidance and leadership for site development and project planning, as well as oversight for the long-range plan. The major functions of the Real Estate division include supporting the university community in the areas of property acquisitions, easements, and leases, as well as developing and maintaining facility use agreements. The last audit of these activities was in 2005.



**PRELIMINARY SCOPE DESCRIPTIONS OF FISCAL YEAR 2013-14 AUDIT PLAN*****University Scholarships and Financial Aid***

The Office of University Scholarships and Financial Aid (USFA) is part of the Enrollment Management area. USFA supports the university's student access, enrollment, and retention goals by providing the financial means to encourage economic, social, cultural, and academic diversity in the student body. USFA provided or monitored approximately \$413 million in student financial assistance in fiscal year 2011-12. A complete audit of USFA is performed over a four-year period. This audit will include institutional and student eligibility, Title IV Return, and quality assurance. The last audit of this activity was in 2012.

***Compliance Reviews***

Internal Audit will continue its program of limited scope reviews of senior management areas. These surveys review major aspects of a department's administrative processes using internal control questionnaires and limited testing that provides broad audit coverage ensuring compliance with university policies on campus.



## **Review and Acceptance of Internal Audit Reports Issued**

### **FINANCE AND AUDIT COMMITTEE**

**August 21, 2013**

#### **Background**

In concurrence with the fiscal year 2012-13 Internal Audit Plan approved by the Finance and Audit Committee at the September 10, 2012 Board of Visitors meeting, the department has completed seven risk-based audits and two compliance reviews during this reporting period. This report provides a summary of the ratings issued during the period and the rating system definitions. With the submission of these nine reports, Internal Audit has completed 96 percent of the annual audit plan. The only project remaining is a risk based audit of IT: Interfaces and Wires, which is currently underway.

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

Athletics: NCAA Compliance	Improvements are Recommended
Human Resources: Compensation and Performance Management	Improvements are Recommended
International Affairs	Improvements are Recommended
IT: Outsourced Cloud Services	Improvements are Recommended
Virginia Tech Transportation Institute	Immediate Improvements are Needed
Virginia Cooperative Extension	Significant Improvements are Needed
IT: Mobile Device Security	Improvements are Recommended
College of Engineering	Improvements are Recommended
College of Liberal Arts and Human Sciences	Significant Improvements are Needed



## **Summary of Audit Ratings**

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

### Definitions of each assessment option

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

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

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

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

### **RECOMMENDATION:**

That the internal audit reports reviewed above be accepted by the Finance and Audit Committee.



## **Federal Agency Special Purpose Audits and Reviews**

### **FINANCE AND AUDIT COMMITTEE**

**August 15, 2013**

#### **Background**

In addition to the annual audits of the university's financial statements and its Intercollegiate Athletics program performed by the Auditor of Public Accounts (APA), Virginia Tech is also subject to special purpose audits or reviews performed by other entities, such as federal agencies sponsoring grants and contracts. Due to the growth in the breadth of the research programs and the dollar volume of activities at Virginia Tech, the university is more likely to now be selected for inclusion in such audits or reviews. At the June 3, 2013 meeting, the Finance and Audit Committee received an initial report about the National Science Foundation audit. The audit is currently in progress. This report provides an update on the status of this audit.

#### **National Science Foundation Audit Update**

In the Spring of 2013 the Office of the Inspector General (OIG) for the National Science Foundation (NSF) announced it would perform "cost incurred performance audits" of eleven institutions of higher education which have received significant funding from NSF. Because Virginia Tech currently has 503 active awards totaling \$190.7 million from NSF, it was one of the universities selected for audit.

The OIG has selected Withum Smith and Brown (WSB), a public accounting firm, to perform Virginia Tech's audit. The university has designated the Assistant Vice President for Sponsored Programs Administration and the Assistant Vice President for Finance and University Controller to coordinate interactions with WSB. Since the entrance conference with WSB on April 12, 2013, the following items have occurred:

- WSB has requested and the university has provided numerous data files of transactions from the university's Finance and Human Resources systems for the entire period under audit (January 1, 2010 through December 31, 2012).
- WSB audit managers visited the campus from July 31, 2013 through August 2, 2013 to gain an understanding of the university's systems and its policies and procedures related to the internal controls over the finance and human resources transactions. The Assistant Vice President for Sponsored Programs Administration and the Assistant Vice President for Finance and University Controller led the discussions with the auditors, who seemed experienced and knowledgeable about higher education business processes.
- WSB audit managers and staff returned to campus on August 5, 2013 through August 9, 2013 to test an initial sample of transactions posted to these NSF grants to ensure they are in compliance with federal regulations and are allowable costs. The university has provided support for most of these sample



transactions and is in the process of providing support for the remaining transactions. The auditors have subsequently asked for additional support or justification for numerous transactions in the initial sample.

Based on a discussion with the WSB auditors on August 9, 2013 the audit timetable has been revised as shown below.

**Revised Audit Timetable Projection:**

- |  |                       |
|--|-----------------------|
| a. Selection and review of an initial set of three months data   | April – May 2013      |
| b. On-campus visit for initial field work for the initial set of expenditures  | July – August 2013    |
| c. Assessment of results of testing for initial sample of transactions, meeting with NSF OIG, selection of additional sample of transactions | August -November 2013 |
| d. Additional on-campus visit to test the second sample of transactions for the three-year period  | November 2013         |
| e. Completion and issuance of audit report   | Spring 2014           |

**Potential Impact of this Type of Audit**

It is still too early to determine the potential impact of this audit on the university. Based on initial feedback from the WSB auditors, there are concerns about several issues. The first is related to cost accounting processes for continuing education conference services provided by the university to meet deliverables for NSF grants. The second issue relates to equipment purchases on NSF projects and whether such purchases benefited the grant or were authorized in advance by NSF. The university will continue to provide the requested information and justifications and address any other concerns about the sample transactions with the WSB auditors and continue our efforts to limit the impact of this audit.

The university will provide another update on this audit at the November Finance and Audit Committee meeting.



# **Update on Joint Legislative Audit and Review Commission's Study on Higher Education Cost Efficiency**

## **FINANCE AND AUDIT COMMITTEE**

**August 8, 2013**

### **Background**

The 2012 General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) to conduct a study on cost efficiency of the 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 directs JLARC to conduct the study identified 14 areas to consider including both academic and non-academic factors that affect the cost of higher education operations. The study is to be conducted over a period of two years and is expected to be completed by November 30, 2014. According to the 2013 JLARC Workplan, the Commission has divided the study into the following broad categories and plans to issue separate reports on each topic by the given dates:

1. *Trends in Higher Education Funding, Enrollment, and Student Costs:* The report will summarize 10 and 20 year trends in the areas of enrollment, tuition and fees, housing, and dining charges, the relationship between average income and higher education costs, student borrowing and other forms of financial aid, public higher education revenue streams, and public higher education spending. June 10, 2013  
(Issued)
2. *Review of Auxiliary Enterprises and Cost of Student Life:* This review will address the efficiency of auxiliary enterprises that are funded through student fees including student housing, student dining, intercollegiate athletics, and campus recreation. September 9, 2013  
(Draft form)
3. *Review of Academic Cost and Efficiency:* The review will address:  
i) how the different types of academic programs offered affect spending,  
ii) the key drivers of faculty compensation,  
iii) major faculty activities and level of faculty productivity, including the role of technology,  
iv) the financial costs of research and types of benefits that stem from research, and  
v) utilization and spending on instructional and research space. December 9, 2013
4. *Review of Administrative Efficiency:* This objective of this review is to study administrative efficiency including administrative staffing, information technology, and procurement. 2014



5. *Strategies and Practices to Facilitate Efficient and Effective Public Higher Education in Virginia*: The primary objective of this review will be to summarize and synthesize key findings from prior JLARC reviews on higher education, and to identify strategies and practices used by Virginia institutions, institutions in other states, other state oversight organizations, and legislatures that merit consideration.

2014

## **Status of the JLARC Review**

The JLARC review is currently underway, and the university is providing full support to the Commission. The Vice President for Finance and CFO is serving as the point of contact for coordination of the review with appropriate university personnel. Due to the comprehensive nature of the review and aggressive timelines, numerous departments within the university are devoting extensive time and efforts in responding to the detailed information requests and responding to follow-up questions and meeting requests. In some instances, JLARC has chosen the university as a test environment prior to expanding the review to other universities. For example, a faculty survey intended for all teaching and research faculty was tested with a sample of Virginia Tech faculty prior to opening the survey for responses to other institutions and to all university teaching and research faculty. The university is actively monitoring the information requests to understand what these reviews may hold for the university and higher education, in general.

### *Update on Report in Trends in Higher Education Funding, Enrollment, and Student Costs:*

JLARC issued its first report – *Trends in Higher Education Funding, Enrollment, and Student Costs* in its Higher Education series on June 10, 2013. This 76 page report reviewed statewide and national trends. The key highlights of the report include:

- Most spending at public four-year higher education institutions in Virginia and nationally is on activities other than direct instruction. The largest driver of spending increases in Virginia has been on auxiliary enterprises such as student housing, dining, and intercollegiate athletics.
- States have shifted more of the financial burden of higher education to students. State funding as a percentage of total revenue at institutions in Virginia and nationally has declined. In Virginia, state general funding per student declined significantly between 1991-92 and 2011-12.
- Virginia has increased enrollment more and graduated students faster than nationwide.
- Price of higher education has increased substantially in Virginia and nationwide. The price of higher education has increased substantially over the last two decades, though, slightly less in Virginia than nationally.



- Higher education now consumes more income, necessitating increased borrowing and other aid.

### *Observations on the first JLARC report*

The university did not have the opportunity to review the first report, issued in June, prior to its release. Thus, we did not provide input to JLARC. However, we studied the report thoroughly. A few comments in reference to Virginia Tech, in comparison to the report findings, include the following points:

- The report identified statewide growth in auxiliary enterprises and suggests that this drives student costs; however, it is important to understand that growth in auxiliary expenditures does not always mean growth in student fees at Virginia Tech. Virginia Tech operates several auxiliary enterprises that have no associated student fees (for example: Electric Services, the Inn at Virginia Tech and Skelton Conference Center). These activities allow Virginia Tech to spread fixed costs over a larger base which results in greater efficiency.
- Virginia Tech has experienced enrollment growth during the time period studied; thus, the university has seen an increased demand for services in several auxiliaries.
- Student expectations have increased over the years. Virginia Tech works to ensure that students maximize their benefits at the minimal cost.
- In terms of overall perspective, it is a critical to note that Virginia Tech maintains the lowest non-E&G fees of the four-year public institutions within the state.
- While the report does reference the system wide reduction of state support and the resulting cost shift from the state to the student, General Fund per resident student at Virginia Tech decreased \$2,957 in absolute dollars between fiscal year 2001 and fiscal year 2014. This is a 53.8 percent decrease in purchasing power on an inflation adjusted basis.
- The JLARC report states an overall 22 percent decline in inflation-adjusted General Fund support per student for Virginia institutions. The 22 percent decline is calculated for both resident and nonresident students. It is pertinent to note that General Fund support is provided for the benefit of resident students only; nonresident students fund more than 100 percent of their cost of education.

### *Review of Auxiliary Enterprises and Cost of Student Life*

The second report in the series on Auxiliary Enterprises and Student Life is currently in draft form and is scheduled to be released on September 9, 2013. The university received a draft copy of this report and provided feedback to JLARC. Since the report is scheduled to be issued on the same day as the Committee meeting, a more detailed briefing for the Committee may be possible.



## **Summary**

The university will continue to provide full support to JLARC in the study and will plan to provide periodic updates to the Board as additional information is available and reports are released.



# **Implementation of New GASB Statements Related to Accounting and Financial Reporting for Pension Plans**

## **FINANCE AND AUDIT COMMITTEE**

**August 15, 2013**

The Finance and Audit Committee is responsible for oversight and monitoring of the overall financial management and financial reporting of the university including preparation of university financial statements. Some important changes are going to occur over the next two years for public institutions of higher education. The materials below provide a brief overview of the accounting environment for Virginia Tech and the pending changes. Some additional introductory information will be provided during the Committee meeting.

The university financial statements are prepared in accordance with the Governmental Accounting Standards Board (GASB). The Governmental Accounting Standards Board (GASB) is an independent organization that establishes standards of accounting and financial reporting for U.S. state and local governments and is recognized as the official source of Generally Accepted Accounting Principles (GAAP) for state and local governments.

In June 2012, the Governmental Accounting Standards Board (GASB) issued two new standards for accounting and reporting pension activity for state and local governments. GASB Statement No. 67 covers accounting and reporting by pension plans, and GASB Statement No. 68 covers accounting and reporting of pension activity by governmental employers participating in those plans such as the university. The Virginia Retirement System must implement Statement No. 67 in fiscal year 2014, while the Commonwealth and its various state agencies (including the university) and localities must implement Statement No. 68 in fiscal year 2015.

Based on current information, the university expects that the implementation of these statements will have a significant impact on the university's financial statements. The university is currently in the process of analyzing the full impact of the implementation of these new standards on the financial statements and plans to provide a comprehensive report to the Committee at a future meeting.





# Update on JLARC Study on Higher Education Cost Efficiency

M. Dwight Shelton

Vice President for Finance and CFO

September 9, 2013





## JLARC Study: Overview

The 2012 General Assembly directed the Joint Legislative Audit and Review Commission (JLARC) to conduct a study on cost efficiency of the Virginia public higher education institutions to identify opportunities to reduce the cost of public higher education in Virginia.

The House resolution identified 14 areas to consider including:

- academic factors: teaching load and faculty productivity, impact of faculty research on tuition, incentives created by existing faculty compensation models, etc.
- non-academic factors: administrative staffing and costs, operation of enterprise activities, etc.





## JLARC Study: *Timeline*

- The study is to be conducted over a period of 2 years
- Expected to be completed by November 30, 2014





# JLARC Study: *Reports*

	<b>Report</b>	<b>Issue Date</b>
1.	Trends in Higher Education Funding, Enrollment, and Student Costs	June 10, 2013 (Issued)
2.	Review of Auxiliary Enterprises and Cost of Student Life	September 9, 2013 (Draft form)
3.	Review of Academic Cost and Efficiency	December 9, 2013
4.	Review of Administrative Efficiency	2014
5.	Strategies and Practices to Facilitate Efficient and Effective Public Higher Education in Virginia	2014





# Trends in Higher Education Funding, Enrollment, and Student Costs Report

- Issued on June 10, 2013
- The 76-page report reviewed and summarized:
  - 10- and 20-year trends in the areas of enrollment, tuition and fees, housing, and dining charges
  - the relationship between average income and higher education costs, student borrowing, and other forms of financial aid
  - public higher education revenue streams, and public higher education spending





## Trend Report - *Highlights:*

- Most spending at public four-year higher education institutions in Virginia and nationally is on activities other than direct instruction.
- The largest driver of spending increases in Virginia has been on auxiliary enterprises such as student housing, dining, and intercollegiate athletics.
- States have shifted more of the financial burden of higher education to students. State funding as a percentage of total revenue at institutions in Virginia and nationally has declined.
- In Virginia, state general funding per student (adjusted for inflation) declined 22 percent between 1991-92 and 2011-12.





## Trend Report – *Highlights (contd.):*

- Virginia has increased enrollment more and graduated students faster than nationwide.
- Price of higher education has increased substantially in Virginia and nationwide. The price of higher education has increased substantially over the last two decades, though, slightly less in Virginia than nationally.
- Higher education now consumes more income, necessitating increased borrowing and other aid.





# Trend Report – *VT Observations*

- Virginia Tech maintains one of the *lowest non-Educational and General fees* of the four-year public institutions in Virginia
- Virginia Tech has experienced *enrollment growth* resulting in an increased demand for services in several auxiliaries
- Student and parent expectations for the quality of services has increased over the years





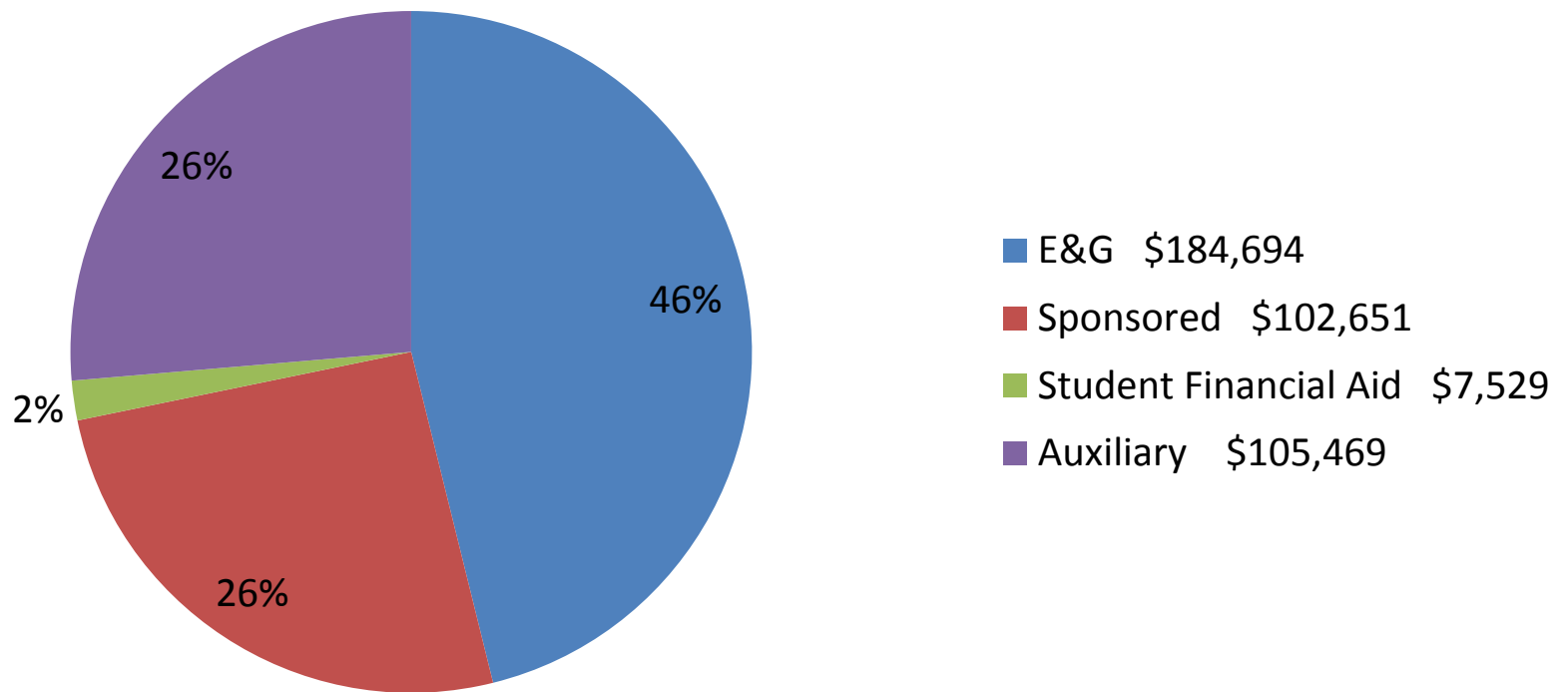
# Trend Report – *VT Observations (contd.)*

- Report cites an overall 22 percent decline in inflation-adjusted General Fund support per student for Virginia institutions.
  - The 22 percent is calculated for both resident and non-resident students
  - General Fund support provided by the state is for the benefit of resident students only; non-resident students fund more than 100 percent of their cost of education
- General Fund per resident student at Virginia Tech decreased \$5,119 in inflation-adjusted dollars between fiscal year 2001 to 2014 – a 53.8 percent decrease on an inflation-adjusted basis





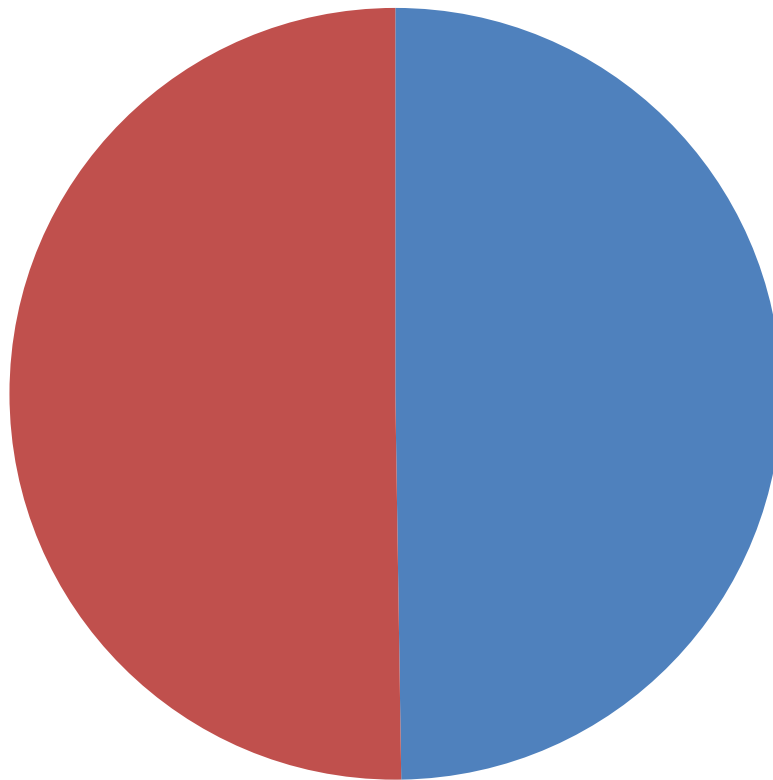
## Virginia Tech Expenditure Growth by Area: FY 2002 to FY 2011







## Growth in Auxiliary Enterprise Revenue



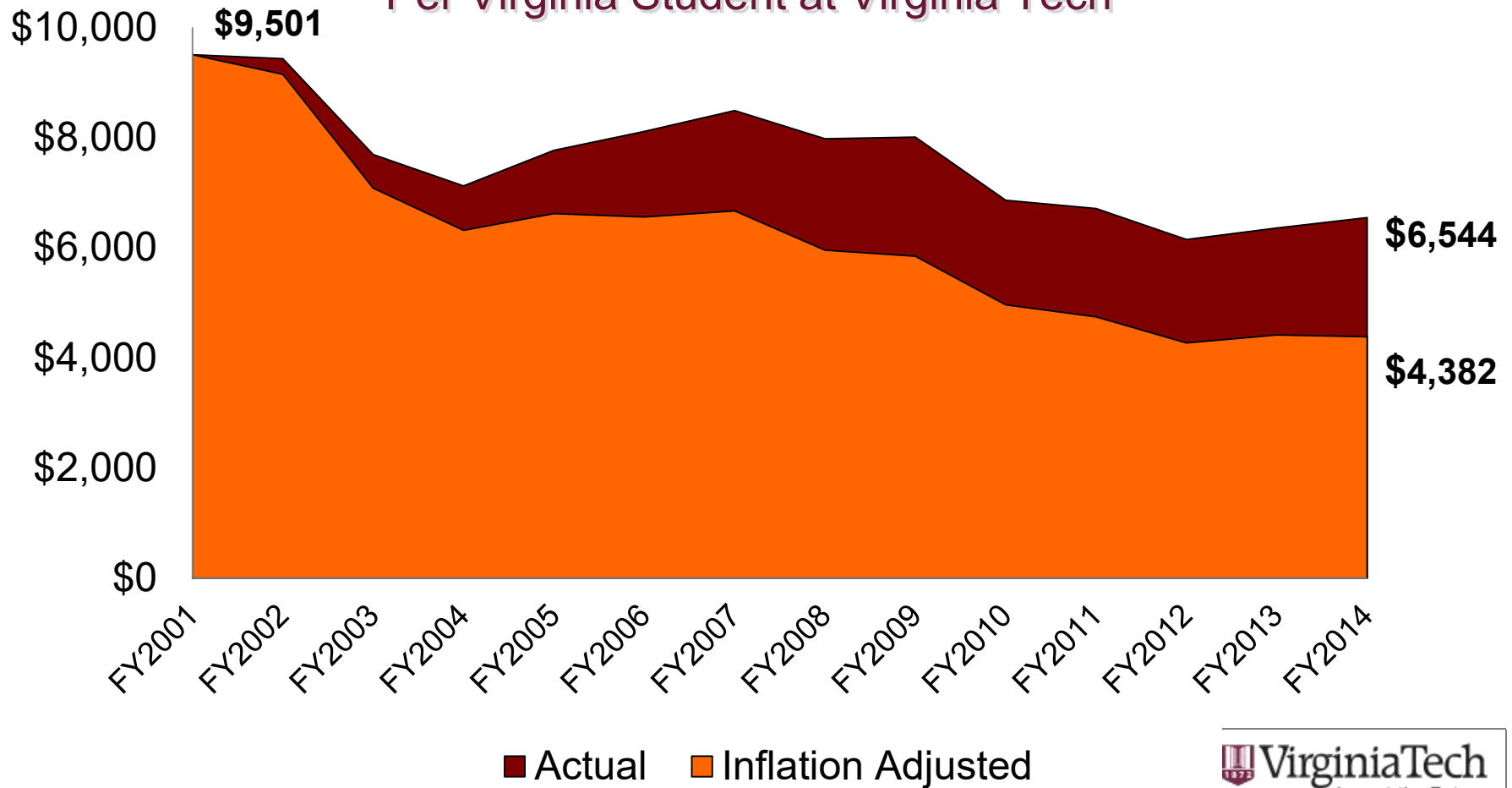
- Student Paid Aux. Revenue \*
- Self Generated Revenue

*\* Includes Comprehensive Fee Revenue and Room and Board Revenue*





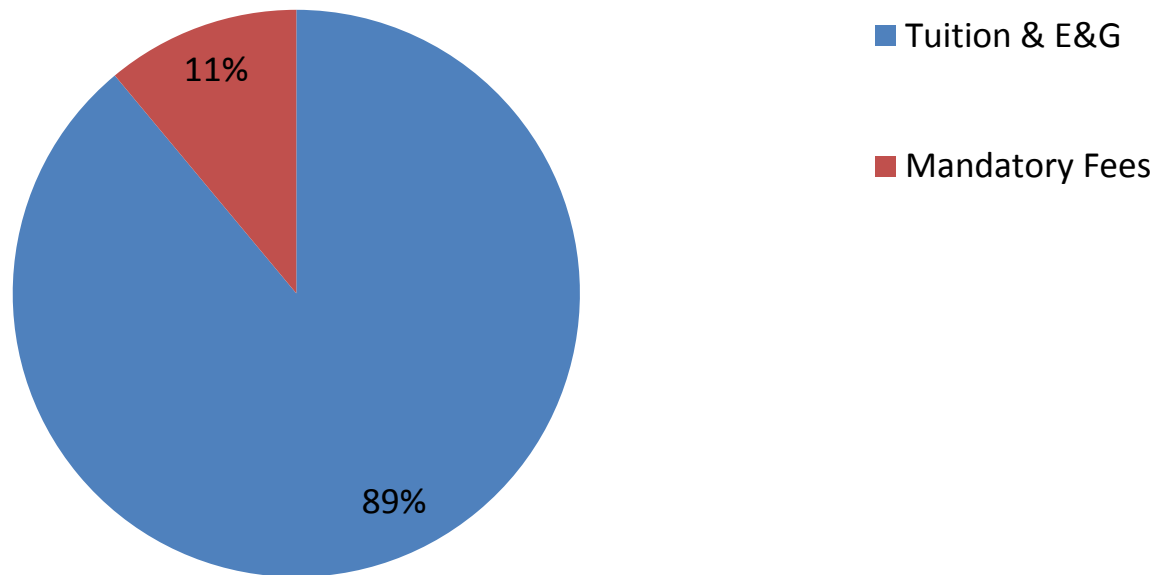
## GENERAL FUND SUPPORT: Per Virginia Student at Virginia Tech







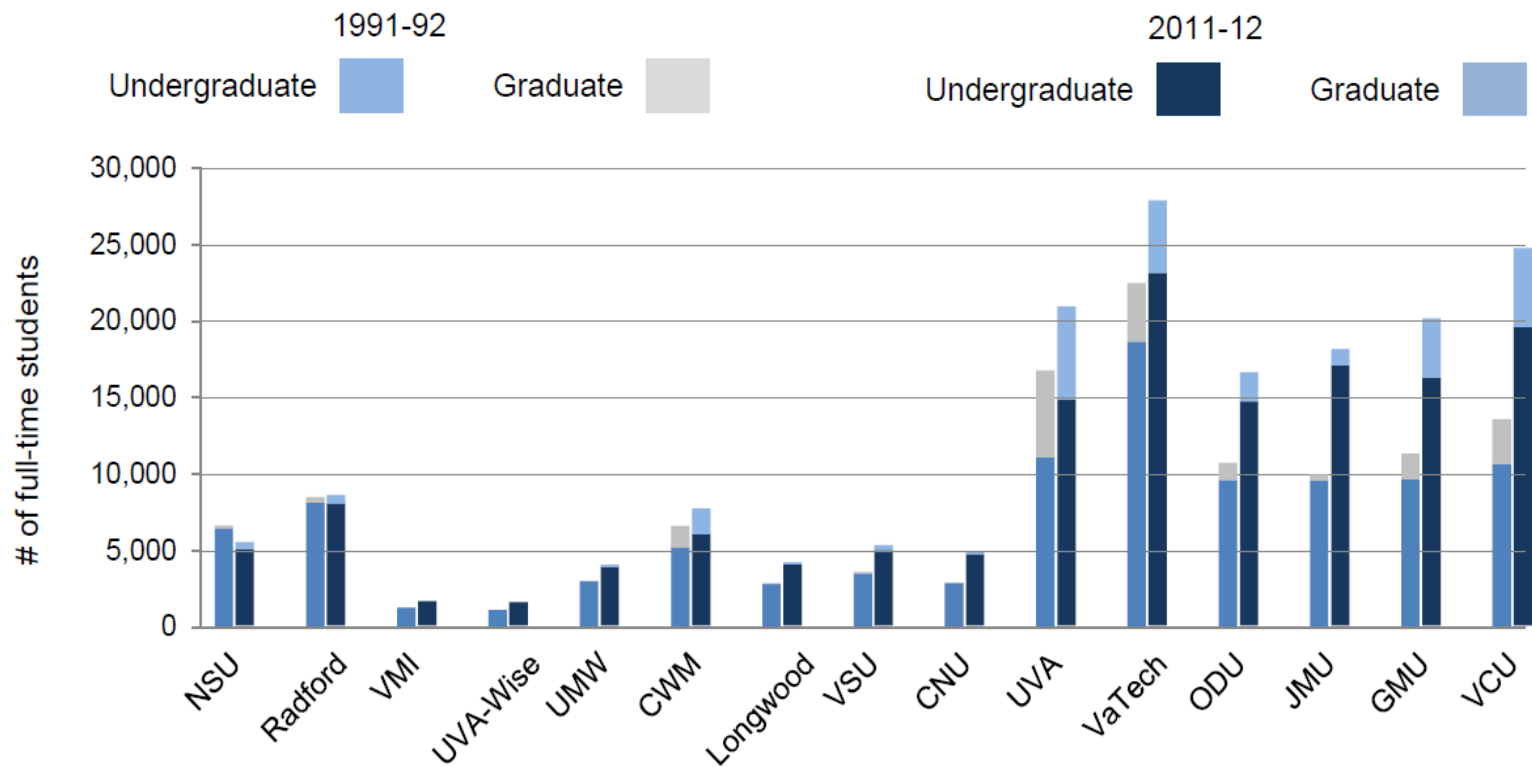
## **VT Focus has been on Core Mission: Allocation of Incremental Charges FY 2002 – FY 2011**







**Figure 11: Most Virginia Public Four-Year Institutions Increased Undergraduate and Graduate Enrollment (1991-92 to 2011-12)**

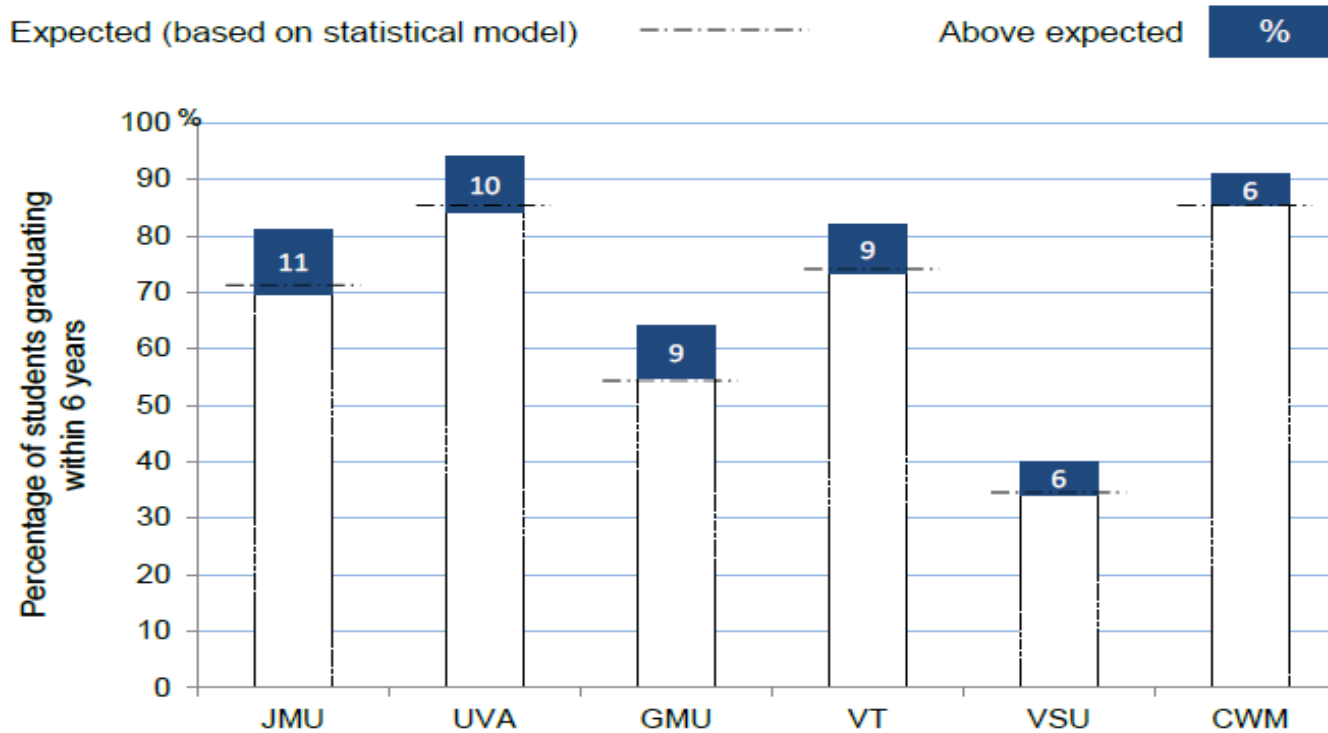


Source: JLARC Trends in Higher Education Funding, Enrollment, and Student Costs Report





**Figure 14: Six Virginia Institutions Had Graduation Rates Substantially Higher Than Predicted When Considering Key Student and Institutional Characteristics**



Note: Six year graduation rates of undergraduate students only.

Source: JLARC staff analysis of data reported by institutions to the NCES, U.S. DOE.





Questions ?



**Potential State Budget Initiatives**  
**FINANCE AND AUDIT COMMITTEE**

**July 30, 2013**

**State Budget Process**

The Commonwealth develops its budgets on a biennial basis, and the next biennial budget will cover the period of July 1, 2014 through June 30, 2016. To prepare proposals for the 2014-16 biennium, much of the budget development process for the state's agencies and higher education institutions occurs in the summer and fall of the preceding year.

In preparation for the 2014 General Assembly session and the 2014-16 biennial budget development process, the university develops budget requests for consideration by the Governor for inclusion in the Executive Budget proposal. The Department of Planning and Budget (DPB) establishes the guidelines that state agencies utilize to submit requests, called "Decision Packages" to the administration. The Governor will present the Executive Budget to the General Assembly on December 16, 2013.

Instructions on the development process have not yet been received and are not expected until late August or September. At the state level, considerations impacting this process include the August forecast of state revenues, the national economic environment and federal sequestration actions, and the recommendations of the Higher Education Advisory Committee and State Council of Higher Education for Virginia (SCHEV) on issues including funding recommendations as framed by the Higher Education Opportunity Act of 2011.

For the university, the process of submission of various elements of the appropriations requests and the development of the Executive Budget proposal for 2014-16 is well underway. While the university has not yet received instructions for the submission of institutional initiatives for 2014-16, work is progressing based on the assumption that the submission guidelines and process will be similar to prior biennia. As a result, during the summer of 2013, the university developed plans for the anticipated submission of operating requests later this year. In addition to these requests, the university has continued to work with the State on statewide funding issues for higher education. The status of each of these efforts is described in this report, and the attached schedule provides a listing of the operating issues specific to Virginia Tech.

Assuming that the process for submission of budget amendments will be similar to recent years' submissions, the university anticipates submitting several adjustments through operating budget development process, including the following categories:

- New initiatives,
- Mandates,
- Prior commitments and critical needs,
- Technical adjustments, and
- Cost adjustments.



## **Potential Budget Requests for the 2014-16 Biennium**

Consistent with this guidance and prior practice, the university has developed a list of potential state budget requests. These initiatives are designed to advance the vision of the university's long range plan. The proposals on this list are consistent with the initiatives included in the Six-Year operating plan, submitted to the state in July 2013. Because the submission for 2014-16 is due in September, work is already underway to prepare the individual proposals. It is the university's business practice to share these potential budget requests with the board to obtain concurrence with the proposed budget strategies for the Executive Budget inclusion and the General Assembly Session.

Several important statewide issues are traditionally addressed centrally and are not included in Virginia Tech's list of requests. The issues that are normally coordinated at a system level by SCHEV and DPB include the following: faculty and staff salaries, base budget adequacy, equipment trust fund, maintenance reserve, operation & maintenance of new facilities, and student financial assistance.

These proposed initiatives are expected to meet the criteria for submission to the Executive Budget. However, the final budget request submission will be modified as necessary to consider Administration guidance. The university may elect to submit all or some of these initiatives as Decision Packages for consideration in the Executive Budget process or as amendments during the 2014 General Assembly session. If any material additions are made to the request because of new opportunities or state guidance, these changes would be reviewed subsequently with the Board of Visitors. A brief description of each of the initiatives follows.

### **Operating Initiatives — University Division**

1. **Advance Strategic Research Opportunities**. The growth of complex interdisciplinary research has resulted in an environment that is more capital intensive than ever. Funding agencies have moved away from supporting the individual investigator and are more interested in investing in large scale interdisciplinary teams working over periods of years. The ability to compete for awards in the current research environment requires flexible support that allows institutions to be nimble in landing large competitive grants. Investments will be made in programs and infrastructure in emerging research areas, especially in the university's neuroscience research in Roanoke. Emerging opportunities to leverage the university's research strengths exist in areas such as advancing research in critical technologies, water, energy, security, transportation, and resiliency. Investment in research not only leads to direct and indirect job creation and economic development in the Commonwealth, but also advances knowledge that contributes to a higher quality of life and the future potential of Virginia's citizens.
2. **Increase Virginia Undergraduate Enrollment**. In partnership with the Commonwealth, the university will continue to enroll an additional 50 Virginia undergraduates each year through 2014-15, for a total of 200, honoring an existing agreement with the 2011 General Assembly to continue to enhance the university's service to the citizens of the Commonwealth.
3. **Expand and Enhance Science, Technology, Engineering, Mathematics, and Health Sciences (STEM-H) Degree Production**. Building upon Virginia Tech's current excellence in STEM instruction, the university is developing innovative instructional models and new degree opportunities in emerging and high-demand STEM-H fields to



advance the educational and economic competitiveness of graduates and the Commonwealth. Science has become increasingly interdisciplinary and collaborative in nature in order to address complex problems. Further, Virginia Tech's goal is to ensure competency in data analysis and computational methods for all students, as well as offer experiential learning opportunities through a "hands-on, minds-on" philosophy that leads to better job preparation and advances post-graduate career opportunities in high-paying STEM-H fields.

4. **Support Faculty Startup Packages, Particularly for New Faculty in the STEM-H Fields.** The market for faculty is increasingly competitive. The ability to offer competitive start-up packages, including appropriate research facilities and equipment, allows the Commonwealth to attract and retain the best and most qualified faculty, including established investigators with international reputations. The success of these faculty benefits students and instructional programs as well as the Commonwealth's economy through the attainment of increased research funding from external sources as well as providing cutting-edge instruction and research opportunities in STEM-H fields.
5. **Enhance Degree Attainment and Core Education Through Creative Technologies and the Expansion of Computational Thinking in Degree Programs.** Characterized by rapid innovation and creative solutions to complex societal problems, the 21<sup>st</sup> century economy demands a highly skilled & cross-disciplinary workforce. By supporting work at the intersection of technology and design, the Institute for Creativity, Arts, and Technology (ICAT) is positioned to be a launch pad for today's students to become the leaders and innovators of the new economy. ICAT is forging a pathway between trans-disciplinary research and artistic output, scientific and commercial discovery, and educational innovation. The Institute is transforming university-level education for citizens of the Commonwealth by preparing students to be part of a new cohort of multi-skilled workers needed to drive economic development in the Commonwealth through the creation of spin-off technologies and partnerships with organizations that can adapt and succeed in response to the critical needs of today's economy.
6. **Support Creation of Faculty of Health Science and Translational Biology, Medicine, and Health degree program.** The creation of an interdisciplinary Faculty of Health Sciences (FHS) provides the focal point and structure to enhance the connections between traditional academic disciplines. This increased interconnectivity will increase faculty productivity and enhance interdisciplinary research outcomes. A key program in this initiative is the implementation of a new Translational Biology, Medicine, and Health degree program to train biomedical and health scientists who will lead the future of prevention, diagnosis, treatment, and curing of disease in the future. Additionally, as a university-wide initiative, the FHS will spur cross-departmental collaborations and, through the sharing of resources, provide opportunities for the university to achieve cost efficiencies. Collectively, the FHS, while continuing to be an effective steward of limited resources, will advance the university's long-range vision of expanding academic and research opportunities in the growing field of health sciences. This is a vital step to positioning the Commonwealth for the future.
7. **Expand Year-Round Academic Opportunities to Accelerate Degree Completion.** Virginia Tech has successfully undertaken its initial steps of increasing the number of on-line courses available in the summer and winter months so that students away from campus can continue progress toward their degree or take additional courses toward a second major or additional minor at the times that are most convenient to them. To



accelerate degree completion, incentives must be expanded to increase on-campus instruction and facility use over the summer and winter months. These incentives must also address student financial barriers. The university is working to implement several strategies to increase the utilization of year-round instruction at the Blacksburg campus. These efforts assist students and the Commonwealth by reducing the potential for incurring student loan debt and enhancing student success while ensuring timely degree completion.

8. **Position the University for Growth in On-Line, Distance, and E-Learning Environments.** With advances in technology dramatically reshaping the educational paradigm, the university will continue to create unique opportunities to enhance classroom environments and online education to expand the range of essential skills students must acquire to excel in complex and rapidly-changing digital and networked environments. This includes expansion of online and hybrid courses. This initiative will support increased access to affordable, high-quality education to residents of the Commonwealth, expanded experiential learning opportunities, and continued investigation, development, and utilization of current and emerging technologies that will enhance the traditional classroom experience while providing mobile access and expanding exceptional learning opportunities throughout the Commonwealth.
9. **Increase Graduate Enrollment.** Recognizing industry and societal need for advanced degree-holders to support economic innovation and expansion, the university will increase graduate student enrollment, focusing on masters and doctoral level science, technology, engineering, mathematics, and health sciences (STEM-H). The education of graduate students is a source of innovation, technological development, and entrepreneurship that leads to higher paying, high-value jobs that are vital for the continued success of the Virginia economy in the global marketplace as well as lower rates of unemployment. The Commonwealth's investment would be leveraged with growth in external grants and contracts to support a vibrant STEM-H graduate education.

## Technical Adjustments

To the extent that technical adjustments are needed, the university will work with the staff in state offices to ensure the appropriate treatment of nongeneral fund appropriations or other technical items.

## Operating Initiatives — Cooperative Extension and Agricultural Experiment Station (CE/AES)

1. **Address Operation and Maintenance of New Facilities.** With a significant portion of the Human and Agricultural Biosciences Building coming online in fiscal year 2015, Operation and Maintenance support is a primary cost driver in the future Agency 229 budget. Facilities must be open throughout the year in order for the agency to deliver on its mission to provide support to the citizens of the Commonwealth. Bringing new facilities online requires utility service, cleaning/housekeeping, maintenance, and operating supplies. Addressing operation and maintenance of facilities also helps to ensure the maximum facility service life and prevention of building deficiencies. Agency 229 operates overwhelmingly



through General Fund support. Nongeneral fund support is extremely limited, and no university tuition resources are available for Agency 229.

2. **Generation and Dissemination of Advancements in Food Safety and Agricultural Productivity Enhancements:** There is no more significant threat to the profitability and sustainability of agricultural production in Virginia than that of potential foodborne illnesses. Outbreaks of salmonellosis, such as those linked to agricultural production on the Eastern Shore of Virginia, can lead to lost revenue and jobs while dramatically altering the national food supply. In response to these and similar incidents, the Food & Drug Administration has proposed a multitude of changes and regulations that will impact the Commonwealth's agricultural producers. This initiative will integrate research to address food safety with Extension efforts to assist Virginia's farmers and agricultural sector in ensuring the safety of the Commonwealth's agricultural products. Additional Extension Agents will advance the provision of state-of-the art information on risk management, finance, economic and marketing strategies to Virginia's agricultural economy. Due in part to the successes of the Extension program, Virginia agricultural exports reached an all-time high of \$2.6 billion in 2012. This strategic investment in Extension Agents and Specialists is necessary to continue to increase Virginia agricultural productivity while supporting job growth and ensuring the safety of the local and national food supply against foodborne illnesses.

### **Capital Initiatives**

Capital initiatives for both the University Division and the Cooperative Extension & Agricultural Experiment Station for the upcoming 2013 General Assembly session will be presented to the Board for ratification in the university's Six-Year Capital Plan.

### **RECOMMENDATION:**

That the university administration be authorized to submit these budget initiatives to the Commonwealth for inclusion in the 2014-16 Executive Budget proposal in accordance with state instructions and consistent with the initiatives contained herein.

September 9, 2013



## **Financial Performance Report - Operating and Capital**

### **FINANCE AND AUDIT COMMITTEE**

**July 1, 2012 to June 30, 2013**

The Financial Performance Report of income and expenditures is prepared from two sources: actual accounting data as recorded at Virginia Tech and the annual budgets which are also recorded in the university accounting system. The actual accounting data reflect the modified accrual basis of accounting, which recognizes revenues when received rather than when earned and the expenditures when obligated rather than when paid. The Original Budget was approved by the Board of Visitors at the June meeting. The Adjusted Budget reflects adjustments to incorporate actual experience or changes made during the fiscal year. These changes are presented for review and approval by the Finance and Audit Committee and the Board of Visitors through this report. Where adjustments impact appropriations at the state level, the university coordinates with the Department of Planning and Budget to ensure appropriations are reflected accurately.

The July to June 2012-13 budget (year-to-date) is prepared from historical data which reflects trends in expenditures from previous years as well as known changes in timing. Differences between the actual income and expenditures and the year-to-date budget may occur for a variety of reasons, such as an accelerated or delayed flow of documents through the accounting system, a change in spending patterns at the college level, or increases in revenues for a particular area.

Quarterly budget estimates are prepared to provide an intermediate measure of income and expenditures. Actual revenues and expenditures may vary from the budget estimates. The projected year-end budgets are, however, the final measure of budgetary performance.



## OPERATING BUDGET

Attachment H

1. While the University increased the tuition budget by \$8.0 million during the year, actual Tuition and Fee revenue was slightly lower than the revised budget.
2. All Other Income is higher than projected due to increased caseloads within the Veterinary Medicine Teaching Hospital. Academic program expenditures are lower than projected due to the timing of costs in continuing education programs. Support program expenditures are behind historical projections due to the timing of operating expenditures coupled with the adjustment to the Tuition and Fee revenue budget.
3. The budget for federal revenue is established to match projected allotments from the federal government that are expected to be drawn during the state fiscal year. All expenses in federal programs are covered by drawdowns of federal revenue up to allotted amounts. Federal Cooperative Extension revenues were less than projected budgets due to the timing of receipt of federal drawdowns and lower than anticipated expenditures.
4. Support program expenses are ahead of historical projections due to timing of operation expenses.
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 expenditures are ahead of 2011-12 levels and the 2012-13 budget.
8. Revenues and Expenses for All Other Programs were less than projected due to lower than budgeted Federal Work Study, Alumni Affairs, and Surplus Property activity.
9. The General Fund revenue budget has been increased by \$31,381 for VIVA libraries distribution costs and increased by \$585,795 to match the actual central appropriations transfer for fringe benefits, and the one-time bonus. The budget was also decreased by \$629,163 to account for the unexpected General Fund reduction. The corresponding expenditure budget has been adjusted accordingly.
10. The annual budget for Tuition and Fees has been decreased by \$530,828 for the finalization of the budgets for tuition, E&G fees and unfunded scholarships; and increased by \$125,252 for the XMNR program, and by \$8.0 million for strong fall enrollments and spring retention. The corresponding expenditure budgets have been adjusted accordingly.
11. The All Other Income revenue budget for the University Division has been increased by \$600,000 for Veterinary Medicine Clinic, by \$116,069 for the credit card rebate, and by \$2.7 million for Continuing Education and COTA programs. The corresponding expenditure budgets have been adjusted accordingly.
12. The General Fund revenue budget has been decreased by \$244,294 for the actual state central fund distribution due to an unexpected reduction of \$209,909 and state support below initial estimates for fringe benefit costs. The corresponding expenditure budgets have been adjusted accordingly.
13. The federal revenue and expenditure budgets have been increased \$2,877,000 on a one-time basis to draw previously appropriated federal funds.
14. Sponsored Programs revenues were reduced \$400,000 based on a revised forecast of course activity within the Institute for Distance & Distributed Learning enterprise fund. The corresponding expenditure budget was adjusted accordingly.
15. The projected year-end revenue and expense budgets for Student Financial Assistance were increased by \$51,750 for the VA Military Survivors & Dependents Program, by \$267,668 for the Commonwealth Scholarship Assistance Program, by \$108,500 for the 2-Year College Transfer Grant and by \$1,879 for the carryover of unexpended balances as of June 30, 2012.
16. The projected annual budgets were adjusted \$90,602 to finalize the Alumni Affairs budget, \$83,000 for increased Surplus Property activity, \$11,465 for Local Fund budget adjustment, \$506,261 for a technical mid-year realignment of fund sources, and \$230,391 for outstanding 2011-12 commitments that were initiated but not completed before June 30, 2012.



**OPERATING BUDGET  
2012-13**

Attachment H

Dollars in Thousands

	July 1, 2012 to June 30, 2013			Annual Budget for 2012-13		
	Actual	Budget	Change	Original	Adjusted	Change
<b>Educational and General Programs</b>						
<b><u>University Division</u></b>						
<u>Revenues</u>						
General Fund	\$145,551	\$145,551	\$0	\$145,562	\$145,551	\$-11 (9)
Tuition and Fees	369,377	371,463	-2,086 (1)	363,869	371,463	7,594 (10)
All Other Income	33,996	33,744	252 (2)	30,318	33,744	3,426 (11)
Total Revenues	\$548,924	\$550,758	\$-1,834	\$539,749	\$550,758	\$11,009
<u>Expenses</u>						
Academic Programs	\$-352,634	\$-354,092	\$1,458 (2)	\$-345,542	\$-354,092	\$-8,550 (9,10,11)
Support Programs	-194,445	-196,666	2,221 (2)	-194,207	-196,666	-2,459 (9,10,11)
Total Expenses	\$-547,079	\$-550,758	\$3,679	\$-539,749	\$-550,758	\$-11,009
NET	\$1,845	\$0	\$1,845	\$0	\$0	\$0
<b><u>CE/AES Division</u></b>						
<u>Revenues</u>						
General Fund	\$62,687	\$62,687	\$0	\$62,931	\$62,687	\$-244 (12)
Federal Appropriation	14,086	17,202	-3,116 (3)	14,325	17,202	2,877 (13)
All Other Income	961	709	252	709	709	0
Total Revenues	\$77,734	\$80,598	\$-2,864	\$77,965	\$80,598	\$2,633
<u>Expenses</u>						
Academic Programs	\$-74,090	\$-75,014	\$924 (3)	\$-73,097	\$-75,014	\$-1,917
Support Programs	-6,314	-5,584	-730 (4)	-4,868	-5,584	-716
Total Expenses	\$-80,404	\$-80,598	\$194	\$-77,965	\$-80,598	\$-2,633 (12,13)
NET	\$-2,670	\$0	\$-2,670 (5)	\$0	\$0	\$0
<b>Auxiliary Enterprises</b>						
Revenues	\$277,805	\$276,021	\$1,784 (6)	\$273,480	\$276,021	\$2,541 (6)
Expenses	-269,776	-294,260	24,484 (6)	-268,539	-294,260	-25,721 (6)
Reserve Drawdown (Deposit)	-8,029	18,239	-26,268 (6)	-4,941	18,239	23,180 (6)
NET	\$0	\$0	\$0	\$0	\$0	\$0
<b>Sponsored Programs</b>						
Revenues	\$292,305	\$290,150	\$2,155 (7)	\$290,550	\$290,150	\$-400 (14)
Expenses	-292,706	-290,150	-2,556 (7)	-290,550	-290,150	400 (14)
Reserve Drawdown (Deposit)	401	0	401	0	0	0
NET	\$0	\$0	\$0	\$0	\$0	\$0
<b>Student Financial Assistance</b>						
General Fund	\$19,047	\$19,047	\$0	\$18,619	\$19,047	\$428 (15)
Expenses	-19,040	-19,049	9	-18,619	-19,049	-430 (15)
Reserve Drawdown	0	2	-2	0	2	2 (15)
NET	\$7	\$0	\$7	\$0	\$0	\$0
<b>All Other Programs *</b>						
Revenue	\$4,725	\$5,178	\$-453 (8)	\$5,671	\$5,178	\$-493 (16)
Expenses	-4,164	-4,903	739 (8)	-5,671	-4,903	768 (16)
Reserve Drawdown (Deposit)	-561	-275	-286 (8)	0	-275	-275 (16)
NET	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total University</b>						
Revenues	\$1,220,540	\$1,221,752	\$-1,212	\$1,206,034	\$1,221,752	\$15,718
Expenses	-1,213,169	-1,239,718	26,549	-1,201,093	-1,239,718	-38,625
Reserve Drawdown (Deposit)	-8,189	17,966	-26,155	-4,941	17,966	22,907
NET	\$-818	\$0	\$-818	\$0	\$0	\$0

\* All Other Programs include federal work study, alumni affairs, surplus property, and unique military activities.



1. Expenses for Residential and Dining Services are lower than projected due to the timing of facility renovation and improvement projects in the residence halls that are normally scheduled during the summer, the replacement of furniture and equipment, facility improvements at CESA, and dining facility projects.
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 Parking Service project savings which were used to pay debt service.
3. Revenue and expenses in the Telecommunication Auxiliary are lower than projected due to the timing of revenues and one-time project expenses for campus telecommunication infrastructure projects.
4. Revenues for the University Services System are higher than projected due to increased self-generated revenue in Health Services and Recreation Sports. Expenses are lower than projected due to timing of operating expenses and projects.
5. Revenues for Intercollegiate Athletics are higher than projected due to higher than forecasted revenues from conference allocation, football ticket sales, basketball settlements, and multimedia revenue. Expenditures for Intercollegiate Athletics are lower than projected due to timing of operating expenses due to debt service refinancing, and one-time sport facility related projects that were initiated but incomplete at year-end.
6. Expenses for Electric Services are lower than projected due to lower than forecasted total cost of purchased electricity as well as the timing of items ordered but not yet received and paid at fiscal year-end.
7. Revenues for the Inn at Virginia Tech and Skelton Conference Center are higher than projected due to higher than forecasted business activity. Expenses are lower than projected due to the timing of projects in progress and the timing of operating expenses.
8. Revenues for Other Enterprise Functions are higher than projected due to higher than forecasted royalties from merchandise sales within the Licensing and Trademark auxiliary, Orientation participation, and Printing Services business volume. Expenses are lower than projected due to timing of projects and equipment purchases.
9. The projected annual revenue and expense budgets for Residence and Dining Halls were increased for projected business volume in the Residence Halls, pouring rights revenue in the Dining halls, Lavery Hall dining facility operations, one-time facility projects in the Residence and Dining Halls, and a Student Life Coordinator at the Center for European Studies and Architecture. The Dining revenue and expense budgets were decreased in the third quarter due to lower than projected business volume. The Housing and Residence Life expense budget was increased for the upper quad capital project planning and Oak Lane IV infrastructure.
10. The projected annual expense budget for Auxiliary Enterprises was increased for \$10.4 million in outstanding 2011-12 commitments and projects that were initiated but not completed before June 30, 2012. This amount includes \$1.3 million to fund project costs for the Telecommunication Fiber Optic project, \$2.3 million in residential projects, \$1.8 million in athletics projects, and \$2.4 million for dining projects. The remainder is spread across the other auxiliary programs.
11. The projected annual expense budgets for Parking and Transportation Services were increased for planned transportation equipment maintenance as well as for the Blacksburg Transit cost of fuel.
12. The projected annual revenue and expense budgets for Telecommunications Services were increased for on-campus project activity.
13. The projected annual revenue, expense, and reserve budgets for University Services were adjusted for increased Center for Alcohol Abuse Prevention self-generated revenue, planned equipment replacement by the Rescue Squad, personnel actions, and McComas Wall repairs.
14. The projected annual revenue budget for Intercollegiate Athletics was adjusted \$3.9 million to accommodate increased revenue from the Russell Athletic Bowl game, football season tickets, game settlements, parking revenue, conference allocation, NCAA opportunity fund, private fund raising, pouring rights revenue, licensing revenue, and an alignment of stadium fees and tickets sales. These increases were partially offset by decreased revenue from men's basketball ticket sales and concession sales. Annual expense and reserve draw budgets were adjusted \$10.4 million to accommodate increased expenses for personnel actions, operating adjustments, sport related projects, the Russell Athletic Bowl, and the procurement of equipment.
15. The projected annual revenue, expense, and reserve budgets for Electric Services were adjusted \$3.9 million to accommodate the decreased cost of wholesale electricity, reduced customer rates, and planned reserve restoration.
16. The projected annual revenue, expense, and reserve budgets for the Inn at Virginia Tech & Skelton Conference Center were adjusted to accommodate equipment, operating, and technology needs.
17. The projected annual revenue, expense, and reserve budgets for Other Enterprise Functions were adjusted for the final outcome of the pouring rights contract renewal, Licensing and Trademark scholarship contributions, Software Sales increased business volume, increased Tailor Shop self-generated revenue and equipment expenses, increased expenses for a planned facility lease, for increased Printing Services equipment expenses, and capital project expenses for the Center for the Arts.



**UNIVERSITY DIVISION  
AUXILIARY ENTERPRISES**

Attachment H

Dollars in Thousands

	July 1, 2012 to June 30, 2013			Annual Budget for 2012-13		
	Actual	Budget	Change	Original	Adjusted	Change
<b>Residence and Dining Halls</b>						
Revenues	\$99,297	\$99,187	\$110	\$98,775	\$99,187	\$412 (9)
Expenses	-98,484	-102,273	3,789 (1)	-97,098	-102,273	-5,175 (9,10)
Reserve Drawdown (Deposit)	-813	3,086	-3,899 (1)	-1,677	3,086	4,763 (9,10)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Parking and Transportation</b>						
Revenues	\$11,342	\$11,776	\$-434 (2)	\$11,776	\$11,776	\$0
Expenses	-10,195	-12,829	2,634 (2)	-12,389	-12,829	-440 (10,11)
Reserve Drawdown (Deposit)	-1,147	1,053	-2,200 (2)	613	1,053	440 (10,11)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Telecommunications Services</b>						
Revenues	\$19,578	\$19,930	\$-352 (3)	\$18,293	\$19,930	\$1,637 (12)
Expenses	-19,561	-21,619	2,058 (3)	-18,231	-21,619	-3,388 (10,12)
Reserve Drawdown (Deposit)	-17	1,689	-1,706 (3)	-62	1,689	1,751 (10,12)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>University Services System</b>						
Revenues	\$36,201	\$35,280	\$921 (4)	\$35,248	\$35,280	\$32 (13)
Expenses	-33,898	-36,348	2,450 (4)	-35,506	-36,348	-842 (10,13)
Reserve Drawdown (Deposit)	-2,303	1,068	-3,371 (4)	258	1,068	810 (10,13)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Intercollegiate Athletics</b>						
Revenues	\$54,837	\$54,055	\$782 (5)	\$50,179	\$54,055	\$3,876 (14)
Expenses	-53,566	-61,042	7,476 (5)	-48,087	-61,042	-12,955 (10,14)
Reserve Drawdown (Deposit)	-1,271	6,987	-8,258 (5)	-2,092	6,987	9,079 (10,14)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Electric Service</b>						
Revenues	\$34,491	\$34,604	\$-113	\$38,493	\$34,604	\$-3,889 (15)
Expenses	-31,053	-34,370	3,317 (6)	-37,880	-34,370	3,510 (10,15)
Reserve Drawdown (Deposit)	-3,438	-234	-3,204 (6)	-613	-234	379 (10,15)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Inn at Virginia Tech/Skelton Conf. Center</b>						
Revenues	\$10,577	\$10,322	\$255 (7)	\$10,302	\$10,322	\$20 (16)
Expenses	-10,266	-10,508	242 (7)	-9,895	-10,508	-613 (10,16)
Reserve Drawdown (Deposit)	-311	186	-497 (7)	-407	186	593 (10,16)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>Other Enterprise Functions</b>						
Revenues	\$11,482	\$10,867	\$615 (8)	\$10,414	\$10,867	\$453 (17)
Expenses	-12,753	-15,271	2,518 (8)	-9,453	-15,271	-5,818 (10,17)
Reserve Drawdown (Deposit)	1,271	4,404	-3,133 (8)	-961	4,404	5,365 (10,17)
Net	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL AUXILIARIES</b>						
Revenues	\$277,805	\$276,021	\$1,784	\$273,480	\$276,021	\$2,541
Expenses	-269,776	-294,260	24,484	-268,539	-294,260	-25,721
Reserve Drawdown (Deposit)	-8,029	18,239	-26,268	-4,941	18,239	23,180
Net	\$0	\$0	\$0	\$0	\$0	\$0



**CAPITAL OUTLAY BUDGET****Educational and General Projects**

1. The current year and total project budget amounts reflect the balance of maintenance reserve appropriation carried forward from fiscal year 2012 and the state's fiscal year 2013 allocation of \$5.649 million of Maintenance Reserve funds.
2. This project will support progress on fire alarm systems and accessibility improvements for several E&G buildings including Randolph Hall, War Memorial Hall, Food Science and Technology Building, Norris Hall, Newman Library, Lane Hall, Patton Hall, Litton Reaves Hall, Whittemore Hall, Architecture Annex and Wallace Annex. Design work is underway.
3. This is a subproject of an E&G Blanket Authorization, which allows unforeseen small projects to be authorized administratively with nongeneral funds for expediency. This subproject includes a \$1 million authorization to initiate planning for the Relocation of Agriculture programs. This subproject was closed June 30, 2013 because the Board of Visitors resolution approved at the June 2013 meeting for the entire Dairy Center Relocation project.
4. This project will plan the construction of a 73,000 gross square foot classroom building to meet the university's instructional classroom and laboratory needs. Preliminary design has been submitted to the State for review. The state has authorized construction funding which may be allocated at the completion of the preliminary designs cost review.
5. This project is for a central chiller plant facility in the southwest section of campus. Substantial completion was achieved in June 2013. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2013.
6. This project is for a 92,500 gross square foot building to provide modern laboratory space to meet the needs of animal and plant science research. Construction is underway with substantial completion expected in November 2013. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2013.
7. This project includes construction of a state-of-the-art performance theatre, creative technologies laboratory, and creative performance laboratory. The project is under construction with a substantial completion date of September 2013. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2013.
8. This project razes and replaces the unrecoverable center and north section of the building. Construction is underway with substantial completion expected in January 2014. The annual budget was adjusted in the third quarter to reflect expected cash outflows for fiscal year 2013.
9. This project is for a 154,900 gross square foot classroom and laboratory facility for undergraduate and research programs in the College of Engineering. Construction is underway with substantial completion expected in December 2013.
10. The project is complete and has been occupied since August 2012. The project may be closed and financial accounts terminated when completion of the authorized scope has been verified by the Chief Facilities Officer. The annual budget was adjusted in the first quarter because expenses planned for fiscal year 2012 were processed in fiscal year 2013.
11. The project is complete and was closed as of June 30, 2013. The annual budget was adjusted in the first quarter because expenses planned for fiscal year 2012 were processed in fiscal year 2013.
12. The project is complete and was closed as of June 30, 2013. The annual budget was adjusted in the first quarter because expenses planned for fiscal year 2012 were processed in fiscal year 2013.
13. The project is complete and was closed as of June 30, 2013.
14. The project is complete and was closed as of June 30, 2013. The annual budget was adjusted in the first quarter because expenses planned for fiscal year 2012 were processed in fiscal year 2013.
15. The project is complete and was closed as of June 30, 2013. The annual budget was adjusted in the first quarter because expenses planned for fiscal year 2012 were processed in fiscal year 2013.
16. The project is complete and was closed as of June 30, 2013. The annual budget was adjusted in the first quarter because expenses planned for fiscal year 2013 were processed in fiscal year 2012.
17. The purpose of this project is to construct a 48,000 gross square foot building along the campus perimeter to house various administrative and academic support functions in a central location. These needs are being accommodated in the Turner Street Building underway in partnership with the Virginia Tech Foundation. This project authorization may be closed pending the completion and occupancy of the Turner Street Building.
18. This is a subproject of a Blanket Authorization, which allows unforeseen small projects to be authorized administratively with nongeneral funds for expediency. This project includes a \$3.5 million authorization to initiate planning for a Sciences Laboratory Building that has been on hold. This subproject may be closed pending the state's implementation of planning funds for the project next fiscal year.
19. This project will plan the renovation of three academic buildings located in the core of main campus bordering the Drillfield: Davidson Hall-Front Section, Sandy Hall, and the Liberal Arts Building. This project is expected to begin planning work in July 2013. In June 2013, the state approved the implementation of funding to complete detail designs effective July 1, 2013.



**CAPITAL OUTLAY PROJECTS  
AUTHORIZED AS OF JUNE 30, 2013**

Dollars in Thousands

	CURRENT YEAR			TOTAL PROJECT BUDGET					
	ORIGINAL ANNUAL BUDGET	REVISED ANNUAL BUDGET	YTD EXPENSES	STATE SUPPORT	GENERAL OBLIGATION BOND	NONGENERAL FUND	REVENUE BOND	TOTAL BUDGET	CUMULATIVE EXPENSES
Educational and General Projects									
<u>Educational and General Maintenance Reserve</u>									
Maintenance Reserve	5,649	7,778	4,010	7,778	0	0	0	7,778	4,010 (1)
<u>Design Phase</u>									
Address Fire Alarm Systems and Access	550	550	179	5,501	0	0	0	5,501	179 (2)
Blanket: Planning Agriculture Programs Relocation	522	522	27	0	0	1,000	0	1,000	505 (3)
Planning: Classroom Building	1,282	1,282	1,035	0	0	2,000	0	2,000	1,035 (4)
<u>Construction Phase</u>									
Chiller Plant, Phase I	12,666	16,000	14,377	12,059	0	400	7,639	20,098	17,663 (5)
Human & Agricultural Biosciences Building I	23,625	30,000	28,081	53,759	0	0	0	53,759	36,838 (6)
Performing Arts Center	30,000	39,000	37,391	27,387	0	32,565	40,135	100,087	80,777 (7)
Renovate Davidson Hall, Phase I	12,000	16,000	14,544	31,119	0	0	0	31,119	19,427 (8)
Signature Engineering Building	36,000	36,000	32,208	47,609	0	18,650	28,959	95,218	56,191 (9)
<u>Close-Out</u>									
Academic and Student Affairs Building	6,362	7,882	5,893	0	0	0	45,153	45,153	43,164 (10)
Hampton Technology Research & Innovation Center	348	1,033	871	11,897	0	0	0	11,897	11,734 (11)
Infectious Disease Research Facility	0	564	504	4,000	0	6,163	0	10,163	9,370 (12)
Upgrade Campus Heating Plant	0	1,956	1,369	17,250	0	2,750	11,500	31,500	28,163 (13)
Veterinary Medicine Instruction Addition	3,132	5,164	3,508	0	0	3,200	10,800	14,000	12,343 (14)
Visitors and Undergraduate Admissions Center	300	423	261	0	0	3,400	7,100	10,500	10,338 (15)
VT-Carilion Research Inst. Third Floor Upfits	8,000	5,911	5,361	0	0	15,000	0	15,000	14,450 (16)
<u>On Hold and Not Funded</u>									
Administrative Services Building	0	0	0	0	0	0	12,000	12,000	0 (17)
Blanket: Planning Science Building Laboratory I	0	0	0	0	0	3,500	0	3,500	547 (18)
Planning: Academic Building Renewal	0	0	0	0	0	0	0	0	0 (19)
Sciences Building Laboratory I	0	0	0	0	0	0	0	0	0 (20)
<b>TOTAL</b>	<b>140,436</b>	<b>170,065</b>	<b>149,617</b>	<b>218,359</b>	<b>0</b>	<b>88,628</b>	<b>163,286</b>	<b>470,273</b>	<b>317,683</b>



## CAPITAL OUTLAY BUDGET (Continued)

20. This project is envisioned to provide an 80,000 gross square foot scientific laboratory facility to support interdisciplinary instruction and research. The total project budget is \$46.45 million including \$31.45 million of General Fund and \$15 million of nongeneral fund. The project had been on hold pending the accumulation of nongeneral fund sources. The nongeneral fund sources have been identified, and the university is working with the state on the timing of the General Fund resources to implement the project.

**Auxiliary Enterprises Projects**

1. Projects are scheduled and funded by the auxiliary enterprises during the annual Auxiliary Enterprise budgeting process. The units prepare five-year plans that outline their highest priority deferred maintenance needs. The annual budget reflects the spending plans of the auxiliary units on scheduled maintenance reserve work for fiscal year 2013. The outstanding balance is committed to a five year forward looking maintenance plan to ensure sufficient resources are available for major maintenance repairs. The auxiliary maintenance reserve program covers 93 assets with a total replacement value of \$1 billion. The outstanding balance of the Total Project Budget is for maintenance reserve work scheduled for fiscal year 2014 and beyond.
2. This project will plan the replacement of the existing four Upper Quad residential facilities (Rasche, Brodie, Thomas, and Monteith) with two new residential facilities. The design will include a master plan of the precinct with a conceptual drawing of an envisioned Corps Leadership and Military Science Building to ensure continuity of the Upper Quad.
3. This project includes installation of a new fiber-optic core on campus to update the communication system. The total expected costs are \$2 million and this project is anticipated to be complete in January 2015. The annual budget was adjusted in the first quarter to reflect revised expected cash outflows for fiscal year 2013.
4. The subproject is complete and the house is occupied. As work progressed, the project incurred unexpected infrastructure costs related to electrical ductbank work, water and sewer revisions, storm water management and detention system changes, and unsuitable soils. The total budget was increased by \$279 thousand to reflect those additional infrastructure costs. The house component is over budget with an estimated overrun of \$1.06 million. The university is working with the private partner to infuse additional funding to cover those costs. The university expects the total budget for this project to be approximately \$6 million.
5. This project includes the third and final phase of addressing moisture penetration and structural problems in the exterior walls of McComas Hall. The total budget was increased by \$275 thousand to reflect additional repair costs for a total authorization of \$3.375 million. The project is anticipated to be complete late summer 2013. Year-to-date expenses exceeded the annual budget because expenses expected in fiscal year 2014 were invoiced in fiscal year 2013. Resources were sufficient to cover the additional cash outflow.
6. This project includes improvements to four complementary communication infrastructure components. The four components include a unified communications system, upgrading the Internet Protocol (IP) Network, upgrading the cable plant, and upgrading equipment rooms in various facilities. The total expected costs are \$16.508 million and this project is anticipated to be complete in spring 2016. Year-to-date expenses exceeded the annual budget because expenses expected in fiscal year 2014 were invoiced in fiscal year 2013. Resources were sufficient to cover the additional cash outflow.
7. The project is complete and has been closed with final project costs of \$66.969 million
8. The project is complete and has been closed with final project costs of \$6.904 million
9. The purpose of this project is to build a new field house to increase the availability of indoor training time for the football program and other athletic programs. In addition, Rector Field House may be renovated to increase its functionality for indoor athletic events. Design is on hold pending resolution of a site location. Year-to-date expenses exceeded the annual budget because of project management work related evaluation of site options. Resources were sufficient to cover the additional cash outflow.
10. This project envisioned a new residence hall of approximately 250 beds. Cost estimates exceed the project budget and the project is on hold while the university explores alternatives. Funding for the project may be considered pending a program plan and financial plan.
11. The purpose of this unfunded parking blanket authorization balance is to complete future improvements and repair projects for the parking system as specific needs are identified and as funding becomes available.
12. This is the remaining authorization of the \$23.5 million Oak Lane Community, Phase IV project. The remaining Oak Lane Community expansion, houses two through five and their necessary site improvements, may be constructed as organizations come forward with plans and commitments for their one-third funding requirement per house. The total remaining authorization was decreased by \$279 thousand to reflect the unexpected cost increases associated with the necessary site improvements to support the first house.



## Capital Outlay Projects Authorized as of June 30, 2013 (Continued)

Dollars in Thousands

	CURRENT YEAR			TOTAL PROJECT BUDGET					
	ORIGINAL ANNUAL BUDGET	REVISED ANNUAL BUDGET	YTD EXPENSES	STATE SUPPORT	GENERAL OBLIGATION BOND	NONGENERAL FUND	REVENUE BOND	TOTAL BUDGET	CUMULATIVE EXPENSES
Auxiliary Enterprises Projects									
<u>Auxiliary Maintenance Reserve</u>									
Maintenance Reserve	6,600	6,600	5,442	0	0	14,573	0	14,573	5,442 (1)
<u>Design Phase</u>									
Planning: Upper Quad Residential Facilities	0	55	4	0	0	5,850	0	5,850	4 (2)
<u>Construction Phase</u>									
Campus Fiber Optic Improvement	294	754	516	0	0	2,000	0	2,000	1,270 (3)
Phase IV of Oak Lane Community (House 1)	1,097	3,600	3,455	0	0	4,942	0	4,942	4,700 (4)
Repair McComas Hall Exterior Wall Structure, Ph III	2,100	2,100	2,367	0	0	3,375	0	3,375	3,106 (5)
Unified Communications & Network Renewal	6,810	3,200	3,664	0	0	4,500	12,008	16,508	8,390 (6)
<u>Close-Out</u>									
Renovate Ambler Johnston Hall	8,931	8,931	6,040	0	0	0	75,000	75,000	66,969 (7)
West End Market Renovation & Expansion	0	168	168	0	0	7,310	0	7,310	6,904 (8)
<u>On Hold and Not Funded</u>									
Indoor Athletic Training Facility	0	0	1	0	0	500	24,500	25,000	8 (9)
New Residence Hall II	0	0	0	0	0	0	27,000	27,000	182 (10)
Parking Blanket Authorizations Balance	0	0	0	0	0	0	16,547	16,547	0 (11)
Phase IV of Oak Lane Community (Houses 2 - 5)	0	0	0	0	0	0	18,558	18,558	0 (12)
TOTAL	25,832	25,408	21,657	0	0	43,050	173,613	216,664	96,976
GRAND TOTAL	<u>\$ 166,268</u>	<u>\$ 195,473</u>	<u>171,274</u>	<u>\$ 218,359</u>	<u>\$ -</u>	<u>\$ 131,678</u>	<u>\$ 336,899</u>	<u>\$ 686,936</u>	<u>\$ 414,659</u>

**RECOMMENDATION:**

That the report of income and expenditures for the University Division and the Cooperative Extension/Agricultural Experiment Station Division for the period of July 1, 2012 through June 30, 2013 and the Capital Outlay report be accepted.

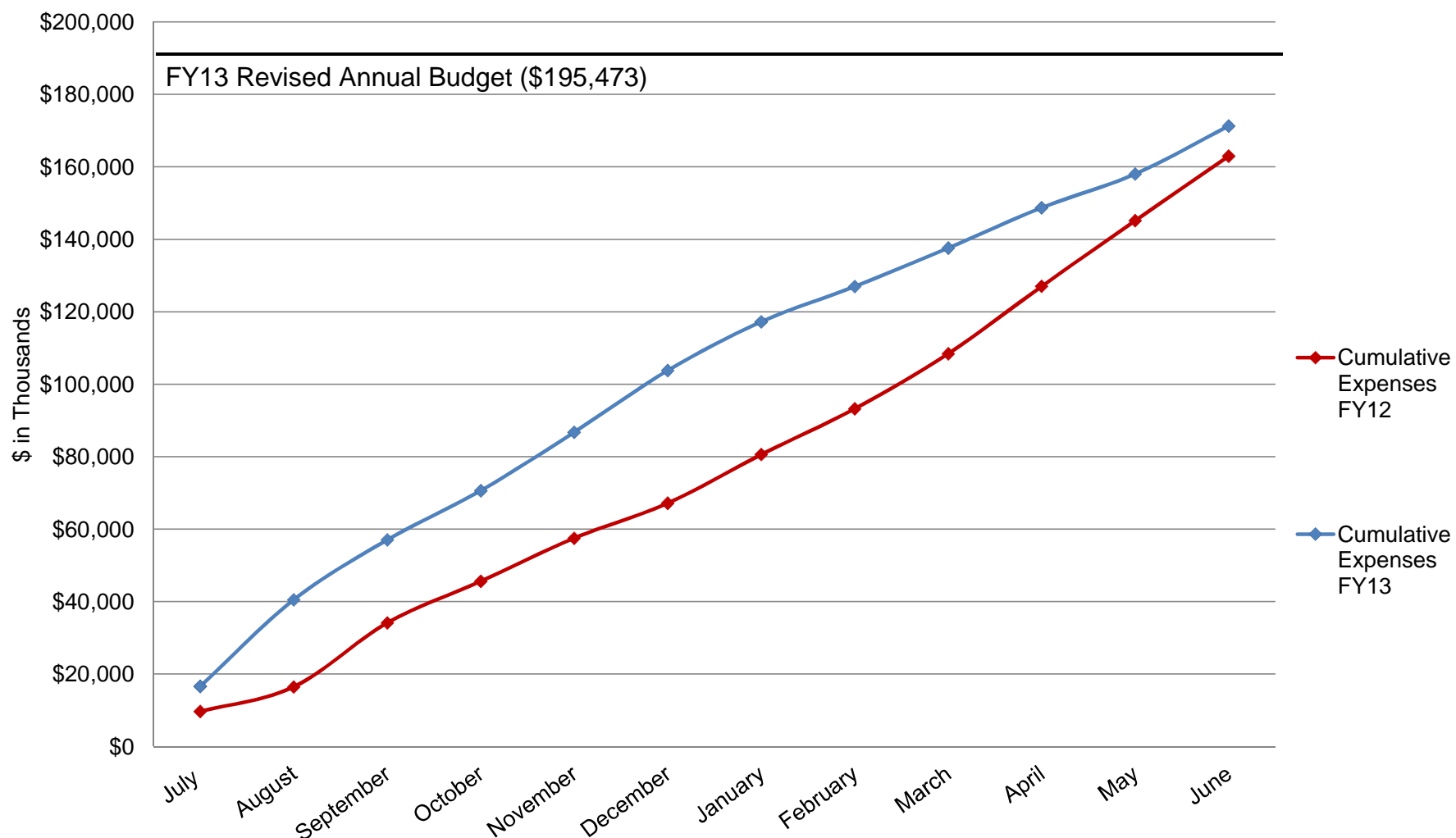
September 9, 2013



# CAPITAL PROGRAM ANNUAL PERFORMANCE

## Cumulative Monthly Expenditures

### Fiscal Year 2012 and Fiscal Year 2013

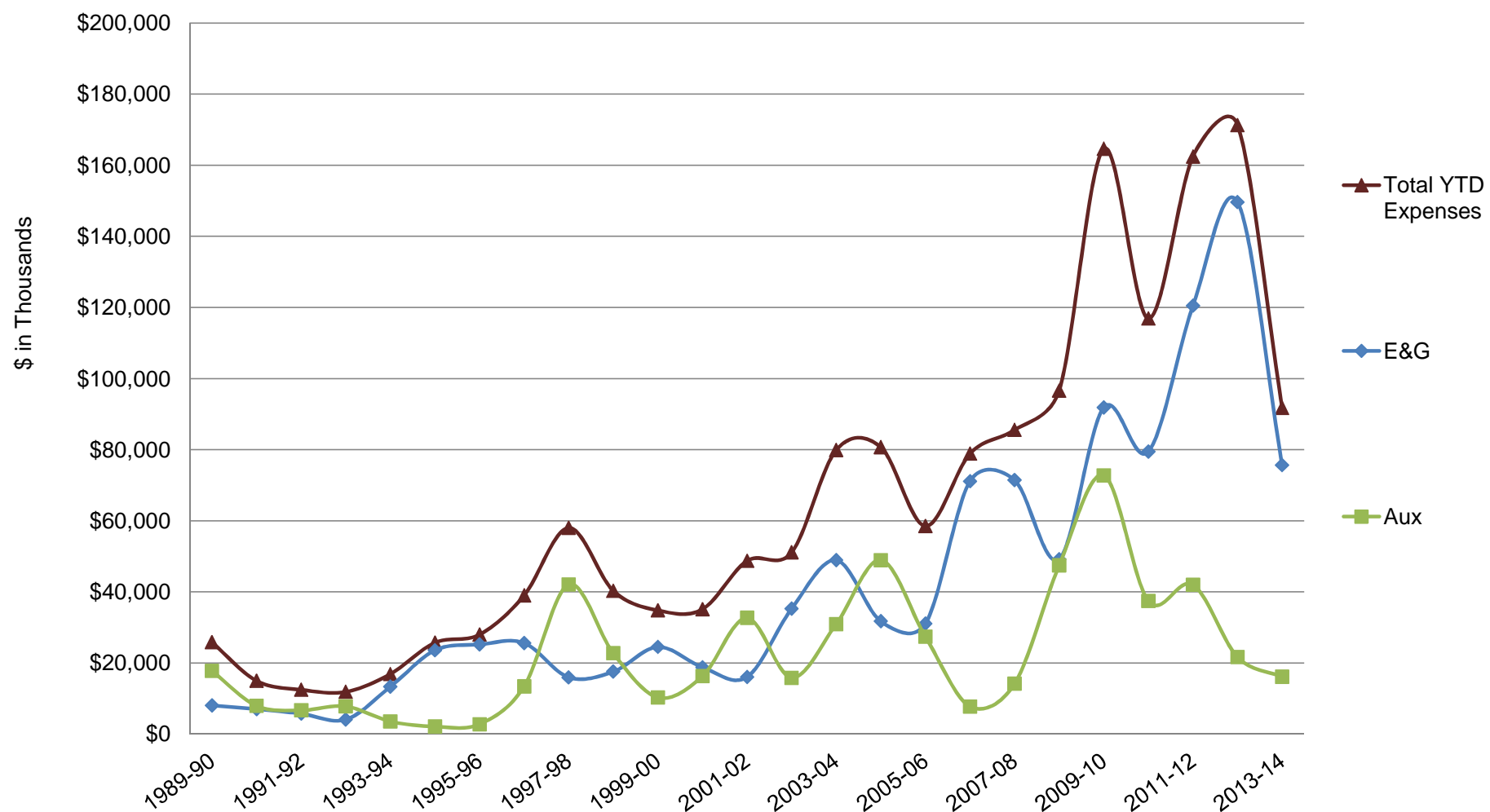




# CAPITAL PROGRAM EXPENSE TREND

## Total Annual Expenses for Active Capital Projects

### Fiscal Year 1990 - Fiscal Year 2014

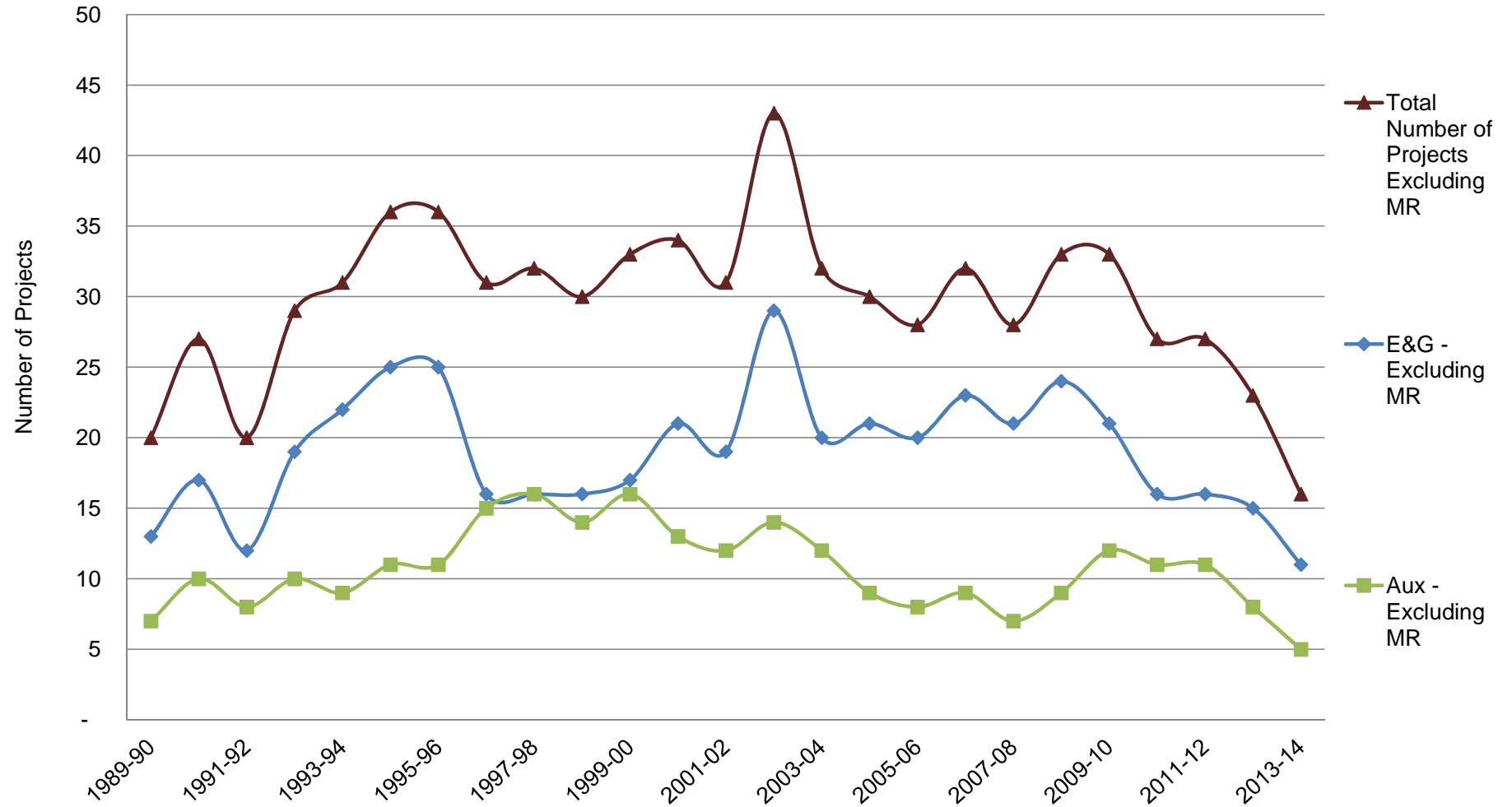




# CAPITAL PROGRAM PROJECTS

## Total Number of Active Capital Projects

### Fiscal Year 1990 - Fiscal Year 2014

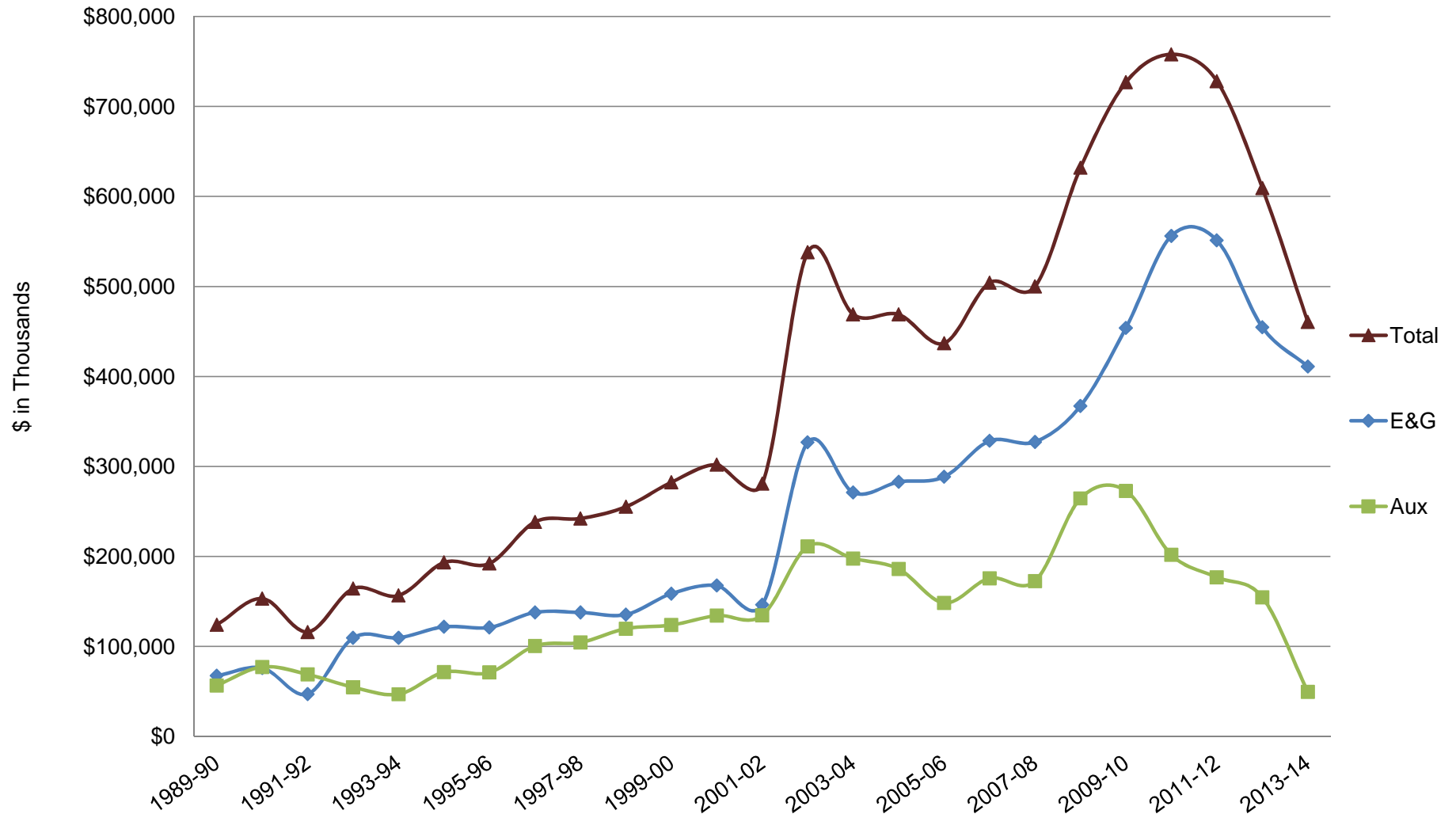




# CAPITAL PROGRAM TOTAL BUDGET

## Total Budget Level of Active Projects

### Fiscal Year 1990 - Fiscal Year 2014

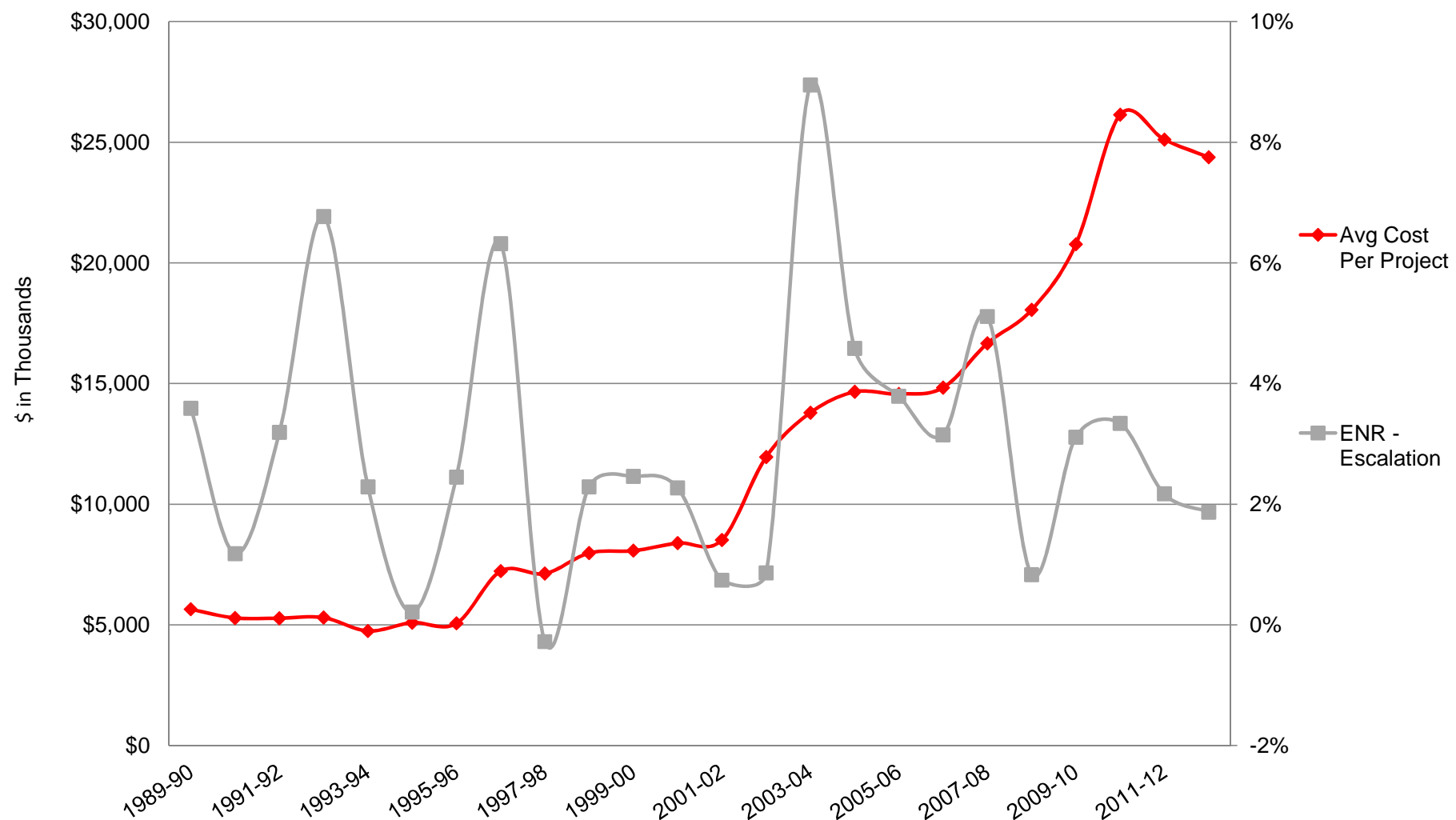




# CAPITAL PROGRAM AVERAGE COST TREND

## Average Cost for Active Projects vs. ENR Escalation

### Fiscal Year 1990 - Fiscal Year 2013





**RESOLUTION AUTHORIZING  
THE SIGNATURE OF CONTRACTUAL DOCUMENTS**

**WHEREAS**, it is the desire of the Board of Visitors of Virginia Polytechnic Institute and State University that M. Dwight Shelton, Jr., so long as he occupies his present position as Vice President for Finance and CFO, be designated as the Chief Contracting Officer of the University; and

**WHEREAS**, it is the desire of the Board of Visitors that the Chief Contracting Officer be given authority to designate individuals in positions as deemed appropriate to execute specific types of contracts and agreements as they relate to their functional areas;

**NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE BOARD OF VISITORS OF VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY:**

1. That M. Dwight Shelton, so long as he occupies his present position as Vice President for Finance and CFO, is hereby designated as the Chief Contracting Officer of the university and is authorized to execute all contracts and agreements on behalf of Virginia Polytechnic Institute and State University.
2. That the President is also authorized to sign all contracts and agreements.
3. That the Chief Contracting Officer may designate individuals in positions as deemed appropriate to execute specific kinds of contracts and agreements including, but not limited to, such areas as physical plant and capital outlay, sponsored programs, extension services, Agricultural Experiment Station, athletics and procurement.
4. That in the absence of the Vice President for Finance and the President, the Senior Vice President and Provost is authorized to sign all contracts and agreements.
5. That the President's Chief of Staff shall serve as the Contract Review Officer and be authorized to sign contractual agreements up to \$1,000,000 in value.

**RECOMMENDATION:**

That the proposed resolution authorizing contractual signature authority be approved.

September 9, 2013



## **Capital Outlay Plan for 2014-2020**

### **JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE**

**June 30, 2013**

At its March 2013 meeting, the Board of Visitors considered a recommendation that a list of potential projects for inclusion in the 2014-2020 Capital Outlay Plan (Plan) be approved and that the university be authorized 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 recommendation was approved, and the university has proceeded accordingly.

On May 21, 2013, the state issued instructions for the preparation and submission of the 2014-2020 Capital Outlay Plan. The deadline for submission of the Six-Year Plan to the state was June 21, 2013. In accordance with the state's traditional requirement of prioritizing projects for General Fund support over a six-year period, the university prepared and submitted the Plan in the customary three biennia arrangement. Attachment A shows the full list of projects including those with General Fund support and those funded entirely with nongeneral fund resources. The biennia show separate lists for the University Division and the Cooperative Extension-Agricultural Experiment Station Division. A brief narrative description of each project is shown on Attachment B.

The projects in the first biennium may be used by the state to update its capital outlay plan and to make funding decisions in the 2014 General Assembly. The projects in the second and third biennia are for planning purposes only. This project arrangement reflects the needs of the university and positions the university with options to respond to various funding abilities of the state in the future. The projects are in priority order, and the cost estimates reflect escalation to a midpoint of construction based on the biennium.

The state capital program includes phased review, approval, and appropriation procedures under which a project requesting General Fund resources may be reviewed and approved up to three times: pre-planning, detail planning, and full funding. Thus, a project may remain on the state capital outlay plan for two or three funding cycles until it reaches the full funding phase. For technical reasons, the state capital budget process includes an instruction to continue submitting information for projects that have previously been approved by the Board of Visitors, submitted, and approved for some level of planning by the Commonwealth, but are not yet fully funded. Virginia Tech has four projects that meet this condition: Classroom Building equipment funding, Academic Building Renovations construction and equipment funding, Improve Kentland Facilities construction and equipment funding, and Sciences Laboratory Building planning, construction, and equipment funding. The university provided the necessary information in accordance with the state's instructions to ensure the projects continue to move through the capital outlay process. The university does not continue listing a General Fund project item on its plan once a project is approved by the state for planning.

The plan includes projects with 100 percent nongeneral fund support and these are located at the lower priority levels of each biennium because they do not compete for General Fund resources. These projects may be approved by the Board of Visitors under the



restructuring management agreements on an as needed basis and as funding is sufficient. The university will bring forward a resolution for each item with 100 percent nongeneral fund support on a project-by-project basis. In accordance with the usual state instructions, these projects are not included in the submission to the state.

Projects with nongeneral fund support, including portions of gift campaigns, may be financed with debt. Each potential debt financing under goes a financial feasibility assessment to ensure resources are sufficient to cover the full debt service term without unnecessary financial risk to unit operations. The positioning of debt is further analyzed to ensure the university does not exceed the parameters of the university debt policy which sets a maximum limit of a 7 percent ratio of total annual debt service to total operating expenses. While the policy sets a maximum ratio of 7 percent, university management, in accordance with direction from the Board of Visitors, manages debt levels to ratios below 5 percent as a conservative measure to ensure resource strength is focused on the strategic operations of the institution. The debt ratio for the year ending June 30, 2012 is three and two-thirds percent. For the forward looking six-year period, the projected debt ratio, including implementation of high priority debt issuance items on the capital list, is expected to remain below 5 percent.

Beyond the submission of the Plan to the state, the expected capital process for the 2014 budget session includes at least five major phases:

- 1) over the summer of 2013, a state appointed Advisory Committee (staffed by several central agencies and offices) will review the university's 2014-2020 Plan with potential follow up by the university;
- 2) by November 1, 2013, the Advisory Committee will provide a set of recommendations to update the state's current Plan for the 2014-2020 period to the Governor and Chairmen of the Money Committees;
- 3) on December 16, 2013, the Governor is scheduled to present to the General Assembly a bill proposing amendments to the current capital outlay plan and a budget bill including planning funds or full funding for high priority items in the plan;
- 4) during the 2014 General Assembly, the legislature may amend the proposed plan and proposed funding items in the Executive Budget Bill; and,
- 5) July 1, 2014, the updated 2014-2020 plan and any funded items will be effective.

### **Recommendation:**

That the Six-Year Capital Outlay Plan for the period 2014 through 2020 as submitted to the state be ratified.

September 9, 2013



## Attachment A

## Capital Outlay Plan for 2014-2020

JOINT FINANCE AND AUDIT COMMITTEE  
AND BUILDINGS AND GROUNDS COMMITTEE

June 30, 2013

## FIRST BIENNIUM -- 2014-2016

Proposed Priority Level	UNIVERSITY DIVISION	Budget by Revenue Source		
		Dollars in Millions		
		Costs Projected to 2017		
		General Funds	Nongeneral Funds	Total
1	Undergraduate Science Laboratory Building	\$ 66.0		\$ 66.0
2	Central Chiller Plant, Phase II	39.0	\$ 5.3	44.3
3	Holden Hall Renovation and Expansion	68.0	7.6	75.6
4	Translational Research and Medicine Laboratory	36.6	18.4	55.0
5	Corps Leadership and Military Science Building	40.1	5.0	45.1
6	Renovate Derring Hall, Phase I	55.8		55.8
7	Renovate Library	89.3		89.3
8	Randolph Hall Renovation and Expansion	155.5	17.3	172.8
9	Robeson Hall Renovation and Expansion	48.6	12.2	60.8
10	VTCRI Vivarium and Research Addition	22.0	22.0	44.0
11	New College of Business Building	90.4		90.4
12	Renew Burruss Hall Infrastructure	75.2		75.2
13	Health and Safety Improvements	15.1		15.1
14	Renovate Southgate Center	10.3		10.3
15	Campus Road Package, Phase I	44.0		44.0
16	Virginia Bioinformatics Institute, Phase III (construction)		40.6	40.6
17	Upper Quad Residential Facilities (construction)		84.2	84.2
18	Health Center Improvements		2.5	2.5
19	South Recreation Field Replacement		4.6	4.6
20	Airport "Hokie Bird" Hangar		4.9	4.9
	<b>TOTAL UNIVERSITY DIVISION</b>	855.9	224.6	1,080.5
	<b>COOPERATIVE EXTENSION/AGRICULTURAL EXPERIMENT STATION DIVISION (229)</b>			
1	Animal Production and Livestock Facilities	49.1		49.1
	<b>TOTAL CE/AES PROJECTS</b>	49.1	-	49.1
	<b>TOTAL OF 2014-2016 BIENNIUM</b>	<u>\$ 905.0</u>	<u>\$ 224.6</u>	<u>\$ 1,129.6</u>

Presentation Date: September 9, 2013



## Attachment A

## SECOND BIENNIUM -- 2016-2018

June 30, 2013

		Budget by Revenue Source		
		Dollars in Millions		
		Costs Projected to 2019		
Priority Level	UNIVERSITY DIVISION	General Funds	Nongeneral Funds	Total
1	Library Storage Addition	\$ 6.8		\$ 6.8
2	Sustainable Materials Building	39.7	\$ 13.2	52.9
3	Electrical and Computer Engineering Building	98.9	24.8	123.7
4	Renovate Norris Hall	32.7	4.6	37.3
5	Replace Femoyer Hall	30.1		30.1
6	Comparative Medicine Research Facility	7.0	7.0	14.0
7	Institute for Critical Technology and Applied Science, Phase III	14.1	14.1	28.2
8	VTCRI Health Sciences Offices and Research Laboratory	5.1	5.1	10.2
9	Renovate Hillcrest Hall	15.5		15.5
10	Renovate Wallace Hall	4.9		4.9
11	Replace Food Science and Technology Building	38.0	6.7	44.7
12	International Affairs Building	11.5		11.5
13	Renovate Price Hall	30.7		30.7
14	Data Center	27.7	9.3	37.0
15	Manufacturing Prototype and Demonstration Facility	12.3	4.2	16.5
16	Power Plant/Substation	32.1	21.5	53.6
17	Campus Road Package, Phase II	16.2		16.2
18	War Memorial Hall Renovation of Recreation Spaces		62.6	62.6
19	New Student Center		124.1	124.1
20	Graduate Student Center Housing		5.4	5.4
21	Rector Field House Renovation		5.6	5.6
22	Baseball Press Box and Restrooms Improvements		3.0	3.0
23	Tennis Stadium Renovation		3.2	3.2
	<b>TOTAL UNIVERSITY DIVISION</b>	423.3	314.4	737.7
	<b>COOPERATIVE EXTENSION/AGRICULTURAL EXPERIMENT STATION DIVISION (229)</b>			
1	Human and Agricultural Biosciences Building, Phase II	85.6	-	85.6
	<b>TOTAL CE/AES PROJECTS</b>	85.6	-	85.6
	<b>TOTAL OF 2016-2018 BIENNIUM</b>	<u>\$ 508.9</u>	<u>\$ 314.4</u>	<u>\$ 823.3</u>

Presentation Date: September 9, 2013



## Attachment A

## THIRD BIENNIUM -- 2018-2020

June 30, 2013

Priority Level	UNIVERSITY DIVISION	Budget by Revenue Source		
		Dollars in Millions		
		Costs Projected to 2021		
		General Funds	Nongeneral Funds	Total
1	Replace Center for Molecular Medicine and Infectious Disease	\$ 12.0	\$ 12.0	\$ 24.0
2	Patton Hall Renovation	22.5	7.4	29.9
3	Hutcheson /Smyth Halls Renovation	59.1		59.1
4	Bishop-Favrao Hall Expansion	35.0	5.0	40.0
5	New Natural Resources Building	69.4	12.2	81.6
6	VTTI Research Building IV	4.8	4.8	9.6
7	Squires Conversion to Academics	128.1		128.1
8	Falls Church Facility Expansion	8.4		8.4
9	Pamplin Hall Renovation	38.9		38.9
10	Kentland Facilities Improvements: Historic Renovations	8.0		8.0
11	Sterrett Facility Renovation	11.0		11.0
12	Lane Hall Rehabilitation	11.8		11.8
13	VBI Data Center Expansion		6.6	6.6
14	Academic Music Building		16.7	16.7
15	Olivio Ferrari Pavilion		5.3	5.3
16	Owens Hall Renovation		10.6	10.6
17	Pritchard Hall Renovation		107.0	107.0
18	New Recreation Facilities		48.1	48.1
19	G. Burke Johnston Renovation		10.2	10.2
20	Inn at Virginia Tech, Phase II		22.2	22.2
	<b>TOTAL UNIVERSITY DIVISION</b>	409.0	268.1	677.1
	<b>COOPERATIVE EXTENSION/AGRICULTURAL EXPERIMENT STATION DIVISION (229)</b>			
1	Middleburg Equine Arena		2.5	2.5
	<b>TOTAL CE/AES PROJECTS</b>	-	2.5	2.5
	<b>TOTAL OF 2018-2020 BIENNIUM</b>	<u>\$ 409.0</u>	<u>\$ 270.6</u>	<u>\$ 679.6</u>
	<b>TOTAL 2014-2020 CAPITAL OUTLAY PLAN</b>	<u><u>\$ 1,822.9</u></u>	<u><u>\$ 809.6</u></u>	<u><u>2,632.5</u></u>

Presentation Date: September 9, 2013



## Attachment B

### Project Descriptions for the 2014-2020 Capital Outlay Plan

#### JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

June 30, 2013

#### First Biennium Projects: 2014-2016

##### University Division

##### 1. Undergraduate Science Laboratory Building

This project has been on the university's plan since 2007 and is included as a high priority to increase the quantity of high quality general assignment instructional laboratories to address the significant growth in life sciences and other laboratory instruction. This project envisions a new facility of 77,000 gross square feet.

##### 2. Chiller Plant, Phase II

This project is the second phase of a strategic plan to establish a campus centralized cooling system. The Phase I project has been approved by the state, and the new plant is under construction on the southwest area of campus. This project will replace outdated equipment in the existing central plant on the north side of campus, and install distribution piping to connect the major plant systems and create a centralized campus cooling system.

##### 3. Holden Hall Renovation and Expansion

Holden Hall was constructed in 1940 with no major renovations or building improvements since going into service. This project proposes to fully renovate the existing 42,000 gross square foot building and construct a 59,240 gross square foot addition to support the Mining and Minerals Engineering program, the Materials Science and Engineering program, and other engineering programs.

##### 4. Translational Research and Medicine Laboratory

The Translational Research and Medicine Laboratory project envisions a 90,000 gross square foot scientific laboratory facility to support the expansion of basic and applied research in the biological and life sciences. This project is a joint effort of the College of Agriculture and Life Sciences, College of Science, and College of Veterinary Medicine.

##### 5. Corps Leadership and Military Science Building

This project has been on the university's plan since 1993, formerly titled Lane Hall Renovation/Addition. The Corps Leadership and Military Science Building envisions a 60,530 gross



square foot building that will provide new permanent space for Corps of Cadets and ROTC programs.

6. Derring Hall Renovation, Phase I

Derring Hall was constructed in 1969 with no major improvements or renovations since the original construction was completed. This request is to renovate and modernize about 118,130 gross square feet of the 208,000 total gross square foot building.

7. Library Renovations

Newman Library was constructed in 1955, with an addition in 1980, and serves as the central materials storage facility for the entire university. This project request is for the reorganization and modernization of the 226,000 gross square foot library to provide a high quality library environment with up-to-date interactive learning formats.

8. Randolph Hall Renovation and Expansion

Randolph Hall was constructed in 1952 with an addition in 1959, and no major renovations since the construction was completed. The project includes renovating the entire 166,000 gross square foot existing building and constructing a 40,000 gross square foot addition that will renew the entire facility to support modern engineering programs and instructional space.

9. Robeson Hall Renovation and Expansion

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 66,100 gross square foot existing building and constructing a 44,400 gross square foot addition to provide modern laboratories and support space to meet the needs for instructional and research laboratory space for the physics programs.

10. VTCRI Vivarium and Research Addition

This project is to construct a four-story, 45,500 gross square foot addition to the existing Virginia Tech Carilion Research Institute building in Roanoke, VA. The addition will provide critical vivarium and laboratory space to continue the growth of the research program.

11. New College of Business Building

The envisioned project is for a 120,000 gross square foot building that would modernize the classroom, laboratory, and faculty office space to house the entire College of Business.

12. Burruss Hall Infrastructure Renewal

Burruss Hall was built in 1936. There have been two additions to the building (the west wing in 1968 and the east wing in 1970) and only one renovation to convert a portion the north elevation to academic use in 2007. The mechanical, electrical, plumbing, and envelop systems are deteriorated and failing. This project proposes to replace the systems and



renovate the remaining 120,000 gross square foot un-renovated portion of the 158,000 gross square foot building.

### 13. 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 updating needs assessments that are beyond the scope of the Maintenance Reserve program.

### 14. Renovate Southgate Center

This project will make renovations to portions of the building to house the Police Department, the Emergency Management department, and swing space for programs dislocated during renovation projects. The renovations will include approximately 38,100 gross square feet of space and will reconfigure the interior partitioning and associated mechanical, electrical, plumbing, and telecommunications upgrades to accommodate reconfigured spaces and open plan layouts.

### 15. Campus Road Package, Phase I

This project is the first of two campus road projects envisioned to support the future build out of the campus master plan. This first phase will provide an access road to the Visitors Center and a perimeter road on the western side of campus.

### 16. Virginia Bioinformatics Institute, Phase III (construction)

The project includes 51,000 gross square feet of additional private and open office space for faculty, researchers, research associates, and support personnel for the Virginia Bioinformatics Institute. The project design is complete with a construction request pending the outcome of external funding.

### 17. Upper Quad Residential Facilities (construction)

This project is to replace the four outdated and deteriorated Upper Quad residential facilities with two modern residence halls. A \$5.85 million planning authorization is underway and this item reflects the balance of the budget needed to complete the project.

### 18. Health Center Improvements

This project envisions a 3,000 square foot addition to address increasing student service demands. The addition would provide additional interview rooms, exam rooms, open clinic space, and expanded clinic support and storage space.

### 19. South Recreation Field Replacement

This project includes installation of artificial turf within an approximately one acre plot outside the limits of the airport runway expansion. The artificial turf fields would accommodate six multi-purpose fields for soccer and flag football which can be converted



into four softball fields. It would also relocate fourteen light poles to provide lighting for the playing fields.

## 20. Airport “Hokie Bird” Hangar

This project envisions an approximately 12,500 gross square foot hangar for two planes with office space for the pilots and reception area on a prepared site at the Airport. The design and site would allow for future expansion of the hangar to hold four planes.

## **Cooperative Extension/Agricultural Experiment Station Division**

### 1. Animal Production and Livestock Facilities

This project includes relocating the existing College of Agriculture and Life Sciences swine offspring production and research program to another university agricultural location in the vicinity of the Blacksburg campus. The project envisions 196,300 gross square feet of new facilities including a gestation house for 130 sows, a farrowing house, a finishing and nursery house for 300 pigs, and support facilities for personnel.

## **Second Biennium: 2016-2018**

## **University Division**

### 1. Library Storage Addition

The project envisions the construction of a 6,000 gross square foot addition to the high-density storage facility near Airport Road to accommodate shifting approximately 400,000 volumes out of the main campus library.

### 2. Sustainable Materials Building

This project envisions a new facility of 92,300 gross square feet for science classrooms, laboratories, laboratory support services, and office space for faculty in the Wood Science and Forest Products department. The anticipated site is near the existing Brooks Forest Products Center.

### 3. Electrical and Computer Engineering Building

This project envisions a 175,000 gross square foot building with classroom, laboratory, and academic office space to house the College of Engineering’s Electrical Engineering and Computer Engineering departments.

### 4. Renovate Norris Hall

Norris Hall was constructed in two phases: the west wing in 1960 and the east wing in 1962. This project proposes to fully renovate major areas of the 68,000 gross square foot building to support engineering programs.



#### 5. Replace Femoyer Hall

The building was constructed in 1949 as a dormitory, with no major building improvements or renovations since it was originally constructed, and it now houses academic programs. This project proposes to raze and replace the 36,000 gross square foot building with a new academic building.

#### 6. Comparative Medicine Research

This project is to relocate the existing College of Veterinary Medicine (CVM) swine research program at the Prices Fork Road location to new facilities adjacent to the existing CVM complex. The new facilities will include 15,000 gross square feet of laboratory space.

#### 7. Institute for Critical Technology and Applied Science, Phase III

This project is to complete the originally envisioned total facilities for the institute with a three-story, 30,000 gross square foot addition to the Phase II building. The project will include specialized research laboratories supporting research in several multi-disciplinary areas including bioengineering, biomaterials, bio-nanotechnology and sensor technology.

#### 8. VTCRI Health Sciences Offices and Research Laboratory

This project will construct a 30,000 gross square foot facility that will house state-of-the-art research laboratory and research support space for the Virginia Tech Carilion School of Medicine and Research Institute.

#### 9. Renovate Hillcrest Hall

Hillcrest Hall is a 47,800 gross square foot building constructed in 1949 with an addition in 1971 and currently houses the honors academic and residential programs. This project will renovate the first and second floors to better support the residential honors program and undergraduate academic support programs.

#### 10. Renovate Wallace Hall

This project will renovate and modernize approximately 9,000 square feet within Wallace Hall to provide improved academic support, research, and administrative office space for the College of Liberal Arts and Human Sciences and the College of Business Department of Hospitality and Tourism Management's demonstration kitchen facility.

#### 11. Replace Food Science and Technology Building

This project is to replace the existing three-story, 48,000 gross square foot Food Science and Technology Building that was originally constructed in 1952 with a modern laboratory facility. The current building is one of the most outdated academic and research buildings on campus.

#### 12. International Affairs Building

The project envisions a new, on-campus International Affairs Building to serve as a permanent student support center and consolidate International Affairs programs. The



envisioned 20,000 gross square foot building will include administrative space for the International Affairs programs, temporary living space for visiting scholars, and student commons spaces for international students.

### 13. Renovate Price Hall

Price Hall was constructed in 1907 and is one of the oldest buildings on the campus. The 57,000 gross square foot building has received no major renovations, upgrades, or improvement projects since the original construction was completed. This project proposes to gut and renovate the entire building for offices, conference/seminar rooms, classrooms, and computer laboratories to repurpose for academic programs.

### 14. Data Center

The University Data Center is envisioned to be a 55,000 gross square foot building that will be a resource supporting and in partnership with institutes, colleges, departments, and administrative areas to address needs for information storage and transmission.

### 15. Manufacturing Prototype and Demonstration Facility

This project envisions a 40,000 gross square foot facility that will feature a flexible use mechanical laboratory that will enable the testing of large equipment. The building will be shared by the College of Architecture and Urban Studies and the Institute for Critical Technology and Applied Science.

### 16. Power Plant/Substation

The projected rate of campus growth in the master plan is expected to exceed the expected serviceability of the existing power plant by 2020. This project is to plan and build additional power plant capacity for the campus and include the use of alternative energy sources.

### 17. Campus Road Package, Phase II

This project is the second of two campus road projects. This phase envisions four sub-projects: the realignment of Duck Pond Drive with Perry Street, a roundabout at Washington Street and Spring Road, a walkway under Duck Pond Drive, and removal of the anticipated abandoned section of Southgate Drive after the airport runway extension is complete.

### 18. War Memorial Hall Renovation of Recreation Spaces

This project envisions a comprehensive renovation of the 123,000 gross square foot Recreation Sports portion of War Memorial Hall inclusive of envelope, mechanical, electrical, and plumbing upgrades. A majority of the gymnasium will be converted into new spaces to accommodate modern priorities in student recreation and sports. In addition, the showers and lockers will be upgraded and a new access-controlled entry will be provided.



### 19. New Student Center

This project is to build a new 240,000 gross square foot student center to replace Squires Student Center. Squires Student Center cannot accommodate the demand for space from students and expansion is not practical because of site and structural constraints.

### 20. Graduate Student Center Housing

This project is to build a 19,200 gross square foot residential facility to provide apartments with an on-site daycare center for graduate students and their families. This resource is desired to support growth of graduate student enrollment.

### 21. Rector Field House Renovation

Rector Field House, which serves a majority of Olympic Sports, does not have restrooms and seating sufficient for events held at the field house. This project would add 16,600 gross square feet for additions to both long sides of the building to provide additional restrooms and install bleachers. A new athletic flooring surface will be installed once Rector Field House is no longer used by the football program. The project would also include an addition for a softball batting practice cage.

### 22. Baseball Press Box and Restrooms Improvements

This project would result in a renovated and expanded facility totaling 10,000 gross square feet. It provides improvements to the existing press box and restrooms at English Field allowing the facility to meet the expectations of fans and media support personnel.

### 23. Tennis Stadium Renovation

This project is to terrace the bank at the outdoor tennis courts to make room for seating and would add 18,000 gross square feet for restrooms, locker rooms, and two additional indoor courts.

## **Cooperative Extension/Agricultural Experiment Station Division**

### 1. Human & Agricultural Bioscience Building, Phase II

This project is to provide a 92,300 gross square foot modern research space for the Agricultural Experiment Station including research laboratories, laboratory support space, research offices, faculty offices, and graduate student research space.

## **Third Biennium: 2018-2020**

### **University Division**

#### 1. Replace Center for Molecular Medicine and Infectious Disease

This project proposes to replace the antiquated life sciences research laboratories and support facilities of the complex currently located at Price Fork Road. The replacement



project is envisioned as an approximately 25,000 gross square foot facility located near the existing College of Veterinary Medicine complex.

## 2. Patton Hall Renovation

Patton Hall was constructed in 1926 with no major renovations or improvements since it went into service. This project proposes to fully renovate the interior and exterior of the 53,000 gross square foot building to support engineering programs in Civil and Environmental Engineering and Engineering Science and Mechanics.

## 3. Hutcheson/Smyth Halls Renovation

Smyth Hall was constructed in 1939 and Hutcheson Hall was constructed in 1940 with neither building having any major renovations or improvements since going into service. This project proposes to fully renovate their combined 104,710 gross square feet to support academic programs in the College of Agriculture and Life Sciences as well as the Department of Statistics.

## 4. Bishop-Favrao Hall Expansion

This project envisions a 70,000 gross square foot expansion to Bishop-Favrao Hall, which houses the Myers-Lawson School of Construction.

## 5. New Natural Resources Building

The College of Natural Resources and Environment has filled Cheatham Hall and requires additional instructional and research space to grow. This project reflects the college's need for an 87,000 gross square foot facility to house all of the central campus Natural Resources and Environment programs.

## 6. VTTI Research Building IV

The Virginia Tech Transportation Institute is projected to need a new building in approximately five years based on current growth. This project envisions a 50,000 gross square foot project for the Institute which will complete the master plan for the area.

## 7. Squires Conversion to Academics

Squires was originally built in 1937 and renovated/expanded in 1969 and again in 1991. A new student center is planned in the second biennium. This project envisions the renovation and conversion of the 235,238 gross square feet of Squires Student Center to academic space after the new student center is complete. The project scope includes a connector to library.

## 8. Falls Church Facility Expansion

This project envisions a 15,000 gross square foot expansion to the Falls Church Facility to support growth of the northern Virginia graduate programs.



## 9. Pamplin Hall Renovation

Pamplin Hall was originally constructed in 1957 and renovated in 1988 including an addition and an atrium to connect the structures. A new building for the College of business is a priority item in the first biennium. This project proposes a renovation of the entire 105,000 gross square feet building for academic programs.

## 10. Kentland Facilities Improvements: Historic Renovations

The original Kentland facility was constructed in 1818. This project includes a complete renovation of the existing 15,000 gross square foot facility and support buildings to restore the buildings and to correct deterioration and deficiencies.

## 11. Sterrett Facility Renovation

Sterrett Center was originally constructed in 1958. This project envisions the renovation of the 75,520 gross square foot facility to enhance the Facilities services operating space.

## 12. Lane Hall Rehabilitation

Originally known as Barracks No. 1, Lane Hall was built in 1888 and converted to office use in 1967. This project is for the renovation and preservation of 28,520 square foot historic building to house academic programs.

## 13. VBI Data Center Expansion:

The existing data center at VBI is reaching capacity and cannot support the call for “big” data projects. This project proposes an economical solution for expanding the data center. The solution includes renovation of existing space and the use of modular data units that may be placed on a pad with incremental capacity needs addressed by adding units as need demands.

## 14. Academic Music Building

This project is to provide a facility to serve the music instruction and practice needs of the Marching Virginians, symphonic orchestra, symphonic band, and choral groups. The facility is envisioned as 30,000 gross square foot building including flexible rehearsal rooms that can be configured to ensemble uses, administrative offices, storage, locker rooms, and related support spaces.

## 15. Olivio Ferrari Pavilion

This project envisions the construction of a new 3,000 gross square foot pavilion behind Cowgill Hall for the College of Architecture and Urban Studies. The pavilion would hold donated collections and provide study and seminar space for faculty and students.

## 16. Owens Hall Renovation

Owens Hall is a 97,600 gross square foot dining facility constructed in 1939 with several small scale interior renovations, the latest completed in 1991. This project plans to make



major interior and exterior renovations including restrooms, dining area, food service, and dining venue stations, and address deferred maintenance.

#### 17. Pritchard Hall Renovation

This project continues the modernization of outdated and deteriorated campus residential facilities. The renovation will fully update the 211,480 gross square foot, 1967 facility and will incorporate additional hall lounges, community and study rooms, expanded bathroom facilities, and air conditioning.

#### 18. New Recreation Facilities

This project proposes to build a new 90,000 gross square foot recreation facility at the south end of the Oak Lane Community. The additional recreation space will address service demands from students and will provide the space in the north zone of campus where demand for recreation space is increasing.

#### 19. G. Burke Johnston Renovation

This project is to renovate the 25,000 gross square foot student center built in 1990. The renovations include complete updates to the interiors, food service areas, building mechanical systems, and deferred maintenance.

#### 20. Inn at Virginia Tech, Phase II

This project proposes to provide additional visitor accommodations to the existing 147 lodging rooms. The design of the Inn and Conference Center includes provisions for a future expansion of a wing of lodging rooms, and this project envisions adding approximately 55 guest rooms at such time as demand requires. The total expansion envisioned is 40,000 gross square feet.

### **Cooperative Extension/Agricultural Experiment Station Division**

#### 1. Middleburg Equine Arena

The current equine facilities at the Agricultural Research and Extension Center in Middleburg, Virginia are not adequate to support the research and outreach education activities. The proposed project is for a 16,000 gross square foot equine arena to accommodate the program needs.



## **Capital Project for Constructing the Upper Quad Residential Facilities**

### **JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE**

**July 17, 2013**

In March 2013, the Board of Visitors approved a \$5.85 million planning authorization for the Upper Quad Residential Facilities project. The project is in the preliminary design phase and will be ready to enter the demolition and construction phase this fall. The designed solution replaces the existing four facilities: Rasche Hall, Brodie Hall, Thomas Hall, and Monteith Hall with two modern residence halls.

The two new residence halls will replace the existing inventory and each building is envisioned to be approximately 97,000 gross square feet. The proposed implementation strategy for the project is a three phase approach. The first phase involves razing and replacing Rasche with a modern five story residence hall. The second phase involves razing and replacing Brodie with a modern five story residence hall. The final phase involves razing Monteith and Thomas. At the end of the project, the two new residential facilities replace the existing bed inventory with modern space.

As with all self-supporting projects, the university has developed a financing plan to support the project. The university worked conjointly with the residential program to develop a long range financial model to support new debt service on this project and other residential program costs within the university's six-year operating plan. This funding plan calls for the use of debt which will be serviced from revenue generated by student fees charged by the residential programs auxiliary enterprise. The total project funding is \$90 million and the plan is sufficient to cover this amount. Any cash designated for the project accumulated prior to the issuance of permanent debt may be used directly for project costs and to lower the total debt issuance.

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 an \$84.15 million authorization supplement to raze the existing four buildings and construct two new residence halls for the Upper Quad Residential Facilities project. The total project budget will be \$90 million.



## **RESOLUTION ON CAPITAL PROJECT FOR CONSTRUCTING THE UPPER QUAD RESIDENTIAL FACILITIES**

**WHEREAS**, the Board of Visitors approved a \$5.85 million planning authorization for the Upper Quad Residential Facilities project in March 2013; and,

**WHEREAS**, the project scope is to raze four existing residence halls and replace the bed inventory with two new modern residence halls, inclusive of design, demolition, sitework, construction, equipment, and infrastructure necessary to support these facilities; and,

**WHEREAS**, the project is in the preliminary design phase and will be ready to enter the demolition and construction phase in fall 2013; and,

**WHEREAS**, the total project budget is \$90 million, including this supplemental request of \$84.15 million; and,

**WHEREAS**, the university has developed a 100 percent nongeneral fund resource plan for the project; and,

**WHEREAS**, the Finance and Audit Committee will further review and approve a financing resolution prior to securing permanent financing for the debt component of the project plus amounts needed to fund issuance costs, reserve funds, and other financing expenses; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the university has the authority to issue bonds, notes or other obligations that do not constitute state tax supported debt; and,

**WHEREAS**, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral funded major capital outlay projects; and,

**WHEREAS**, the university may address minor cost variances provided sufficient funds are available to support the full project costs;

**NOW, THEREFORE BE IT RESOLVED**, that the university be authorized to move forward with an \$84.15 million authorization supplement for demolition and construction of the Upper Quad Residential Facilities 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 \$90 million total project costs, plus related issuance costs and financing expenses.

### **RECOMMENDATION:**

That the resolution authorizing Virginia Tech to design and construct the Upper Quad Residential Facilities project be approved.

September 9, 2013



## **Capital Project for Planning the Marching Virginians Practice Facility**

### **JOINT FINANCE AND AUDIT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE**

**August 21, 2013**

The university's 2012-2018 Six-Year Capital Outlay Plan approved by the Board of Visitors at its June 2011 meeting includes a nongeneral fund project called the Academic Music Building. The project is a high priority for the College of Liberal Arts and Human Sciences (College), and the project remains an item on the university's 2014-2020 Six-Year Capital Outlay Plan.

At this time, the College is prepared to move forward with certain components of the project as a phase one implementation to accommodate the practice facility needs of the Marching Virginians. This phase envisions three components: a facility, a covered open air pavilion, and an artificial turf field. The facility would provide the Marching Virginians with an approximately 4,330 gross square foot building that will include restrooms, lockers, an instrument storage room, and a drum line room with storage for percussion instruments. To provide a shelter for the Marching Virginians during inclement weather, a 3,500 gross square foot outdoor covered pavilion will be attached to the main building. The open air pavilion will be able to accommodate 350 musicians. The artificial turf field will accommodate a lighted, soccer-size field, including sidelines and permanent striping.

The estimated total project costs of this phase, inclusive of design and construction, are \$4.75 million. The College has worked conjointly with Recreation Sports and Athletics on a collaborative shared use and funding plan to support this phase of the project. At this time, the university is requesting a planning authorization of \$400,000 for the project and funding sources are available and sufficient to cover these costs. A subsequent request for construction funding may be submitted after designs are underway and a firm scope and cost are determined.

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 a \$400,000 planning authorization to move forward with design of the proposed Marching Virginians Practice Facility project.



**RESOLUTION ON CAPITAL PROJECT FOR PLANNING THE  
MARCHING VIRGINIANS PRACTICE FACILITY**

**WHEREAS**, existing practice area for the Marching Virginians is an exposed natural turf field without indoor changing, restrooms, storage; and,

**WHEREAS**, the proposed solution is a project to construct an approximately 4,300 gross square foot building that will include restrooms, lockers, an instrument storage room, and a drum line room with storage for percussion instruments; and,

**WHEREAS**, a 3,500 gross square foot outdoor covered pavilion, capable of holding 350 musicians, will be attached to the main building to provide a shelter for the Marching Virginians during inclement weather; and,

**WHEREAS**, a lighted, soccer-size practice field with artificial turf including sidelines and permanent striping will be installed; and,

**WHEREAS**, the estimated project costs, inclusive of design and construction, are \$4.75 million; and,

**WHEREAS**, the College has worked conjointly with Recreation Sports and Athletics on a collaborative shared use and funding plan to support the project; 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, and funding of nongeneral funded major capital outlay projects; and,

**WHEREAS**, the university may address minor cost variances provided sufficient funds are available to support the full project costs;

**NOW THEREFORE BE IT RESOLVED**, that the university be authorized to move forward with a \$400,000 planning authorization for the Marching Virginians Practice Facility funded entirely with nongeneral fund revenues.

**RECOMMENDATION:**

That the resolution authorizing Virginia Tech to design the Marching Virginians Practice Facility be approved.

September 9, 2013



## **Committee Minutes**

### **Committee on Research**

**Solitude Room  
The Inn at Virginia Tech and Skelton Conference Center  
4:15-5:45 p.m.**

**September 8, 2013**

#### **Committee Members Present:**

Mr. John Lee, Chair  
Dr. Nancy Dye  
Dr. William Holtzman  
Mr. John G. Rocovich, Jr.

#### **Guests:**

Dr. Charles Steger, Dr. Robert Walters, Mr. Dwight Shelton Jr., Mr. James L. Chapman, Dr. Mr. William D. Fairchild III, Mr. Cordel L. Faulk, Mr. B. Keith Fulton, Mr. John C. Lee, IV, Ms. Deborah Petrine, Dr. Michael Quillen, Ms. Suzanne Obenshain, Dr. Thomas Ryan, Mr. Stephen Sturgis, Mr. Ralph Byers, Dr. Tom Dingus, Mr. Martin Daniel, Mr. Bien Doung, Dr. Mike Friedlander, Dr. Roderick Hall, Ms. Natalie Hart, Ms. Kay Heidbreder, Mr. Tim Hodge, Dr. Bill Knocke, Dr. Joseph Merola, Dr. Scott Midkiff, Mr. John Pastor, Dr. Ellen Plummer, Ms. Sue Teel, Mr. Chris Yianilos, Ms. Erica Wood, Mr. Nick Warrington, Dr. Paul Winistorfer, and Ms. Beth Tranter.

1. **Opening Remarks and Approval of June 2, 2013 Minutes.** Mr. Lee welcomed those in attendance. The minutes were unanimously approved.
2. **Remarks from the President.** Dr. Steger welcomed those in attendance.
3. **Resolution for Exclusion of Certain Officers/Directors.** Dr. Walters reviewed the Resolution for Exclusion of Certain Officers/Directors. The resolution was unanimously approved.
4. **Office of Research Annual Report (Research Administration):** Dr. Walters reported on extramural research expenditures for FY 2013 and trends related to the growth of the research enterprise at Virginia Tech. With total research and development expenditures of \$454 million in fiscal year 2012, Virginia Tech marked its 13th consecutive year of research growth under President Charles W. Steger. In 2000, Virginia Tech earned \$97.3 million in grants from federal and state agencies, industry, and foundations for research and development. In the 2013 fiscal year, Virginia Tech earned nearly triple as much, about \$286.5 million, in extramural support for research. While National Science Foundation support



continues to grow, Department of Defense and the Department of Health and Human Services have emerged as key sponsors of research at Virginia Tech.

5. **Virginia Tech Transportation Institute (Research Initiatives):** Dr. Tom Dingus reported on the work of the Virginia Tech Transportation Institute, focusing on the institute's key themes of saving lives, saving time, saving money, and protecting the environment. As part of his presentation, Dr. Dingus focused on the impact of historical milestones such as development of the Smart Road in 2000, establishment of the International Center for Naturalistic Driving Data Analysis at Virginia Tech in 2006, initiation of the National Surface Transportation Safety Center for Excellence in 2006, establishment of the Crash Sled Laboratory Partnership in 2009, and the founding of the Connected Vehicle/Infrastructure University Transportation Center in 2012. Dr. Dingus also updated the board on the work of the National Tire Research Center and Southern Virginia Vehicle Motions Laboratory, which were created in 2010 and opened in 2013. Dr. Dingus also presented future plans for the Northern Virginia Connected Test Bed, which opened in 2013, and the Automated and Autonomous Vehicle Initiative.

#### **Adjournment.**

There being no further business, the meeting adjourned at 5:45 p.m.





# Office of Research Annual Report

**Robert W. Walters**

Vice President for Research



# Agenda

- Research Expenditures
- Trends in Research Administration
- The Path Forward





# Research Expenditures

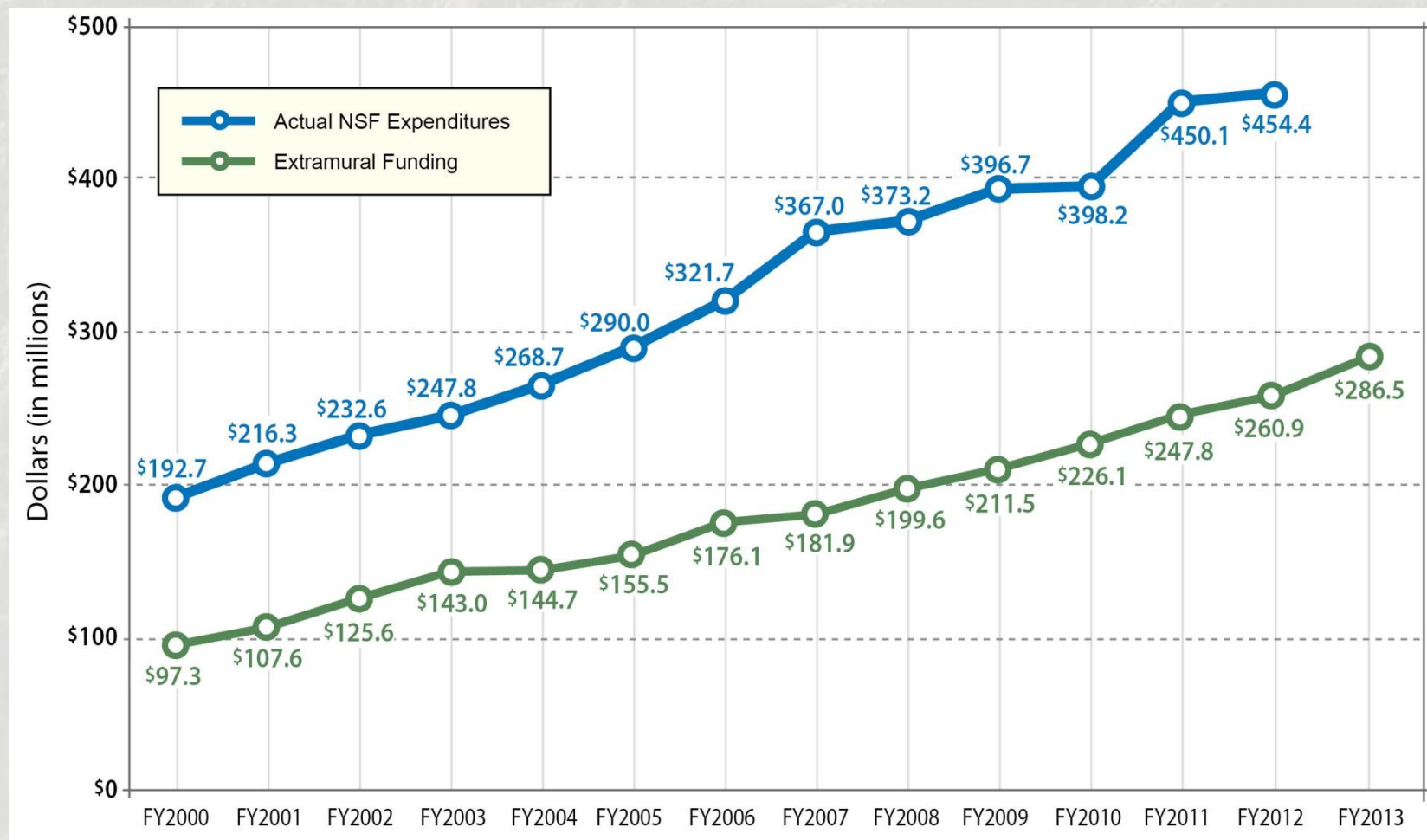


# Measuring Research Productivity

- “NSF-Reported Expenditures” is the bellwether measure of research productivity in the U.S. higher education industry.
- Some important considerations:
  - The National Science Foundation (NSF) reports these data, but the “NSF-Reported Expenditures” total includes **all** R&D expenditures regardless of agency or source.
  - NSF reports funds when they are **spent** rather than when they are received because this reflects the actual completion of research and because the U.S. economy is impacted at the point of expenditure, not award.
  - There is an inherent **lag** in obtaining comparison data.



# NSF-reported Research Expenditures



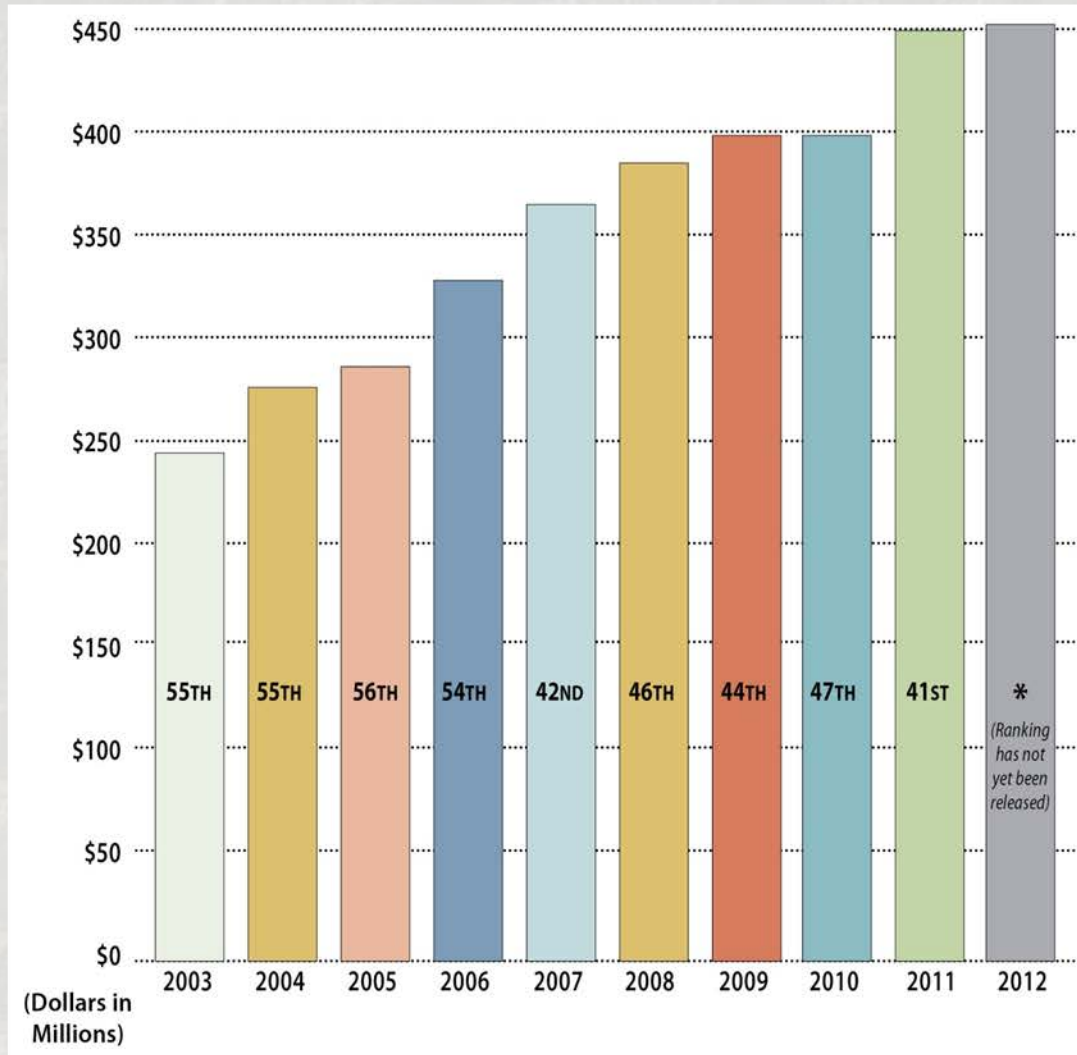


# NSF Research Expenditure Rankings

- More than 900 universities ranked.
- Less than \$25M separated 40<sup>th</sup> from 48<sup>th</sup> in FY11.

## Rankings of selected Virginia Institutions in FY 11

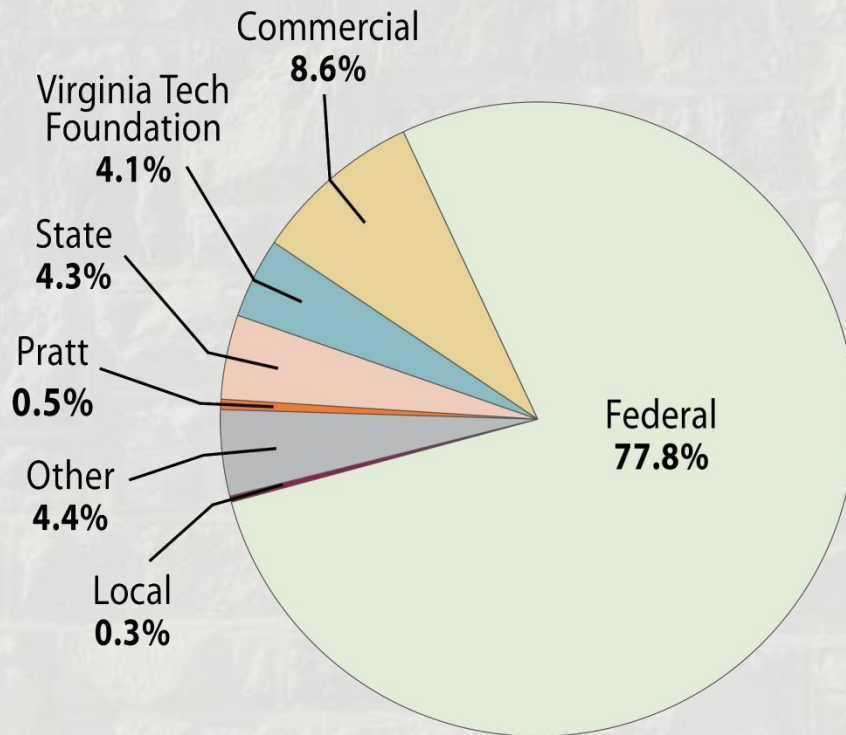
Virginia Tech	<b>41st</b>
University of Virginia (main campus)	<b>72nd</b>
Virginia Commonwealth University	<b>98th</b>
George Mason University	<b>156th</b>
Eastern Virginia Medical School	<b>224th</b>



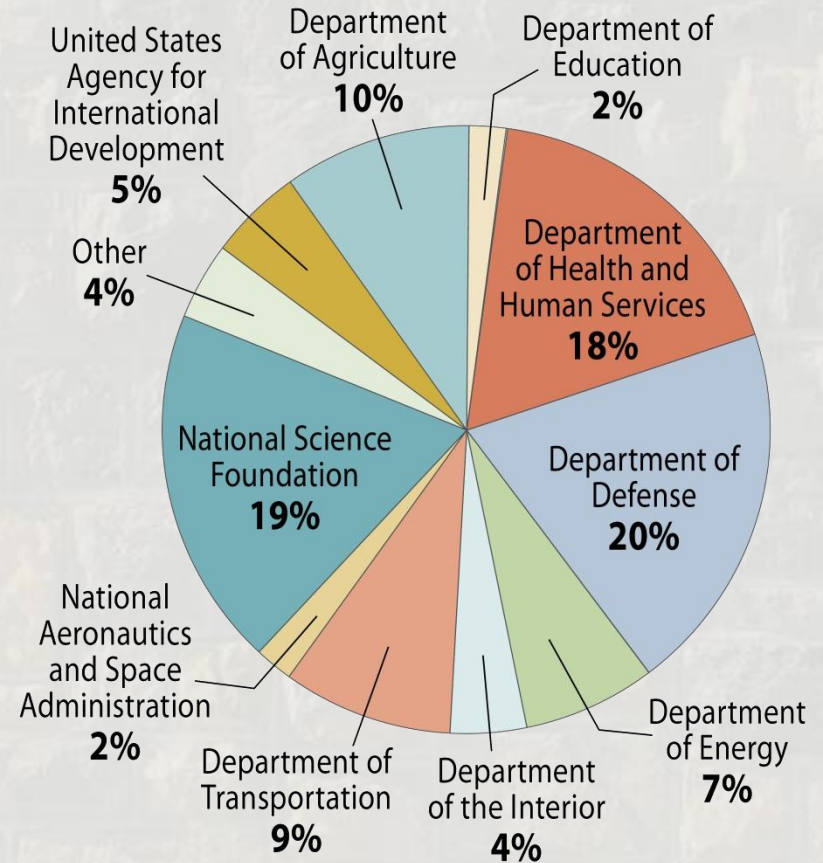


# FY 2013 Sponsored Expenditures

## All Sources



## Federal Sources

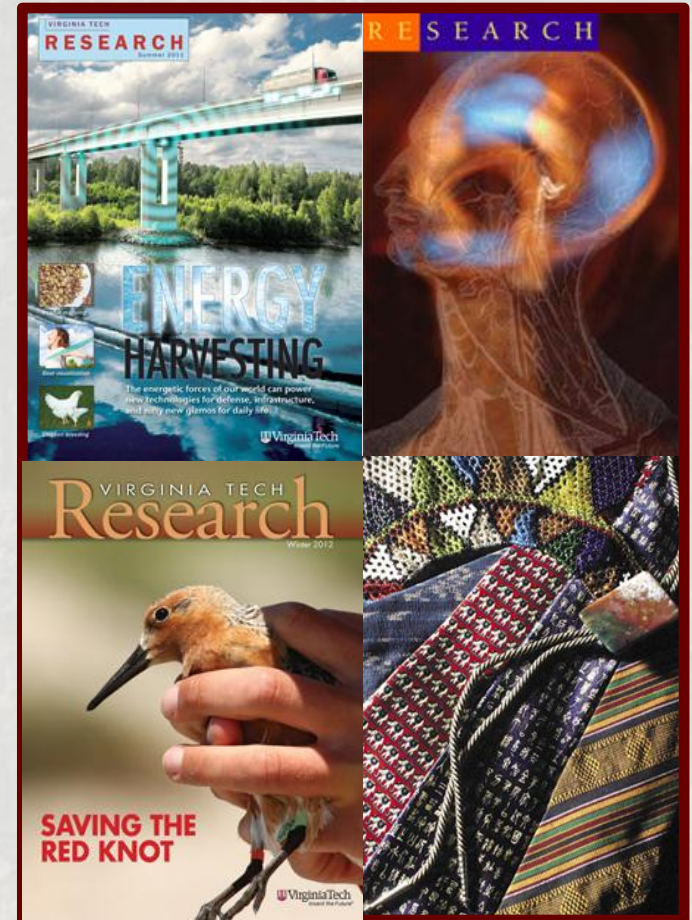




# University Research

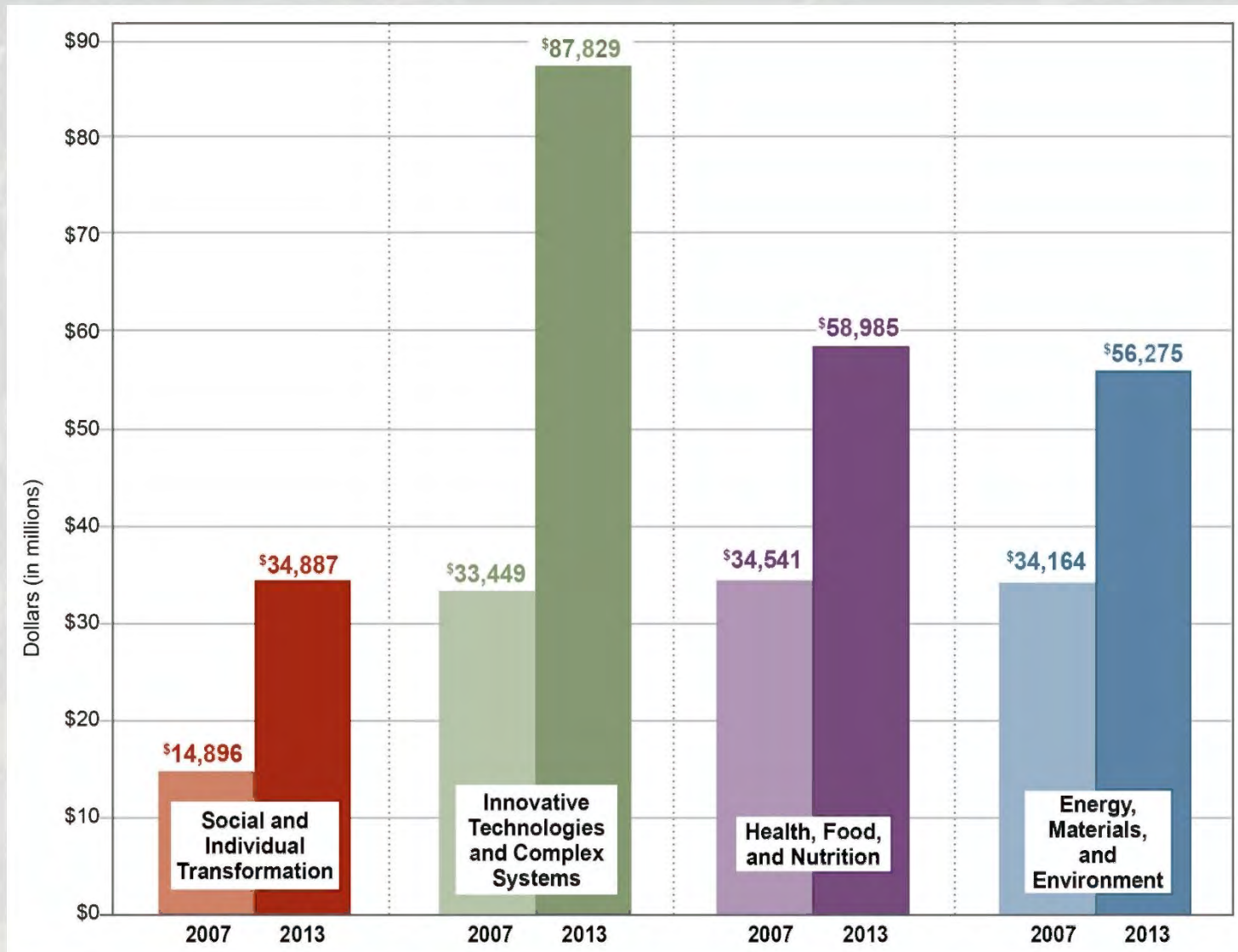
## DISCOVERY DOMAIN AREAS – 2006-2012

- Energy, Materials and Environment
  - Energy
  - Environment and Bioprocessing
  - Water Research
  - Materials and Sensors
- Innovative Technologies and Complex Systems
  - Business and Manufacturing
  - Communications, Information Technology, Cybersecurity and Mathematics
  - Transportation
- Health, Food and Nutrition
  - Biosciences and Biotechnology
  - Biomedical Science and Engineering
  - Food, Nutrition and Health
  - Life Sciences
- Social and Individual Transformation
  - Arts, Architecture and Design
  - Policy and Social Sciences

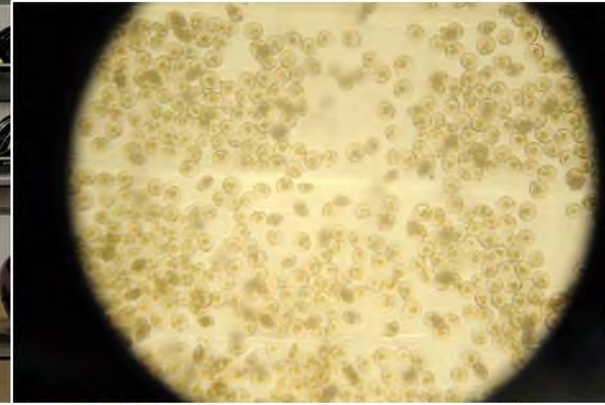




# Research Growth by Domain Area



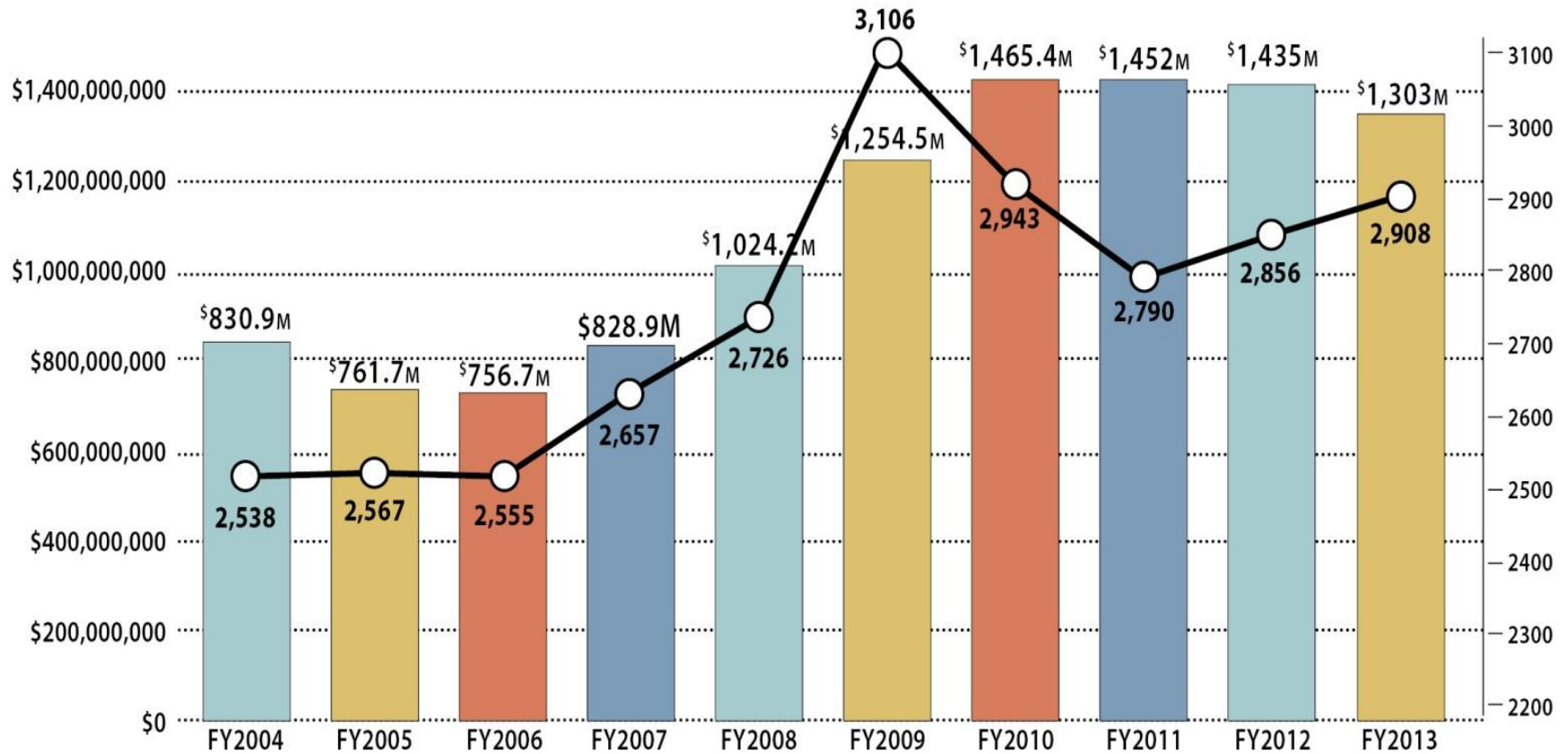




# Trends in Research Administration



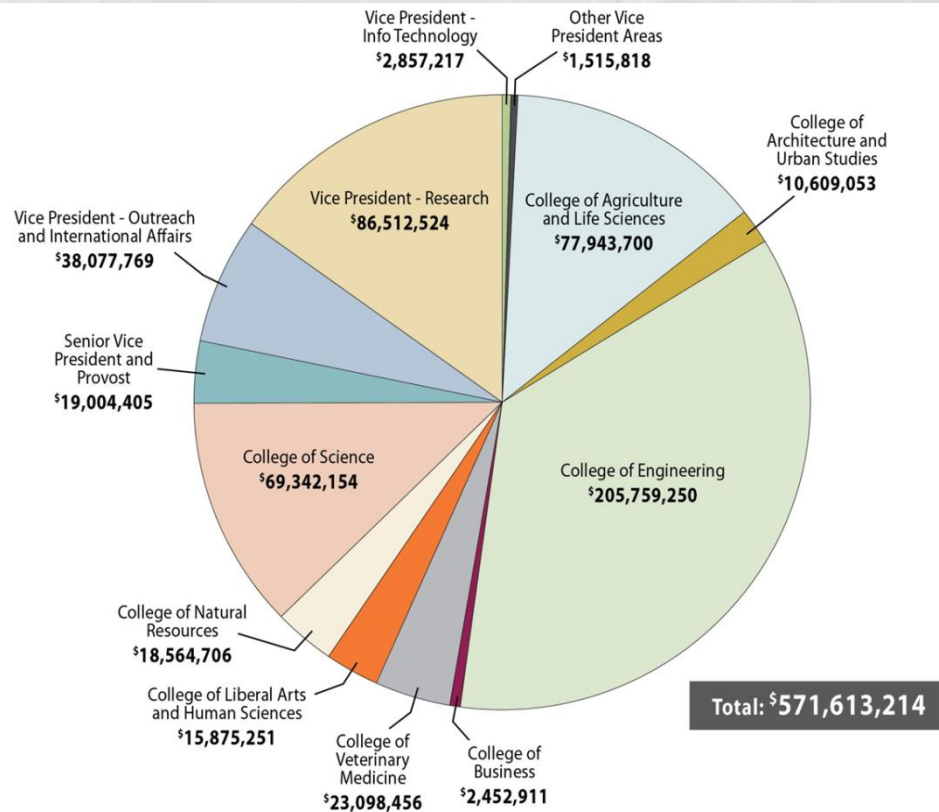
# Number and Value of Proposals



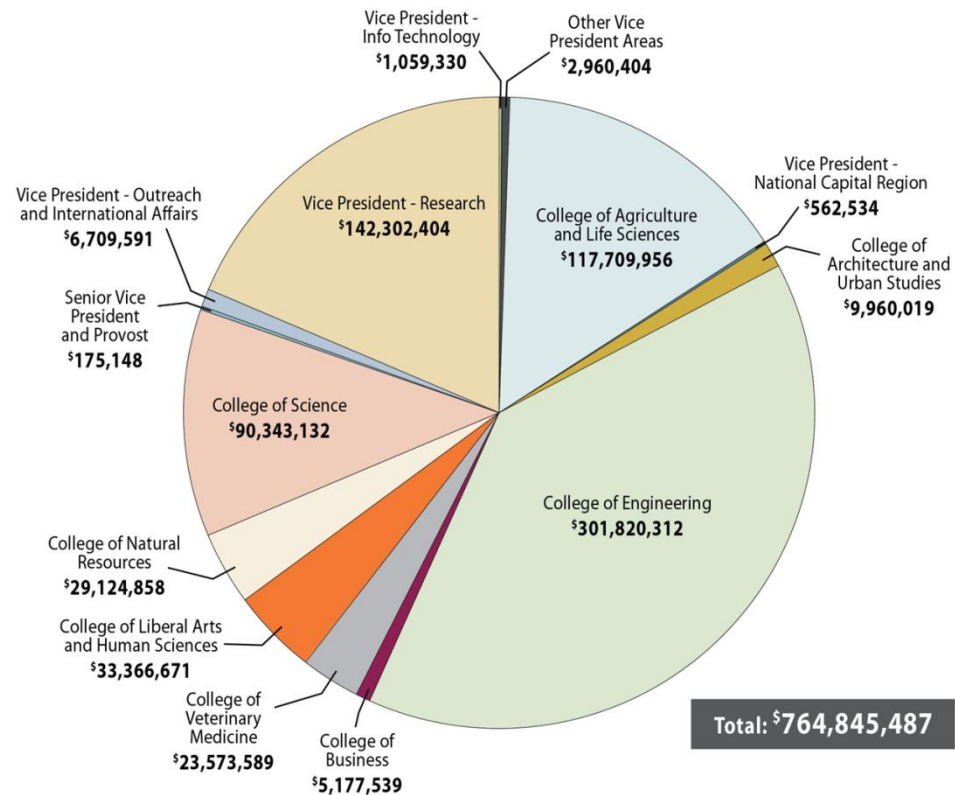


# Proposals Submitted

**FY 2002**

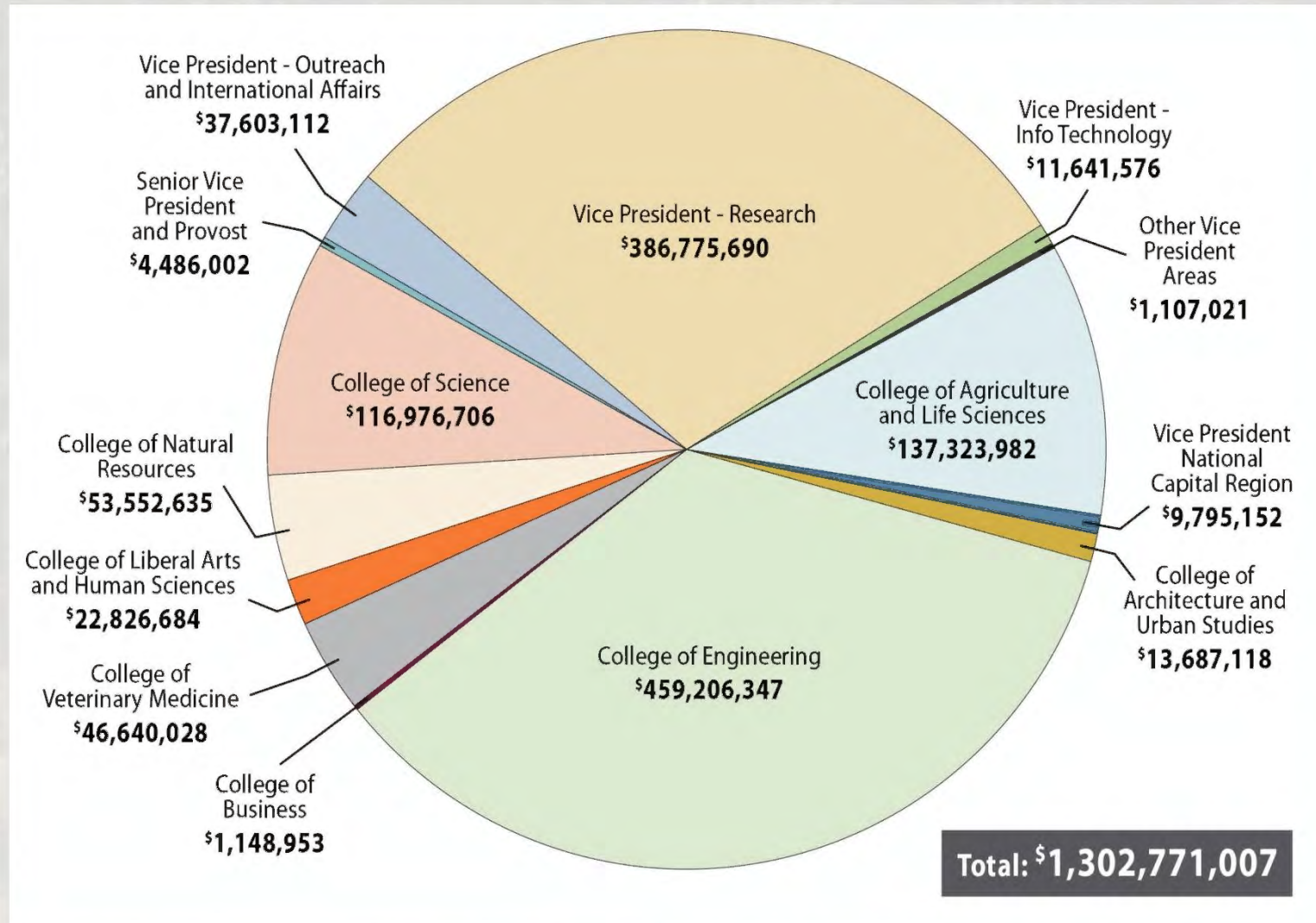


**FY 2006**



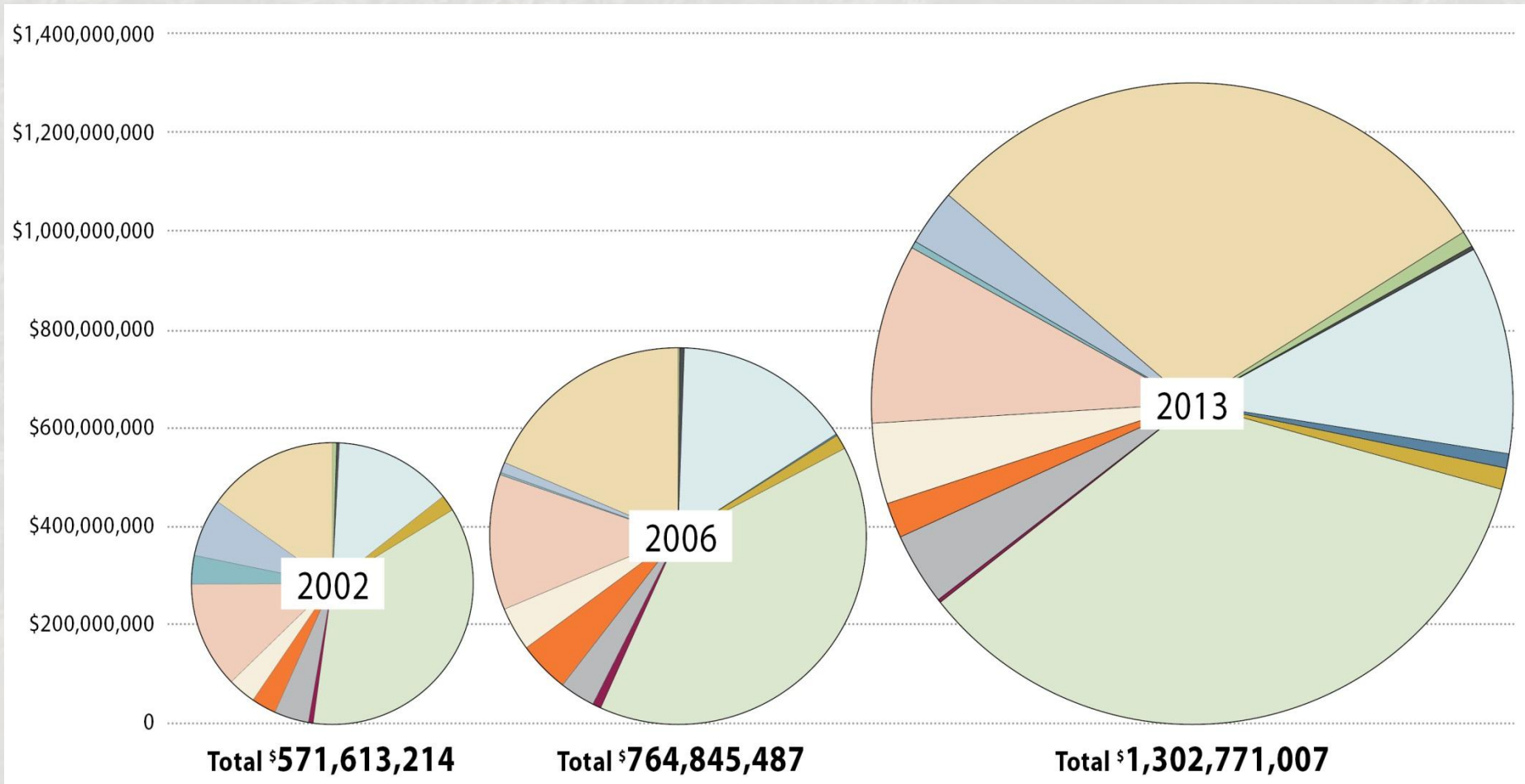


# Proposals Submitted in FY13



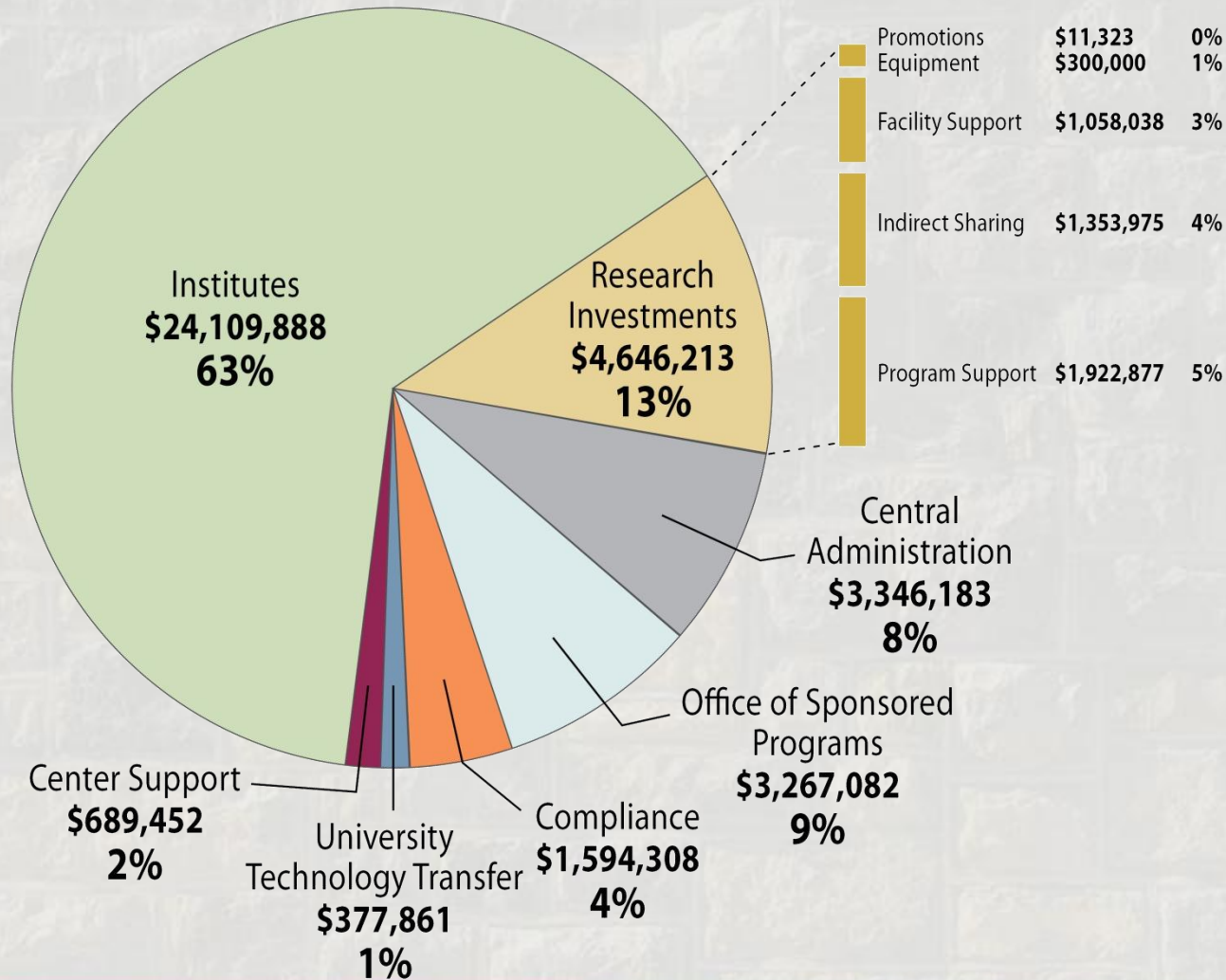


# Trends in Proposals Submitted



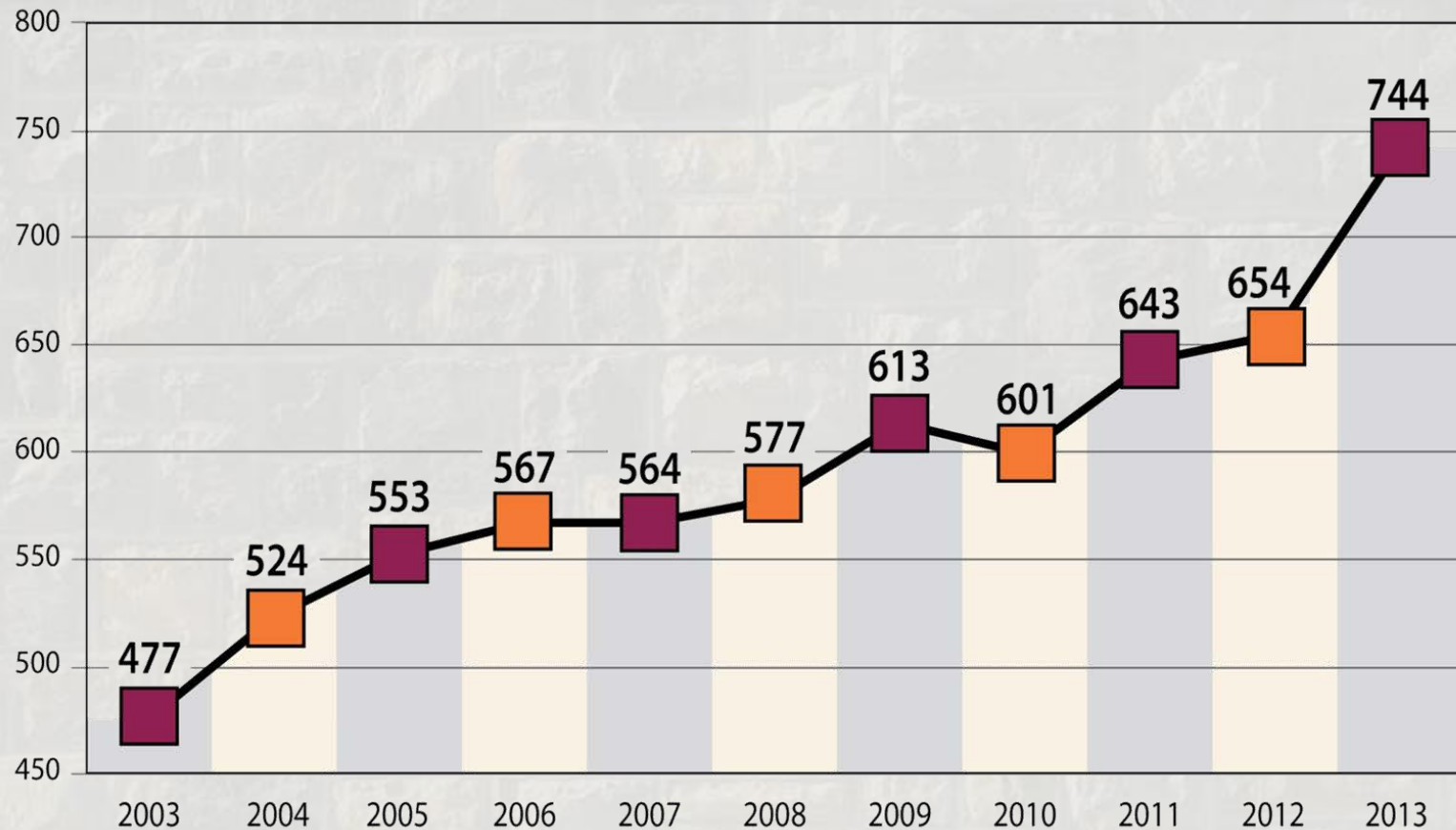


# Research Administration Budget Overview





# Research Faculty Growth



**As of July 1, 2013: 744 Research Faculty**  
**56% increase in Research Faculty 2001-2013**



# Research Administration

	FY 2011	FY 2012	FY 2013
<b>New Institutional Review Board (IRB) Protocols</b>	982	947	936
<b>IRB Post-Approval Monitoring (PAM) Review Audits</b>	484	668	993
<b>New Institutional Animal Care and Use Committee (IACUC) Protocols</b>	180	218	198
<b>IACUC PAM Reviews</b>	--	--	72
<b>Export Control Reviews</b>	531	1,094	1,406
<b>Restricted Party Screenings</b>	2,557	2,861	4,029
<b>Export Control PAM Reviews</b>	3,875	5,350	7,319
<b>Restricted Research Security Plans</b>	40	70	90
<b>Limited Submissions</b> (25 total in 2008)	107	128	148



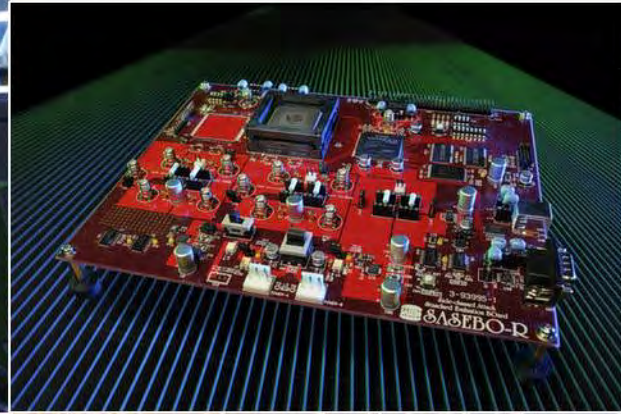
# Research Administration

## *New areas of responsibility*

	Established	Impact	Future Impact
<b>Responsible Conduct of Research Training*</b>	2010	2,032 trained	USDA and National Endowment for the Arts recently adopted new requirements.
<b>International Visitor Visa Reviews*</b>	2011	4,020	Aligned with growth of international research engagement.
<b>Conflict of Interest (COI) and Commitment Training*</b>	2012	4,046 trained	10 additional agencies/foundations recently adopted PHS COI policies.
<b>Institutional Biosafety Committee</b>	2012	143 active protocols	New requirements for regulatory compliance issued 2012

*Development of new IT databases/processes was required.*





# The Path Forward



# Plan for a New Horizon

## RESEARCH FOCUS AREAS - 2012-2018

### Security

- Cyber- security
- Food security
- Management and security of communication systems  
(such as wireless, networks, and smart grids)

### Resilience

- Resilience of complex systems
- System stability and resilience of ecosystems
- Planning for stability in communities of all sizes

### Health

- Neuroscience
- Genomics
- Global health issues
- Aging
- Methods grounded in high-performance computing and networks

### Sustainability

- Energy, materials, and technology
- Water science, policy, and management
- Transportation and communication infrastructures
- Natural resources, ecosystems, and environmental quality
- Informatics and policy
- Food and food systems
- Sustainable international development





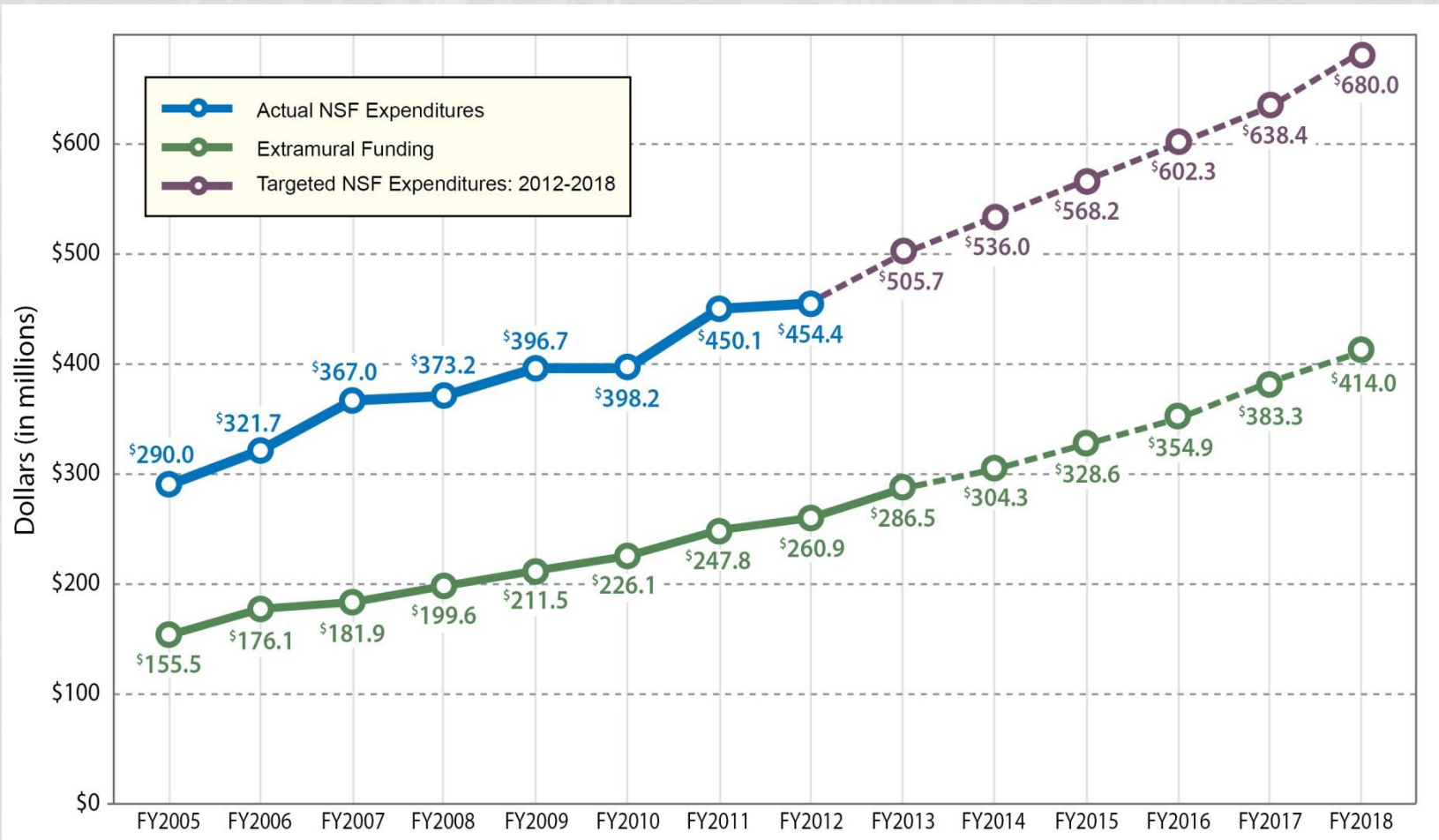
# Research Focus Areas

## Mapping to “Plan for a New Horizon”

2006-2012	2012-2018
Energy, Materials and Environment	<b>Sustainability</b>
Social and Individual Transformation	<b>Resilience</b>
Health Food and Nutrition	<b>Health Sustainability Security</b>
Innovative Technologies and Complex Systems	<b>Sustainability Security</b>



# Targeted Research Expenditures





# Thank you





- Saving Lives*
- Saving Time*
- Saving Money*
- Protecting the Environment*

Tom Dingus, VTTI Director  
Newport News Shipbuilding Professor  
of Civil and Environmental Engineering  
President, VTT, LLC



# ***Advancing Transportation through Innovation***





# **VTTI Major Historical Milestones**

- **Smart Road (2000)**
- **International Center for Naturalistic Driving Data Analysis at Virginia Tech (2006)**
- **National Surface Transportation Safety Center for Excellence (2006)**
- **Crash Sled Laboratory Partnership (2009)**
- **National Tire Research Center/Southern Virginia Vehicle Motions Laboratory (Created in 2010; Opened in 2013)**
- **Connected Vehicle/Infrastructure University Transportation Center (2012); Northern Virginia Connected Test Bed (Opened 2013)**
- **Automated and Autonomous Vehicle Initiative (Future)**



# Virginia Smart Road



MORE THAN  
**16,500**  
RESEARCH HOURS  
ON THE SMART ROAD





# Smart Road

## *All-weather Testing*

- All-weather testing capabilities
- Snow, fog, rain
- 75 custom towers
  - Supported by a 500,000-gallon water tank
  - ½ mile of roadway





# Smart Road

## *Experimental Lighting*

- Variable lighting section
  - 60 light towers
  - ~90% of lighting configurations found on U.S. highways
  - Differential spacing
  - Height adjustable
  - Intelligent Transportation Systems (ITS) equipment
  - 3 luminaires/poles
  - Varying intensities





# Other “Smart” Features

- Advanced communications system
  - Local-area wireless network
- Military-grade DGPS allows precise, real-time vehicle location
- Varied terrain
- High and low power capabilities
- 50% asphalt/50% concrete
- High-speed turnarounds at each end of the test bed





# Naturalistic Driving Studies of Crash Risk

## *Why Develop a New Methodology?*

- Human performance contributes to more than 90% of crashes
- A subset of factors creates the majority of the crash risk
  - Impairment (primarily alcohol)
  - Inattention and distraction
  - Drowsiness
  - Judgment-related error
- Current methods of studying driver performance/behavior and their safety impacts have limitations
  - Detailed pre-crash information is not available from crash databases





# Video: What are the contributing factors?





# Naturalistic Driving Studies (NDSs) and Large-scale Field Operational Tests (FOTs): *The Road Ahead*

VTTI currently houses 90% of the world's NDS data. These data will be used by hundreds of researchers worldwide for the next 30 years. Data collections include:

- National Academy of Sciences SHRP 2 NDS
  - 2,000 cars for 3 years; 2.5 M trips
- FMCSA 270-Truck and Motorcoach FOT
- NIH Teen Practice Driving/Driver Coach NDS
  - 180 cars for 18 months
- MSF Motorcycle Training NDS
  - 100 bikes for two seasons
- NHTSA Large-scale Motorcycle FOT
  - 160 bikes for one season
- Canadian Government NDS
  - 125 cars for 2 years
- NHTSA “100-Car” NDS





# Video: Motorcycle Naturalistic Driving Study





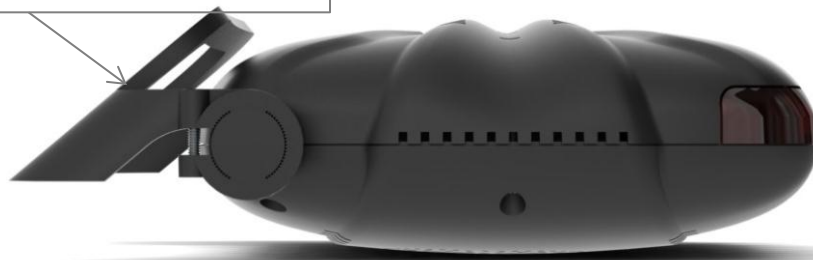
# Newest VTTI Technology: *MiniDAS*

Size: 6.7" x 5" x 2"

(AA battery shown for reference)



Windshield mount

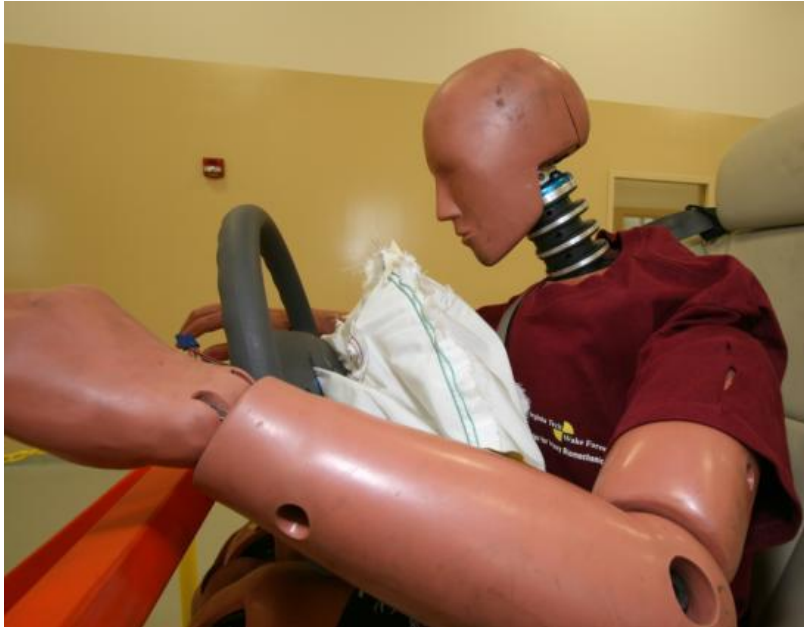


- Vehicle network (CAN) via integrated OBD-II/power cable
- 2 video channels (IR illumination for nighttime collection)
- GPS
- 3-axis accelerometer
- 3-axis rate gyro (roll/pitch/yaw)
- 3-axis magnetometer
- Expandable with sensor modules via WiFi, Bluetooth, or CAN



# Center for Injury Biomechanics

## *Crash Sled Lab*

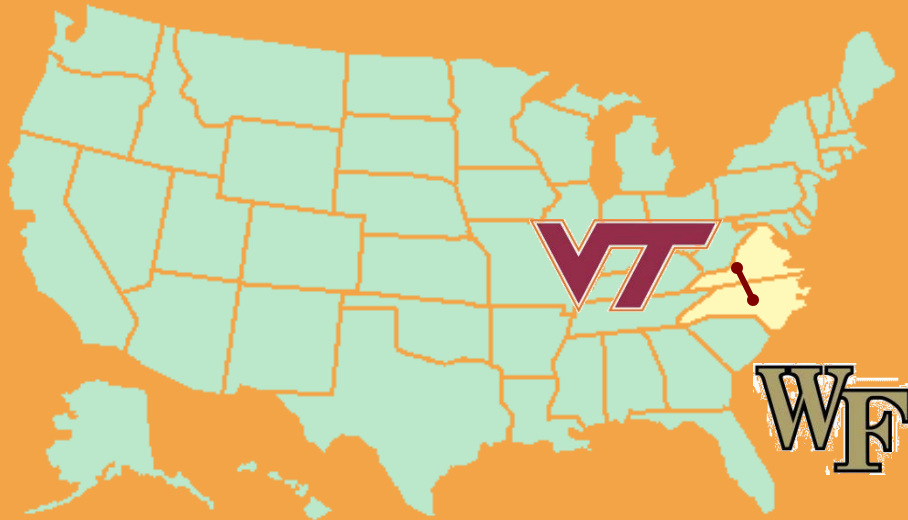


- 10,000 sq. ft.
- Housed in the CRC
- 1.4 meganewton *ServoSled* System crash sled
- Only facility in the world with unique capabilities
  - High-rate impact testing
  - High-rate imaging
- Facilitates better understanding of injury mechanisms
- Researchers can develop better mitigation schemes and protection systems

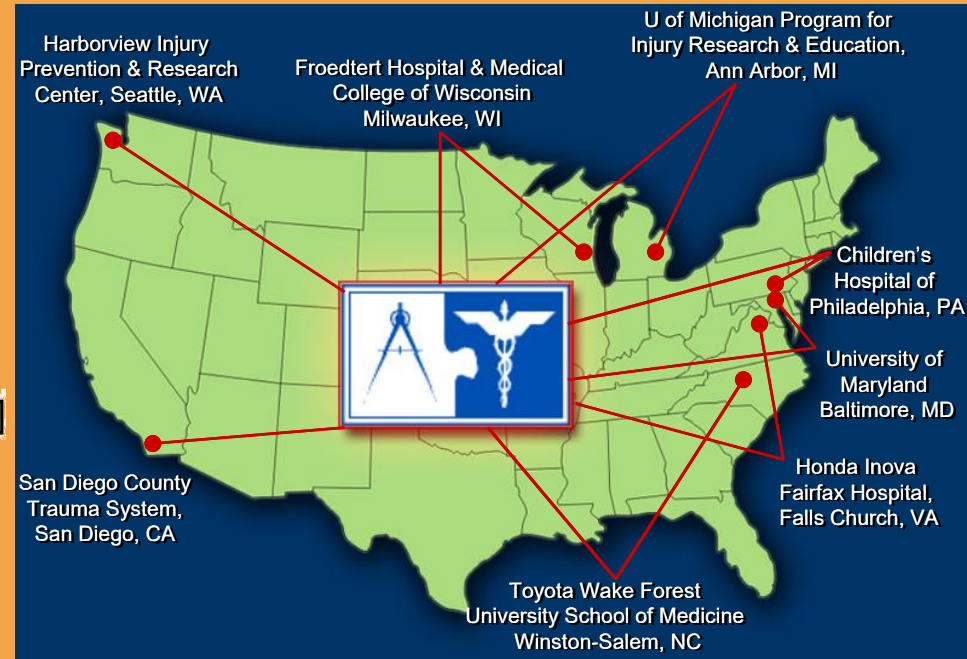


# Center for Injury Biomechanics

VTTI – Engineering WFU - Medicine



CIREN Center Locations



Dr. Duma



Dr. Gabler



Dr. Hardy



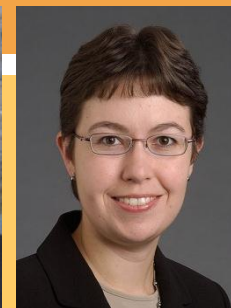
Dr. Kemper



Dr. Stitzel



Dr. Gayzik



Dr. Sparks



Dr. Meredith



# National Tire Research Center/SoVa Motion at the *Virginia International Raceway*

## NTRC/SoVa Motion Offerings

- Revolutionary component and vehicle testing, development, and integration
- The globe's premiere force-and-moment tire test facility
- The most capable lab tire traction testing
- 8-post Test Rig, Cruden Simulators, and Wheel Force Transducer test labs
- Vehicle level ride and handling tests and evaluations: VIR world-class circuit

## NTRC/SoVa Motion Planned Offerings

- Rolling Resistance
- Tire + Vehicle Math Modeling/Simulation
- 4-corner Hardware-in-the-loop Damper Lab





# Virginia International Raceway

- Cooperative Agreement to use VIR for testing and research
- Road course up to six miles long; many hills and curves
- Complements the Smart Road (interstate highway)
- With the NTRC and SoVa Motion, creates full suite of modeling and testing capabilities





# Video: NTRC Tire Testing





# Northern Virginia

## *I-66 Connected-vehicle Test Bed*

- Part of a U.S. DOT University Transportation Center Grant
- Totals \$13.7M, including cost share to be spent through 2016
- VDOT is providing \$4.5M in cash and in-kind
- Example applications: Electronic emergency brake lights, variable speed limits, roadway hazards, emergency vehicle approaching in left lane





# Video: Demo of Connected Vehicles

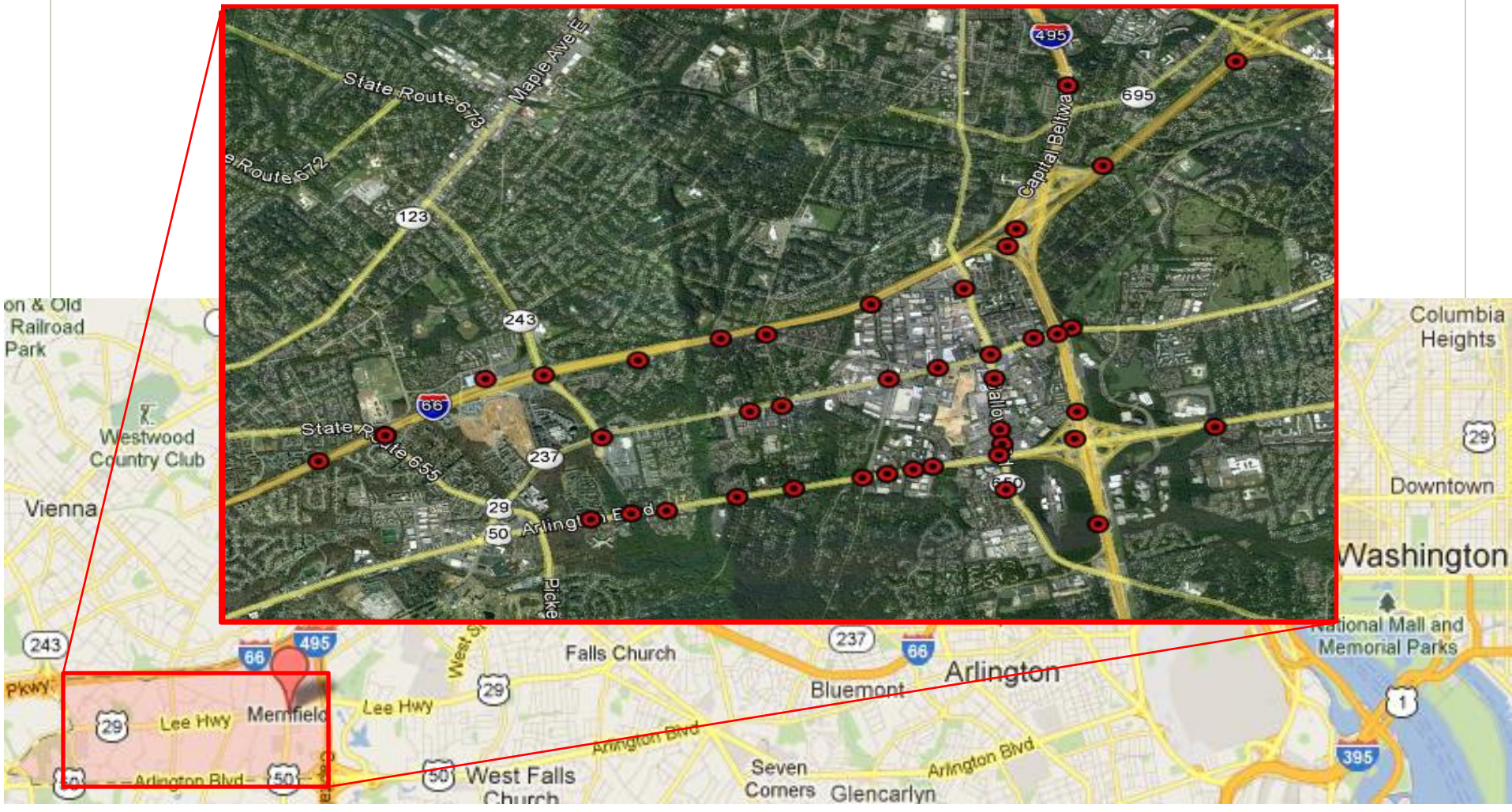


VirginiaTech  
Transportation Institute



# Connected Test Bed Geography

Northern Virginia I-66 Test Bed with Roadside  
Transmitter/Receiver Installation Locations





# Light-Vehicle Builds and Support for the Connected Vehicle Safety Pilot Program



## Project Overview

Data collection and analysis for a consortium of eight major auto manufacturers to test connected-vehicle safety technology.

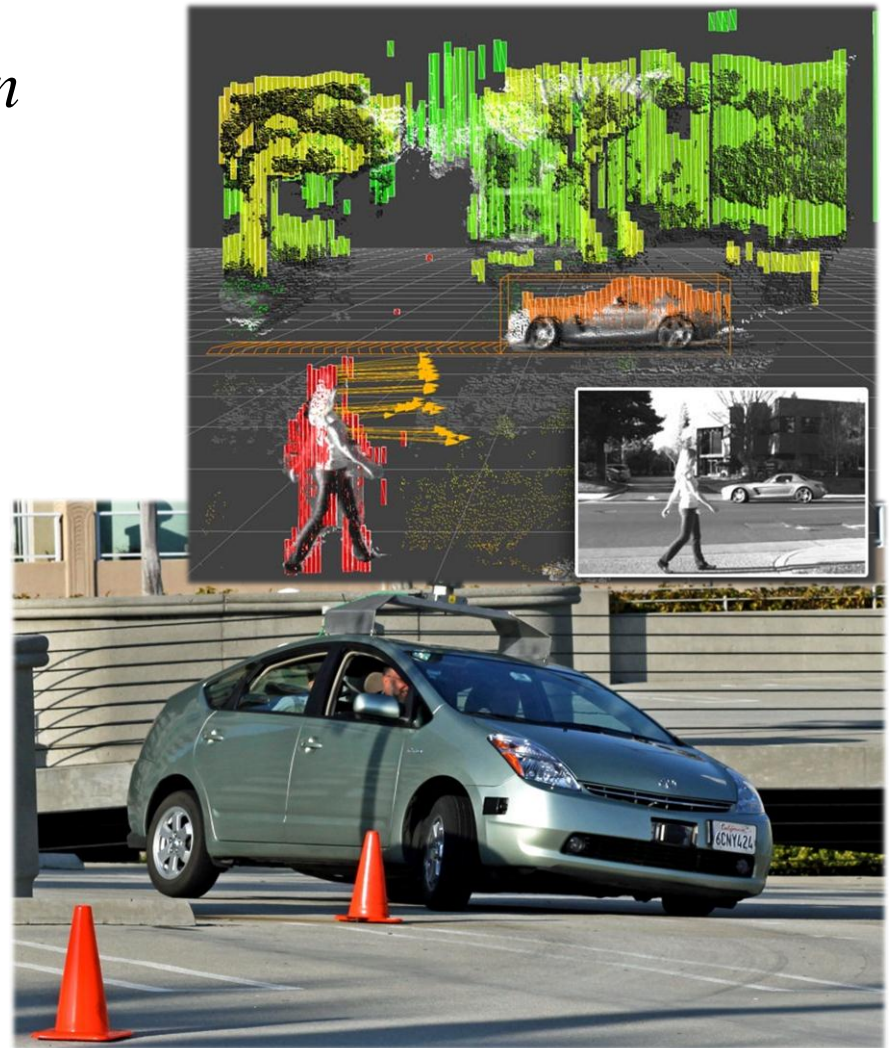




# VTTI Automated Vehicle Research

*Predicted to be the next big research area in transportation*

- Proprietary research projects with OEMs
- Developing two light vehicles and one heavy vehicle at VTTI
- NHTSA automated driving project
- Can leverage current VT capabilities (e.g., Blind Driver) to create bigger research awards





# VTTI Project Team and Partners

- Automated research vehicles



Level 2 Automated Vehicle



Level 3 Automated Vehicle

- Human Factors Industry Advisory Group to provide expert/peer review and guidance

**Battelle** *Bishop Consulting*



**Continental**



**Google**



**SwRI**





# How Big is VTTI?

## *External Benchmarking*

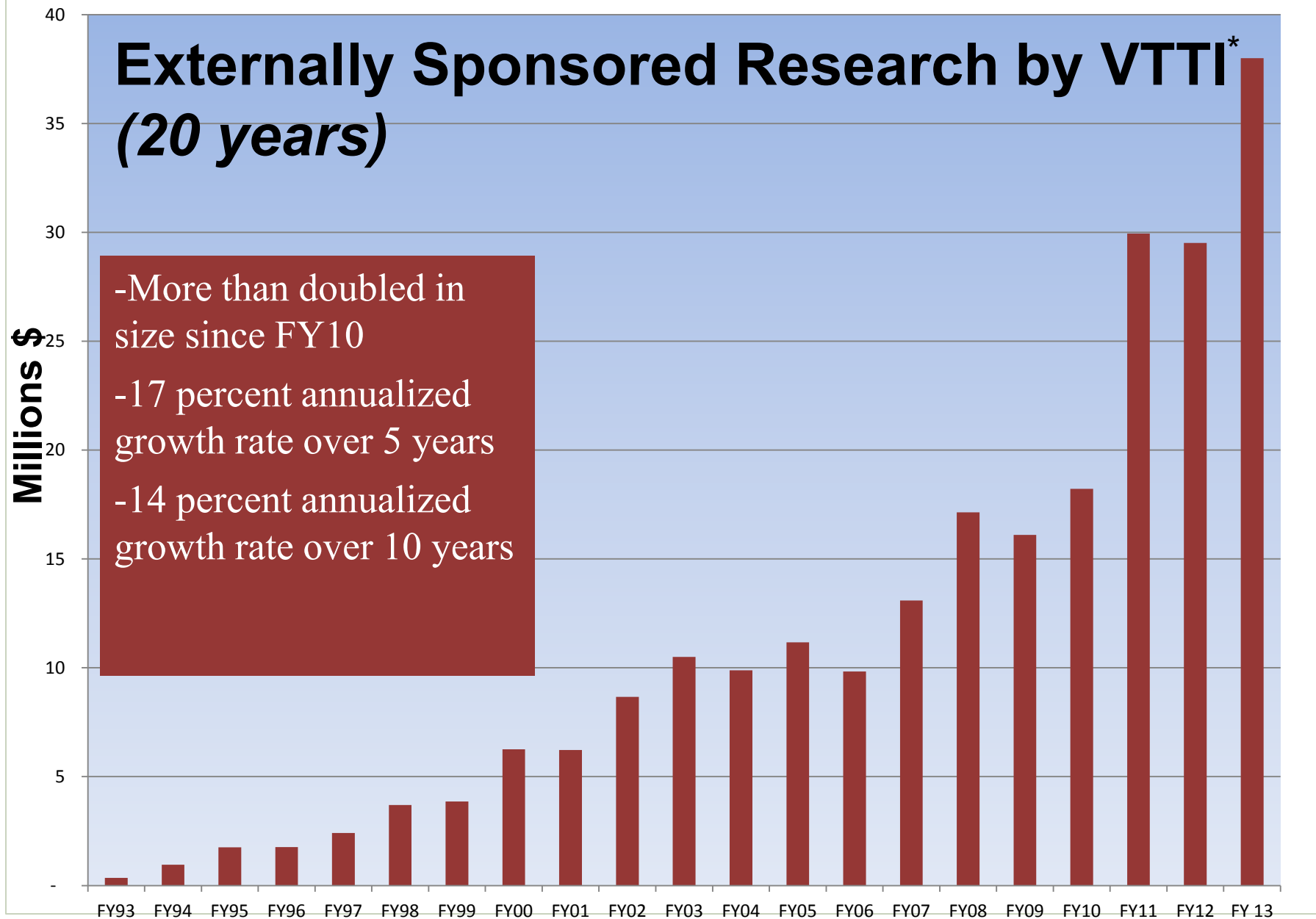


- #1 in federal grants and contracts
- #1 in private sector contracts
- Largest group of driving safety researchers in the world



# Externally Sponsored Research by VTTI\* (20 years)

-More than doubled in size since FY10  
-17 percent annualized growth rate over 5 years  
-14 percent annualized growth rate over 10 years

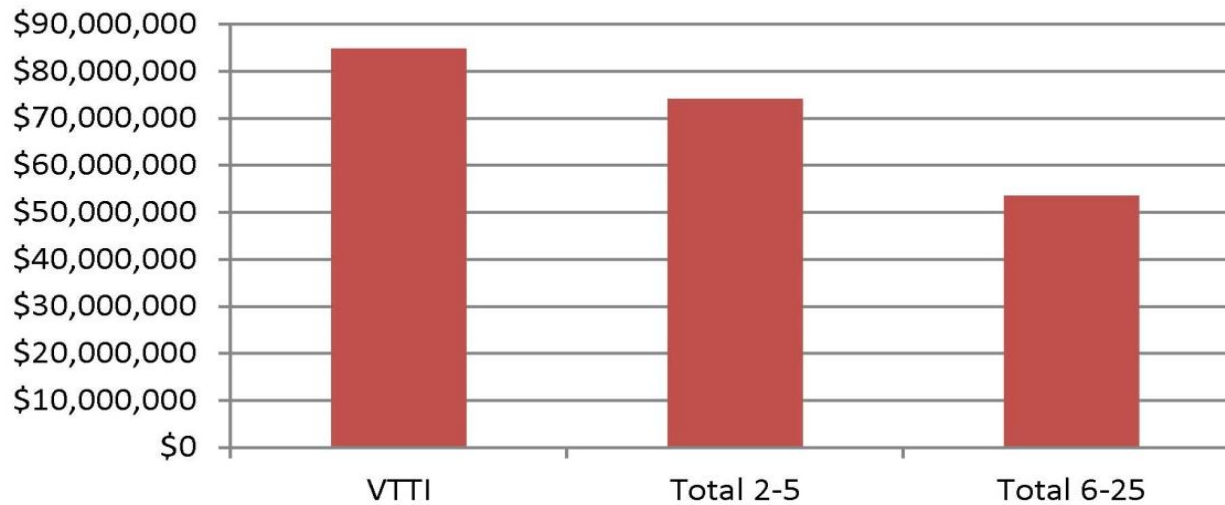


\*Includes VTT, LLC

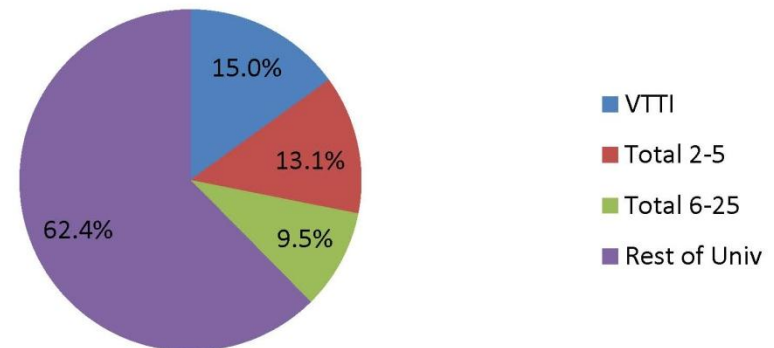


# How Big is VTTI? *Internal Benchmarking*

**External Awards by Institute/Center \***  
**(Last Two Fiscal Years)**



**Percent of Total University Awards\***  
**(Last Two Years)**



\*Includes VTT, LLC



# Million-dollar Researchers at VTTI

Researcher (Rank at VT)	2013 Expenditures
Tom Dingus (1)	\$7,689,175*
Zac Doerzaph (4)	\$3,025,718
Rich Hanowski (6)	\$2,543,830
Jon Hankey (8)	\$2,344,392
Stefan Duma (16)	\$1,599,542
Luke Neurauter (23)	\$1,235,703
Jon Antin (24)	\$1,164,555
Warren Hardy (26)	\$1,147,099
Ron Gibbons (27)	\$1,139,385
Darrell Bowman (32)	\$1,073,072
Shane McLaughlin (33)	\$1,050,017

For research expenditures (excluding outreach), VTTI and affiliated faculty had:

- 4 of top 10
- 8 of top 25
- 13 of top 50
- 19 of top 100\*\*

\*Includes VTT, LLC

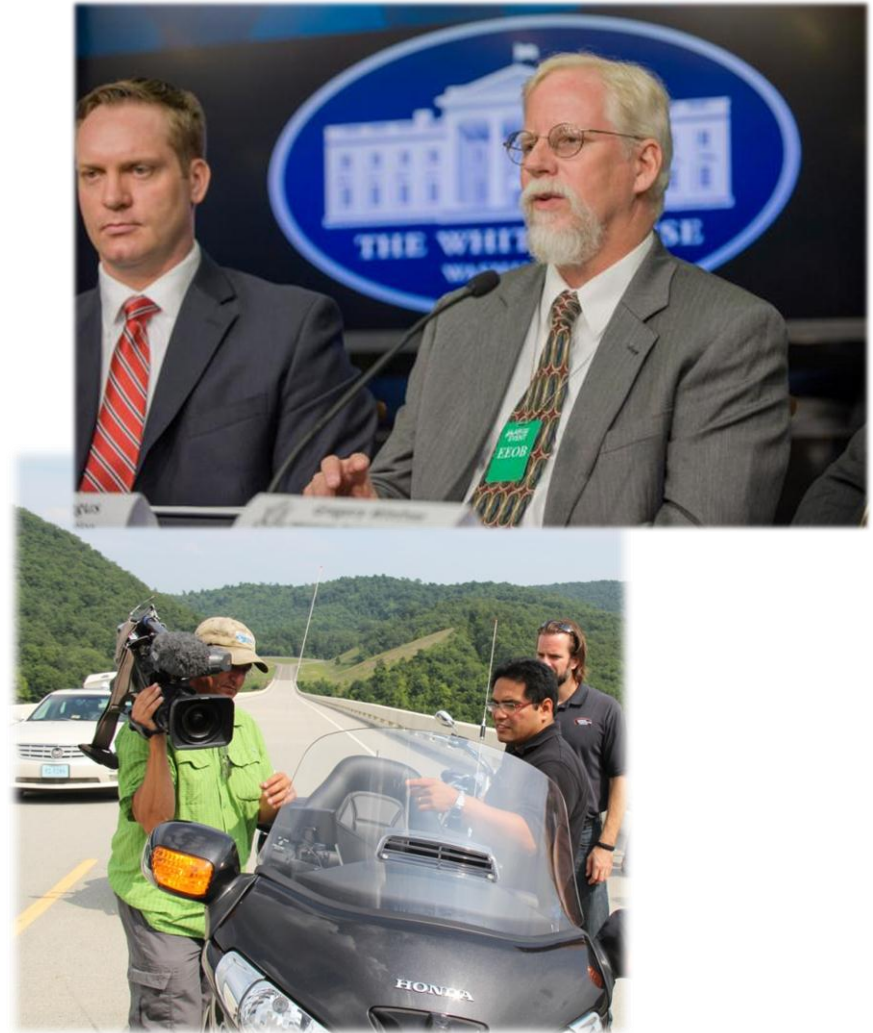
\*\*100= 5% of VT Faculty



# VTTI National and International Publicity for VT

Just since May, examples  
include:

- CNN
- NPR
- Weather Channel
- ABC Nightline
- Discovery Channel-Canada
- Governor's InnoVAte  
Virginia Group
- White House Champions  
of Change





# VTTI: We Enable Big Research

*We reach out to VT faculty and provide new research opportunities.*

*More than 65 faculty have worked with VTTI in just the last few years.*

*Examples this year:*

- Tom Martin, Electrical & Computer Engineering
  - Intelligent awareness for work zone workers using DSRC
- Don Baird, Materials Engineering
  - New materials to improve tire rolling resistance
- Pamela Murray-Tuite, Civil & Environmental Engineering
  - Emergency V2V communication
- Paul Herr, Marketing
  - Marketing the National Tire Research Center





# VTTI Educational Impact



- 35+ undergrads  
~\$250K/year
- 65 different grad students  
\$1.525M of grad student support/year
- 9 current employees pursuing advanced degrees
- More than 1,400 student-years of funding since 1996



# VTTI Student Research Examples

- More than 35 undergrads work as Smart Road experimenters and in the Data Reduction Labs
  - Engineers
  - Psychologists
  - Statisticians
- NTRC/Danville Community College
  - Paid internships to students enrolled in the General Engineering and Technical Programs
- NTRC/Goodyear Tire and Rubber Company
  - Will support the efforts of two grad students working with VT faculty





# VTTI Research Impact

MORE THAN

**140** ANNUAL PUBLICATIONS



**High-profile, highly diverse.**  
**Examples include:**

- New England Journal of Medicine
- Official Journal of the American Academy of Pediatrics
- The Journal of the American Medical Association (JAMA)
- Journal of Adolescent Health
- American Journal of Public Health
- Journal of Microstructures and Materials Science
- International Journal of Image and Data Fusion
- International Journal of Impact Engineering
- Journal of Safety Science



# VTTI

## *Global Impact*



- Conducting studies in China, Australia, Canada; France and New Zealand in the near future
- Researchers invited to keynote international conferences and symposia
- Continually expanding international efforts

- |               |                          |
|---------------|--------------------------|
| 1. Australia* | 14. Hungary              |
| 2. Austria    | 15. Israel               |
| 3. Canada*    | 16. Italy                |
| 4. Chile      | 17. Mexico               |
| 5. China*     | 18. New Zealand          |
| 6. Colombia   | 19. Portugal             |
| 7. Ecuador    | 20. Qatar                |
| 8. Estonia    | 21. Saudi Arabia         |
| 9. Finland    | 22. South Africa         |
| 10. France    | 23. Sweden               |
| 11. Germany   | 24. United Arab Emirates |
| 12. Greece    | 25. Uruguay              |
| 13. Honduras  |                          |

\*VTTI is currently overseeing naturalistic driving studies conducted here.



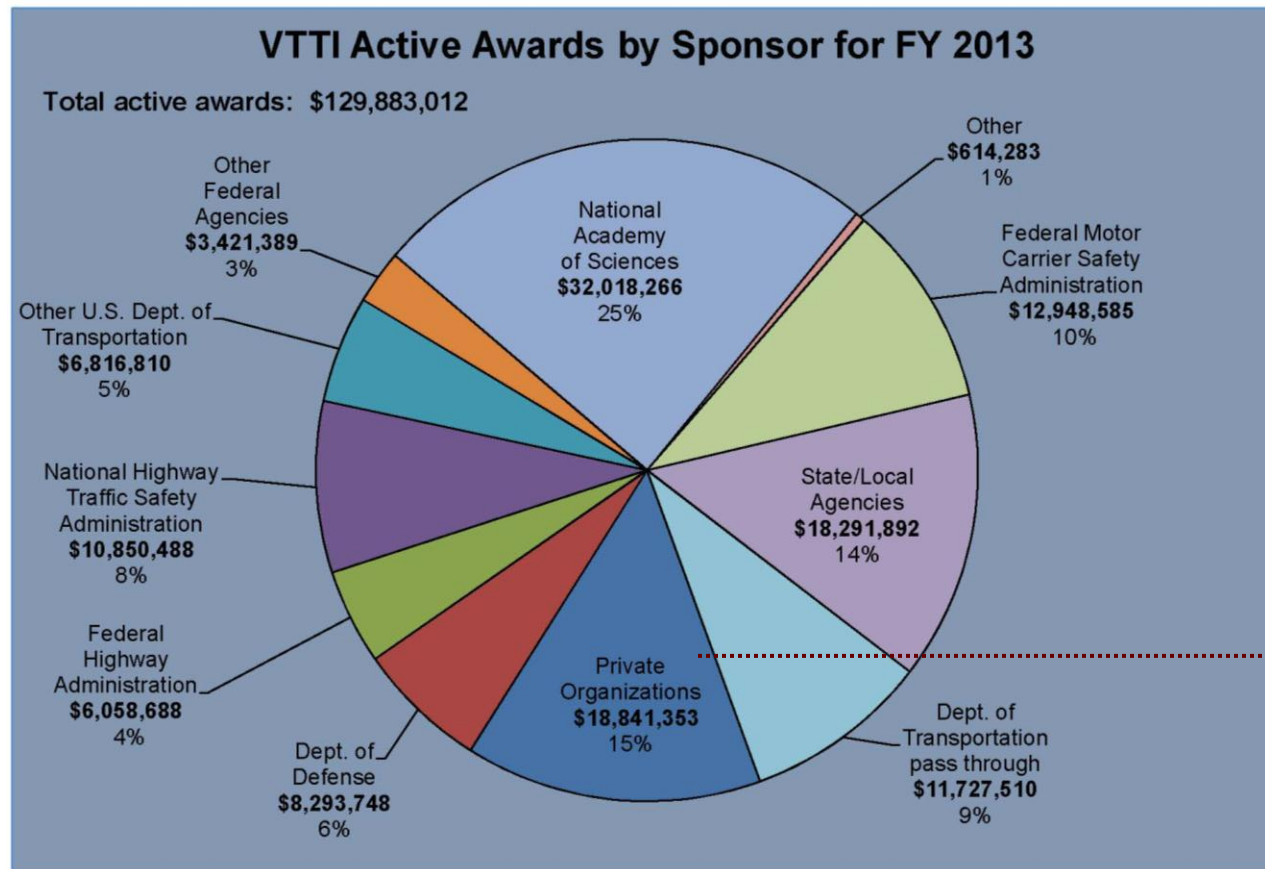
# VTTI Economic Development



- VTTI has created more jobs in Montgomery Co. than any other public or private entity since the Smart Road opened
  - 500 direct and indirect jobs
- NTRC will have an economic impact of \$147M on Southern Virginia during first 10 years of operation
  - 183 jobs in the region by 2020
- Global customers are already joining regional industry leaders coming to Southern Virginia to tap into the unique capabilities offered by NTRC



# VTTI Expansion of VT Sponsorship Portfolio



## *Private sector sponsorship*

- GM provided nearly \$7M during FY12
- Virtually every tire supplier sponsors research
- Corporate fundraising has exceeded \$2M since 2009



# VTTI Continued Success

## *Expanding the “Transportation Mission” to Create Opportunities and Growth*

- Vehicle emissions and fuel economy
- Vehicle dynamics and vehicle modeling
- Crash biomechanics and crash worthiness
- Innovative materials for pavement and tires
- “Big data” and High Performance Computing for crash causation and countermeasure development
- NIH contracts for teen driving research





# VTTI

We are not just a road:

- We are pioneers in transportation and related industries
- We enable big research for faculty and students
- We are on the cutting edge of new transportation challenges
- We bring in the largest portion of research money to VT
- We are a job creator
- Most importantly, we save lives, time, resources, and the environment

*And this is just the first 25 years.*





Join us for our 25<sup>th</sup> Anniversary Celebration  
Friday, November 15  
1-5 p.m.  
at VTTI



## **RESOLUTION FOR EXCLUSION OF CERTAIN OFFICERS/DIRECTORS**

**WHEREAS**, Virginia Polytechnic Institute and State University ("Virginia Tech") was determined by the Department of Defense (DoD) to be a facility authorized to be eligible for access to classified information or award of classified contracts in 1960 and years following, with the most recent authorization in 2011, and

**WHEREAS**, in accordance with the National Industry Security Program Operating Manual (NISPOM), Cognizant Security Agencies (CSAs) require certain principal officers, directors, partners, regents, or trustees, and those occupying similar positions at institutions of higher education meet the personnel security clearance requirements established for the level of the institution's facility security clearance or be formally excluded; and

**WHEREAS**, the NISPOM permits the exclusion from the personnel clearance requirements of said principal officers et al. on the basis that these cited individuals shall not require, shall not have, and can be effectively excluded from access to all classified information disclosed to Virginia Tech, and do not occupy positions that would enable them to affect adversely corporate policies or practices in the performance of classified contracts, as determined by a CSA.

**NOW THEREFORE BE IT DECLARED**, that the Board of Visitors hereby formally appoints a managerial group with the authority and responsibility for the negotiation, execution, and administration of classified contracts ("Key Management Personnel"), consisting of the following principal officers within Virginia Tech: President, University Legal Counsel, Chief Contracting Officer, Senior Research Compliance Officer, Senior Contracts Officer, and Facility Security Officer (specified by name in Attachment A).

**BE IT RESOLVED**, that the President and the said managerial group at the present time do possess, the required security clearance, with the exception of the Chief Contracting Officer, who is in the process of acquiring clearance; and

**BE IT RESOLVED FURTHER**, that in the future, when any individual enters upon any duties as President, or as a replacement for one of the Key Management Personnel list of Virginia Tech described herein, such individual shall immediately make application for the required security clearance; and be excluded from access to classified information until such personnel clearance is granted and

**BE IT RESOLVED FURTHER**, that in the future, when a CSA determines that additional Virginia Tech officials must be added to said managerial group and be granted personnel clearances or excluded from classified access pursuant to the NISPOM, such requirements shall be made and approved by the Key Management Personnel, and not the Board of Visitors, unless approval by the Board of Visitors is formally required by the CSA, and



**BE IT RESOLVED FURTHER**, that the appended list of all members of the Board of Visitors (specified by name in Attachment B) shall not require, shall not have, and can be effectively excluded from access to all classified information in the possession of Virginia Tech, and do not occupy a position that would enable them to affect adversely Virginia Tech policies or practices in the performance of classified contracts. A copy of this resolution shall be provided to CSAs as required by the NISPOM.

**RECOMMENDATION:**

That this resolution be adopted.

September 9, 2013



**ATTACHMENT A: List of Board of Key Management Personnel by name who must be granted personnel clearances or excluded from classified access pursuant to the NISPOM per Board of Visitors Resolution, September 9, 2013**

President	Dr. Charles W. Steger
Legal Counsel	Kay K. Heidbreder, Esq.
Chief Contracting Officer	M. Dwight Shelton, Jr.
Senior Research Compliance Officer	Dr. David M. Moore
Senior Contracts Officer	John C. Rudd Jr.
Facility Security Officer	David A. Brady



**ATTACHMENT B: List of Board of Visitors Members to be excluded per Board of  
Visitors Resolution, September 9, 2013**

Mr. James L. Chapman  
Dr. Nancy V. Dye  
Mr. William D. Fairchild, III  
Mr. Cordel L. Faulk  
Mr. B. Keith Fulton  
Mr. William B. Holtzman  
Mr. John C. Lee, IV  
Ms. Suzanne S. Obenshain  
Ms. Deborah Petrine  
Mr. Michael Quillen  
Mr. John G. Rocovich, Jr.  
Dr. J. Thomas Ryan  
Mr. Steve Sturgis  
Mr. Dennis H. Treacy



## **Committee Minutes**

### **STUDENT AFFAIRS AND ATHLETICS COMMITTEE OF THE BOARD OF VISITORS**

**Smithfield Room  
The Inn at Virginia Tech and Skelton Conference Center  
8:30 a.m.**

**September 9, 2013**

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

Mr. Cordel Faulk, Committee Chair  
Mr. John Lee  
Mr. Steve Sturgis  
Ms. Erica Wood

#### **Guests:**

Dr. Charles Steger, Mr. Michael Quillen, Dr. Patricia Perillo, Mr. Jim Weaver, Mr. Jermaine Holmes, Ms. Carol Robertson, Dr. Frank Shushok, Dr. Marc Junkunc, Mr. Tom Brown, Mr. Richard Sparks, Ms. Penny White, Dr. Richard Ferraro, Mr. Chris Wise, Mr. Hikmet Gursoy, Ms. Sue Teel, Dr. Cynthia Bonner, Mr. Bill Foy, General Randal Fullhart, Mr. Brian Bolton, Ms. Frances Keene, Mr. Ted Faulkner, Dr. Martha Glass, Mr. Byron Hughes, Dr. Eleanor Finger, Dr. Sharrika Adams, Mr. Frankie Krimowski, Dr. Guy Sims, Mr. Brent Ashley, and Mr. Nick Warrington.

#### **Open Session**

- 1. Opening Remarks and Approval of June 3, 2013 Minutes.** Mr. Cordel Faulk, Committee Chair, provided opening remarks and submitted the minutes of the June 3, 2013, Student Affairs and Athletics Committee meeting to the committee for review and acceptance. The minutes were approved as written.
- 2. Athletics Department Report.** Mr. Jim Weaver, Director of Athletics, introduced Mr. Jermaine Holmes, Director of Student Athlete Academic Support Services, who provided an update on the 2013 spring semester academic performance of the 509 athletes on spring team rosters. Of these athletes, 55% achieved a 3.0 grade point average (GPA) for the semester and 47% maintained a cumulative GPA of 3.0 or higher. The spring semester Dean's List included 168 athletes, 20 of whom earned a 4.0 GPA for the semester and 2 of whom maintained a cumulative 4.0 GPA. The average team spring semester GPA was 3.09, with a team cumulative GPA of 3.03. In terms of athlete graduation rates, 68% of our student athletes graduate in six years, using the federal measure and 88%, using the NCAA measure, which places us 6<sup>th</sup> in the Atlantic Coast Conference.



Mr. Weaver then introduced Ms. Carol Robertson, the new Women's Head Golf Coach. She is a native of Tazewell, Virginia and attended James Madison University, where she was a member of the women's golf team. After graduation she played as a professional golfer for three years and then became the head women's golf coach at Old Dominion University. During her first year at Virginia Tech, she will focus on recruiting her first class of athletes, who will be redshirted for a year and will then begin playing in their second year.

3. **Orientation to Student Affairs in Higher Education and at Virginia Tech.** Dr. Patricia Perillo, Vice President for Student Affairs, reviewed the division's strategic goals for 2012-2018. Over the next five years the Division of Student Affairs will focus on:
- Impacting learning environments,
  - Fostering globalization and inclusive excellence,
  - Creating a culture of collaboration and organizational efficiency,
  - Embracing a networked society, and
  - Enhancing our facilities.

Dr. Perillo provided examples of strategies that the division will employ to address each goal. These priorities include a focus on:

- Sophomores, transfers, and off campus students,
- Leadership in the spirit of Ut Prosim
- Aspirations for Student Learning,
- Curricular collaborations,
- Professional development for faculty and staff,
- Innovative partnerships with academic colleagues,
- Multicultural programs and services emphasis on education and cultural competence,
- International global village,
- Parent and alumni relations,
- Communications and Innovative Technologies, and
- Capital planning process.

4. ***Innovate!*: an Entrepreneurial Living-Learning Community.** Dr. Frank Shushok, Associate Vice President for Student Affairs, and Dr. Marc Junkunc, Assistant Professor of Management, gave an update on *Innovate*, Virginia Tech's newest living-learning community. As an entrepreneurial community, *Innovate* houses 35 first year and transfer students, from a variety of academic disciplines, who are interested in incubating ideas and engaging their entrepreneurial spirit. The program is housed in the Oak Lane Community and is guided by a steering team comprised of representatives from the Division of Student Affairs, faculty from the Pamplin College of Business, students, and a variety of other university colleagues. Employing a multidisciplinary approach, this community breaks down traditional silos and encourages creative thinking. Program participants enroll in a common course that facilitates the generation of creative ideas and educates students on the skills they need to start a business.



5. **Focus on Families as Partners.** Mr. Tom Brown, Dean of Students, Mr. Richard Sparks, Associate Dean of Students and Director of New Student Programs, and Ms. Penny White, Director of Parent and Alumni Relations, provided an overview of partnerships that the Division of Student Affairs has with the families of students. This relationship with parents has developed over time as the program for entering students has evolved from one that focused primarily on the orientation of students prior to their arrival on campus, to an emphasis on the adjustment of students during their first semester, to our current holistic approach that addresses the needs not only of our entering students, but also those of their parents and families. This collaborative approach ensures that all families have the opportunity to be included, delivers a consistent message, assists families with navigating the university, and demonstrates the value of family involvement in enhancing student success. Contact with families is maintained through a monthly family E-newsletter, a New Student and Family Programs website, a Facebook page, and a dedicated email address where family members can ask questions and request information.
  
6. **Recreational Sports at Virginia Tech.** Dr. Richard Ferraro, Assistant Vice President for Student Affairs and Mr. Chris Wise, Director of Recreational Sports, gave an update on the extensive offerings provided by the Recreational Sports Department. Core program areas include:
  - Intramural sports,
  - Club sports,
  - Fitness,
  - Aquatics and Instructional Programs, and
  - Open recreation

Program participation numbers for 2012-2013 included:

- 622,066 total visits to the recreational facilities in McComas and War Memorial Halls by 26,071 individual students;
- 16,986 total participants in intramural sports, representing 8,583 individual students;
- 46,687 total participants in group exercise and physical training, representing 4,455 individual participants; and
- 1,396 total club sports participants.

In addition to core programs, the department provides a variety of specialized offerings in collaboration with other university departments. These include programs aimed at achieving a healthy, well-balanced lifestyle as well as events such as the Hokie World Games and Parade of Nations, which celebrates the international diversity of the campus, or the annual Run for Remembrance, which involves the entire university community. Recreational Sports offers programs that support the Aspirations for Student Learning, contribute to the overall well-being of Virginia Tech students while they are enrolled, and establish the



foundation for a healthy lifestyle after graduation. In order to deliver this extensive array of programs, Recreational Sports depends on the services of 569 student employees. The department has recently upgraded the recreational facilities in McComas Hall and War Memorial Hall and has made improvements to its tennis courts and club sports fields. Future plans include more extensive renovations to War Memorial Hall, upgrades to the intramural sports fields, and construction of a ropes course as well as a disk golf course.

**Adjournment.**

There being no further business, the meeting was adjourned at 11:23 a.m.





# ***Orientation to Student Affairs in Higher Education and at Virginia Tech***

## **Student Affairs and Athletics Committee of the Board of Visitors**

Patricia A. Perillo, Ph.D.  
Vice President for Student Affairs  
September 9, 2013





# ***History of Student Affairs in Higher Education***

***Nearly 90 years of research and scholarship***

- In loco parentis
- Student Services
- Student Development
- Student Learning





## ***Virginia Tech Student Affairs Mission Statement***

*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 (That I May Serve).*





## Division of Student Affairs

# *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 & 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.





# ***Division of Student Affairs Overview***

## ***Leadership***

The Vice President for Student Affairs provides leadership to a division comprised of 19 departments and 5 administrative units. An Associate Vice President, three Assistant Vice Presidents, the Commandant of the Corps of Cadets, the Dean of Students, and the Chief of Staff provide daily oversight to specific departments and programs.

## ***Employees***

The division is one of the largest employers at Virginia Tech, with approximately 3,200 faculty, staff, wage, student employees, and graduate assistants.





# ***Division of Student Affairs Overview***

## ***Budget***

The 2012-13 revenue budget for the Division of Student Affairs totals approximately \$139 million, of which \$2 million are Education and General funds and \$2 million are Unique Military Activities funds. The remaining \$135 million in Auxiliary Enterprises accounts for 47% of the university's total Auxiliary Enterprise funds.

## ***Facilities***

The Division of Student Affairs is responsible for an extensive physical plant consisting of nearly 1.6 million assignable square feet and over 60 buildings across the campus. This represents approximately 28% of the total assignable square feet on the Virginia Tech campus. These include 10 dining facilities and 47 residence halls.





# ***Student Affairs Departments***

- Alumni Relations
- Alcohol Abuse Prevention Center
- Career Services
- Cook Counseling Center
- Corps of Cadets
- Cranwell International Center
- Dean of Students Office
- Dining Services
- Fraternity and Sorority Life
- Housing and Residence Life
- Leadership Education Collaborative
- Multicultural Programs and Services
- New Student and Family Programs
- Recreational Sports
- Schiffert Health Center
- Services for Students with Disabilities
- Student Advocacy
- Student Centers and Activities
- Student Conduct









# ***Division of Student Affairs Strategic Goals (2012-2018 as part of University Strategic Plan)***

- Impacting Learning Environments
- Fostering Globalization and Inclusive Excellence
- Creating a Culture of Collaboration and Organizational Efficiency
- Embracing a Networked Society
- Enhancing our Facilities





# Top Priorities for Virginia Tech Division of Student Affairs

- Innovative communication
- Off campus/transfers/sophomores
- Equity, diversity, inclusion
- Leadership in the spirit of *Ut Prosim*
- Aspirations for Student Learning





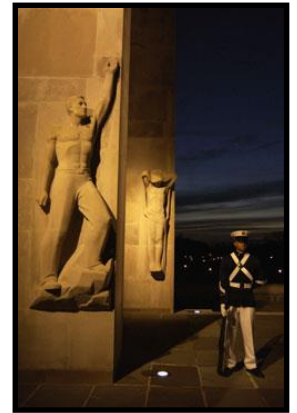
## Top Priorities for Virginia Tech Division of Student Affairs *(continued)*

- Curriculum collaborations
- DSA development
- Professional development
- Parent and alumni relations
- Innovative partnerships





# ***Observations, Reflections, Questions?***







**Frank Shushok, Ph.D.**

Associate Vice President for Student Affairs

**Marc Junkunc, Ph.D.**

Assistant Professor, Management; Faculty Director for Innovate



# *Living Learning Communities*

- A unique, shared experience where students engage faculty, community, and their peers in a learning-centered, living environment.
- Opportunities for holistic and transformative learning where students spend most of their time – their residence hall home.
- Spaces to engage in academic major work, common interests, dynamic intellectual dialogue, and multi-generational mentorship.
- Research shows that students who choose to live in LLCs have higher cumulative GPAs, increased interaction with faculty, and higher retention rates than their peers.



# *Innovate: An Entrepreneurial Community*

- 35 first-year students (including transfers) interested in engaging their entrepreneurial spirit.
- Located at 2475 Oak Lane, the “SPEH Innovate” house is an ideal incubator for ideas and entrepreneurial learning.
- A multidisciplinary (including business, science, architecture, engineering, and LAHS majors) approach.





# *Innovate: An Entrepreneurial Community*

- The Innovate steering team is a collaboration of Pamplin faculty, the Division of Student Affairs, students, and other university colleagues excited to support students' ideas and ventures.
- An ever-growing list of university colleagues, students, alumni, and real-world entrepreneurs.
- On-campus, student-led “eClub” is poised to support new students with some multigenerational mentorship.





# Families as Partners





# Examples of how some campuses view parents...

- Helicopter
- Blackhawk
- Lawnmower
- Bulldozer
- Stealth
- Psycho
- In-Denial
- Lion
- Wolf
- Mosquito



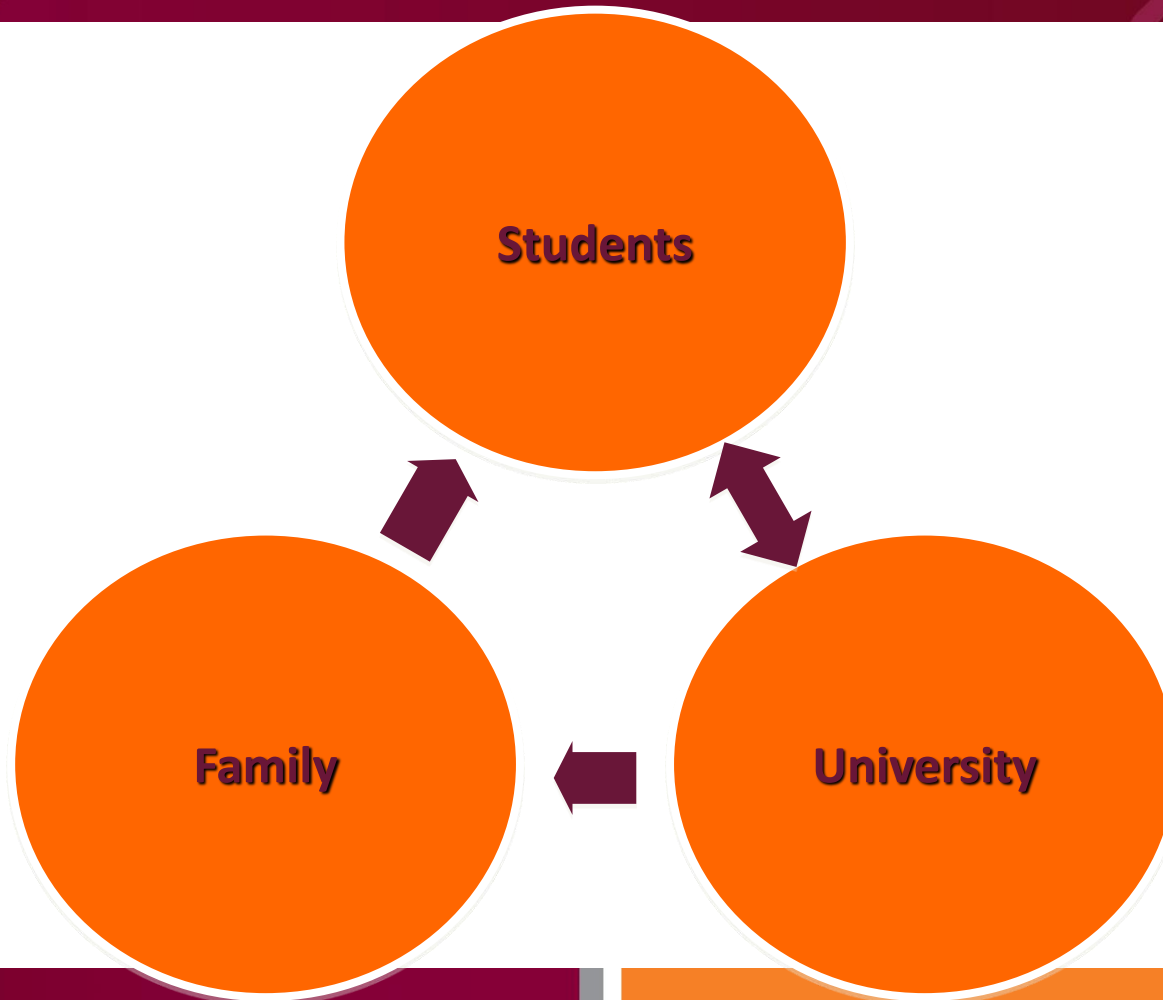
# But, not at VT

We believe in Partnership





# An evolving relationship ...a new chapter





# New Student and Family Programs



Benefits of collaboration:



Inclusive



Consistency of message



Easier for families to  
navigate VT



Demonstrates the value  
of family involvement





# Ways we stay in contact

- 🦃 Hokie Family E-news – monthly
- 🦃 [www.facebook.com/VirginiaTechStudentAffairs](https://www.facebook.com/VirginiaTechStudentAffairs)
- 🦃 [www.nsfp.vt.edu](http://www.nsfp.vt.edu)
- 🦃 [families@vt.edu](mailto:families@vt.edu)





# Families as Partners







CIVILITY



SELF UNDERSTANDING

WELLNESS



CURIOSITY



• UT PROSIM •

COURAGEOUS  
LEADERSHIP



# VIRGINIA TECH

## RECREATIONAL SPORTS



# VIRGINIA TECH

## RECREATIONAL SPORTS

### OUR MISSION:

To enhance the quality of life for the university community by educating and encouraging participation in activities that promote healthy lifestyles, social interactions, and leadership skills. The department creates an atmosphere that encourages individuals to develop life-long involvement in recreational activities and is dedicated to meeting the changing needs of a diverse community by offering quality structured and informal recreational opportunities.

### OUR VISION:

To build a Healthy Hokie community and to influence students to commit to the aspirations for student learning.





# VIRGINIA TECH

## RECREATIONAL SPORTS

### OUR CORE PROGRAM AREAS:

- Intramural Sports
- Club Sports
- Fitness
- Aquatics and Instructional Programs
- Open Recreation





# VIRGINIA TECH

## RECREATIONAL SPORTS

### PROGRAMS BY THE NUMBERS:

Total Visits to McComas and WMH	622,066	Unique visits to McComas and WMH	26,071
Total Intramural Participants	16,986	Unique Intramural Participants	8,583
Total Group Exercise and PT participants	46,687	Unique Group Exercise and PT Participants	4,455
Total Club Sport Participants	1396	Total Student Employees	569





# VIRGINIA TECH

## RECREATIONAL SPORTS

### Specialized & Integrated Programs:

- Smart Life (with Dining Services and Schiffert Health Education)
- How of Happiness (with the Women's Center and Schiffert Health Education)
- Counseling Referral (with the Cook Counseling Center)
- Chi Running (with HNFE and the Corps of Cadets)
- U.S.O.A. Hokie Kids Day (with Rescue Squad, Athletics, etc., and Community)
- Hokie World Games and Parade of Nations (with Cranwell and Athletics)
- The Run for Remembrance (with the University Community)





# VIRGINIA TECH

## RECREATIONAL SPORTS

### Benefits of Physical Activity: (Center for Disease Control & Prevention)

- Control Your Weight
- Reduce Your Risk of Cardiovascular Disease
- Reduce Your Risk for Type 2 Diabetes and Metabolic Syndrome
- Reduce Your Risk of Some Cancers
- Strengthen Your Bones and Muscles
- Improve Your Mental Health and Mood
- Improve Your Ability to do Daily Activities and Prevent Falls
- Increase Your Chances of Living Longer





# VIRGINIA TECH

## RECREATIONAL SPORTS

### Opportunities To Practice Our Aspirations:

- Civility (sportsmanship, understanding policy, shared space, diverse environments)
- Self Understanding (personal health, competitiveness, choices, engagement)
- Curiosity (New activities, leadership ops, personal health, research ops)
- Courageous Leadership (team leaders, sports officials, testimonies, invitations)
- UT Prosim (instructors, community events, leadership ops, involvement)





# VIRGINIA TECH

## RECREATIONAL SPORTS

## Completed Facility Enhancements:

- McComas Addition
- War Memorial Improvements
- Tennis Courts
- Bermuda Playing Surface/Club Fields





# VIRGINIA TECH

## RECREATIONAL SPORTS

## Future Facility Plans:

- Turf Fields/Intramural Sports
- War Memorial Hall Modernization and Renovation
- Disk Golf
- Ropes/Challenge Course







Questions?

VIRGINIA TECH

RECREATIONAL SPORTS



[illegible]





**Governing Board Certification Form**  
**Academic Year 2013-14**

As Chairman of the Governing Board at Virginia Polytechnic Institute and State University, 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, ACC 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 ACC.

Date Presented to the Governing Board: \_\_\_\_\_

Signed: \_\_\_\_\_  
(Chairman of the Governing Board)

Signed: \_\_\_\_\_  
(CEO of Member Institution)

Please return completed form before **October 18, 2013** to:

Commissioner John D. Swofford  
Atlantic Coast Conference  
4512 Weybridge Lane  
Greensboro, NC 27407



## **RESOLUTION APPROVING THE 2014-2020 SIX-YEAR ACADEMIC, FINANCIAL, AND ENROLLMENT PLAN**

**WHEREAS**, the Higher Education Opportunity Act of 2011 requires each public institution of higher education in Virginia to develop and submit an academic, financial, and enrollment plan covering a six-year period; and

**WHEREAS**, these plans are required to be submitted for review by July 1<sup>st</sup> of each odd year with the goal of finalizing plans by October 1<sup>st</sup>; and

**WHEREAS**, annual adjustments to plans may be submitted by July 1<sup>st</sup> of each even year as desired by institutions; and

**WHEREAS**, the university submitted the plans by July 1<sup>st</sup> to the State Council of Higher Education (SCHEV) as required; and

**WHEREAS**, the Commonwealth's process requires approval of the each institutions' six-year plan by that institution's Board of Visitors; and

**WHEREAS**, Virginia Tech has prepared these plans in accordance with the requirements of the Higher Education Opportunity Act of 2011 and guidelines prepared by the State Council of Higher Education in Virginia; and

**WHEREAS**, university representatives met and reviewed the plans with state officials on August 20<sup>th</sup>; and

**WHEREAS**, the new process envisions an iterative discussion with the Commonwealth culminating in a final plan by October 1<sup>st</sup>;

**NOW THEREFORE BE IT RESOLVED**, that the Virginia Tech six-year academic, financial, and enrollment plan be approved as submitted; and

**BE IT FURTHER RESOLVED**, that if state officials require changes to the university's plan that the university be authorized to make necessary changes to the plan as may be appropriate, bringing any material changes back to the Board of Visitors for ratification; and

**BE IT FURTHER RESOLVED**, that if the University's strategic planning process creates the need to modify the six-year academic, financial, and enrollment plan that the university prepare for submission of a revised plan by July 1, 2014.

### **RECOMMENDATION:**

That the Resolution regarding approval of the academic, financial, and enrollment plans be approved.

September 9, 2013



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013****Part II:****A. Institutional Mission:**

Virginia Polytechnic Institute and State University (Virginia Tech) is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The discovery and dissemination of new knowledge are central to its mission. Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

**B. Strategies****208 Program Strategies:**

1. **Advance Faculty Salary Competitiveness to the 60<sup>th</sup> Percentile of SCHEV Peer averages.** The university's authorized faculty salary is projected to be at the 22<sup>nd</sup> percentile of the SCHEV Peer group for Virginia Tech, ranking 19<sup>th</sup> of 26 institutions. This has made attracting and retaining world-class faculty extremely difficult, and we continue to defend against the loss of our talented faculty members to competing institutions. In order to retain and recruit high-quality faculty to deliver the instructional and research missions of the university, competitive salaries must remain a priority for the institution. The replacement of faculty is far more expensive than the retention of human capital into whom the university has invested significant time and resources. The competition for faculty across institutions has accelerated, creating an environment in which faculty are rewarded for mobility rather than performance. The restoration of an annual merit process that rewards the best and brightest faculty for their efforts to drive the university forward will reduce turnover of our most productive faculty and move the university closer to the state's own goal of achieving the 60<sup>th</sup> percentile of the SCHEV Peer group average salary over 6 years. The university plans for the nongeneral fund share of a statewide compensation process. In the absence of a statewide compensation process, the university will make limited progress with nongeneral fund revenue alone.
2. **Increase Staff Salaries.** Much like faculty, the slow pace of growth of staff compensation has negatively impacted retention and recruitment efforts at the university. The need to competitively compensate the hard-working support staff at the university is a key factor in ensuring a highly productive and innovative organization. Advanced knowledge, skills, and abilities are critical for the effective operation of a complex institution of higher learning.
3. **Address Operation and Maintenance of New Facilities.** With several new facilities coming on-line during the planning period, including the university's new Classroom Building and Engineering instructional facility, Operation and Maintenance support is a



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013**

primary cost driver in the future budget. Facilities must be open throughout the year in order for the university to deliver its mission of providing programming to students and citizens of the Commonwealth. Bringing new facilities online requires utility service, cleaning/housekeeping, maintenance, and operating supplies. Addressing operation and maintenance of facilities also helps to ensure the maximum facility service life and prevention of building deficiencies.

4. **Advance Strategic Research Opportunities.** The growth of complex interdisciplinary research has resulted in an environment that is more capital intensive than ever. Funding agencies have moved away from supporting the individual investigator and are more interested in investing in large scale interdisciplinary teams working over periods of years. The ability to compete for awards in the current research environment requires flexible support that allows institutions to be nimble in landing large competitive grants. Investments will be made in programs and infrastructure in emerging research areas, especially in the university's neuroscience research in Roanoke. Emerging opportunities to leverage the university's research strengths exist in areas such as advancing research in critical technologies, water, energy, security, transportation, and resiliency. Investment in research not only leads to direct and indirect job creation and economic development in the Commonwealth, but also advances knowledge that contributes to a higher quality of life and the future potential of Virginia's citizens.
5. **Increase Virginia Undergraduate Enrollment.** In partnership with the Commonwealth, the university will continue to enroll an additional 50 Virginia undergraduates each year through 2014-15, for a total of 200, honoring an existing agreement with the 2011 General Assembly to continue to enhance the university's service to the citizens of the Commonwealth.
6. **Expand and Enhance STEM-H Degree Production.** Building upon Virginia Tech's current excellence in STEM instruction, the university is developing innovative instructional models and new degree opportunities in emerging and high-demand STEM-H fields to advance the educational and economic competitiveness of graduates and the Commonwealth. Science has become increasingly interdisciplinary and collaborative in nature in order to address complex problems. New interdisciplinary undergraduate degree programs in Nanoscience, Neuroscience, Systems Biology, and several new interdisciplinary graduate degree programs in Regenerative Medicine and Computational Tissue Engineering will provide the 21st century STEM-H student with a breadth of knowledge that spans traditional science disciplines. The university will expand health science instruction through the addition of an undergraduate Biomedical Engineering degree, a graduate Population Health Sciences degree, and through strengthening pre-med instruction and advising that prepares undergraduates for medical school. This strategy also includes the addition of a Meteorology degree program. Further, Virginia Tech's goal is to ensure competency in data analysis and computational methods for all students, as well as offer experiential learning opportunities through a "hands-on, minds-



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013**

on" philosophy that leads to better job preparation and advances post-graduate career opportunities in high-paying STEM-H fields.

7. **Support Faculty Startup Packages, Particularly for New Faculty in the STEM-H Fields.** The market for faculty is increasingly competitive. The ability to offer competitive start-up packages, including appropriate research facilities and equipment, allows the Commonwealth to attract and retain the best and most qualified faculty, including established investigators with international reputations. The success of these faculty benefits students and instructional programs as well as the Commonwealth's economy through the attainment of increased research funding from external sources as well as providing cutting-edge instruction and research opportunities in STEM-H fields. The market has become very competitive for faculty with a high likelihood of intellectual property and spin out corporations.
8. **Enhance Degree Attainment and Core Education Through Creative Technologies and the Expansion of Computational Thinking in Degree Programs.** Characterized by rapid innovation and creative solutions to complex societal problems, the 21<sup>st</sup> century economy demands a highly skilled & cross-disciplinary workforce. By supporting work at the intersection of technology and design, the Institute for Creativity, Arts, and Technology (ICAT) is positioned to be a launch pad for today's students to become the leaders and innovators of the new economy. ICAT is forging a pathway between trans-disciplinary research and artistic output, scientific and commercial discovery, and educational innovation. The Institute is transforming university-level education for citizens of the Commonwealth by preparing students to be part of a new cohort of multi-skilled workers needed to drive economic development in the Commonwealth through the creation of spin-off technologies and partnerships with organizations that can adapt and succeed in response to the critical needs of today's economy.
9. **Support Creation of Faculty of Health Science and Translational Biology, Medicine, and Health degree program.** The creation of an interdisciplinary Faculty of Health Sciences (FHS) provides the focal point and structure to enhance the connections between traditional academic disciplines. This increased interconnectivity will increase faculty productivity and enhance interdisciplinary research outcomes. A key program in this initiative is the implementation of a new Translational Biology, Medicine, and Health degree program to train biomedical and health scientists who will lead the future of prevention, diagnosis, treatment, and curing of disease in the future. Additionally, as a university-wide initiative, the FHS will spur cross-departmental collaborations and, through the sharing of resources, provide opportunities for the university to achieve cost efficiencies. Collectively, the FHS, while continuing to be an effective steward of limited resources, will advance the university's long-range vision of expanding academic and research opportunities in the growing field of health sciences. This is a vital step to positioning the Commonwealth for the future.



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013****10. Expand Year-Round Academic Opportunities to Accelerate Degree Completion.**

Virginia Tech has successfully undertaken its initial steps of increasing the number of on-line courses available in the summer and winter months so that students away from campus can continue progress toward their degree or take additional courses toward a second major or additional minor at the times that are most convenient to them. To accelerate degree completion, incentives must be expanded to increase on-campus instruction and facility use over the summer and winter months. These incentives must also address student financial barriers. The university is working to implement strategies to increase the utilization of year-round instruction at the Blacksburg campus by: (1) Lowering costs for students who take seat based courses in Blacksburg over the summer/winter sessions. This allows students to weigh the choice of returning home to work with the opportunity to take advantage of summer/winter cost savings, (2) creating a summer/winter undergraduate research program to provide meaningful, resume building employment for students to encourage them to remain in Blacksburg, work and take seat based instruction. This would address the traditional student practice of returning home to seek income and resume-building employment opportunities between the academic terms, while allowing student progress and meaningful work opportunities during the summer in scientific discovery. (3) expanding course offerings to meet the needs of students seeking to advance their plans of study toward early degree completion (4) increasing available student financial aid to ensure access to summer/winter enrollment, and (5) creating summer bridge programs for entering freshmen. These efforts assist students and the Commonwealth by reducing the potential for incurring student loan debt and enhancing student success while ensuring timely degree completion.

**11. Position the University for Growth in On-Line, Distance, and E-Learning Environments.**

With advances in technology dramatically reshaping the educational paradigm, the university will continue to create unique opportunities to enhance classroom environments and online education to expand the range of essential skills students must acquire to excel in complex and rapidly-changing digital and networked environments. This includes expansion of online and hybrid courses. This initiative will support increased access to affordable, high-quality education to residents of the Commonwealth, expanded experiential learning opportunities, and continued investigation, development, and utilization of current and emerging technologies that will enhance the traditional classroom experience while providing mobile access and expanding exceptional learning opportunities throughout the Commonwealth.

**12. Increase Graduate Enrollment.** Recognizing industry and societal need for advanced degree-holders to support economic innovation and expansion, the university will increase graduate student enrollment, focusing on masters and doctoral level science, technology, engineering, mathematics, and health sciences (STEM-H). The education of



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013**

graduate student is a source of innovation, technological development and entrepreneurship that leads to higher paying, high-value jobs that are vital for the continued success of the Virginia economy in the global marketplace as well as lower rates of unemployment. The Commonwealth's investment would be leveraged with growth in external grants and contracts to support a vibrant STEM-H graduate education.

- 13. Address Library Costs and Enhance Digital Collections.** Libraries play a vital role in ensuring that the university can consistently deliver a high quality educational experience. The evolution of information delivery and storage through has accelerated the reliance upon digital technology to provide a modern and effective library resource to the campus community. Addressing rising costs of journals and other library materials is central to maintaining and enhancing the value of the university's library collection to both students and researchers. Additional investment is needed to continue providing cutting edge research to students while minimizing the negative impacts of space limitations and the increasing costs of subscription based resources and information platforms. Access to these resources and increased support of the libraries will be critical for the university to continue to enhance student learning while improving retention and graduation rates.
- 14. Expand Effective Economic Development Program and Enhance Statewide Job Creation Opportunities.** To better serve the needs of the Commonwealth, the university will provide opportunities for students to apply and expand upon classroom learning in real world service opportunities in the local community and extend the campus expertise across the Commonwealth. The university is growing research and extending research to economic development in Southside Virginia through the National Tire Center, creating jobs and building core competencies for future industry. Support from the Commonwealth will help expand economic development efforts and job creation.
- 15. Increase Number of Full-Time Faculty.** The institution is stressed in its ability to provide an excellent instructional opportunity for its students. This has mandated larger class sizes, the use of adjuncts, graduate students, and professional instructors in the delivery of curriculum and has limited the availability of key course sections for students. Continued growth in high demand areas such as engineering, architecture, business, and life sciences has strained student to faculty ratios and limited the university's ability to expand high-demand offerings. Additional support for faculty costs will allow the university to maintain the high quality instructional opportunities demanded by its students while ensuring access to courses that are desperately needed for timely graduation. This stress is affirmed in the university's Base Budget Adequacy shortfall. Stress relief is needed so that Virginia Tech instructional programs are competitive internationally, and support capacity for enhanced global education.



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013****16. Support Existing Virginia Student Enrollment Growth and Degree Attainment.**

Virginia Tech has grown by more than 2,200 resident undergraduate students over the past several years. During this period of considerable growth, the Commonwealth was not funding enrollment growth. Support for this growth is consistent with Section 23-38.87:14.B of the Code of Virginia: "The Governor shall consider and recommend as he deems appropriate and the General Assembly shall consider and provide as it deems appropriate additional general fund appropriations to address the unfunded enrollment growth that occurred between the 2005-06 fiscal year and the enactment of this chapter.")

**17. Ensure Access for Low and Middle-Income Families by Continuing to Expand Need-based Financial Aid to Undergraduate Students.**

Virginia Tech is very sensitive to student access to higher education, including student cost and borrowing levels. The university's Funds for the Future financial aid program protects students from tuition increases during their academic careers depending on their level of financial need. Returning students with the greatest need are completely sheltered from tuition rate increases. The university's financial aid initiatives also address enrollment goals and work to reduce the unmet financial needs of Virginia's low and middle-income families. These programs are intended to work in concert with increases in state support for student financial aid.

**18. Expand Enrollment in the University's Veterinary Medicine Program.**

Veterinary medicine today is one of the broadest biomedical disciplines, encompassing the entire spectrum of medical activities from the molecular level to entire ecosystems. Creating additional Virginia graduate students seats will help to ensure that the Commonwealth's residents have access to the program and the veterinary services that graduates offer the community. This will serve to address the industry's demand for veterinary services and skilled biomedical specialists. Addressing the shortfall of veterinarians will serve not just our citizens, but also support a healthy and profitable agricultural industry in the Commonwealth. The program will enroll an additional 30 students per year. With only 28 accredited veterinary medicine schools in the nation, providing for enrollment growth is necessary to avoid the loss of enrollment to off-shore institutions.

**19. Enhance Student Advising Services and Degree Completion.**

Student learning and development, thus success and degree completion, is enhanced through academic advising. To expedite degree completion and promote academic success, student support services will be bolstered through strategies that include pathway to degree attainment assistance for students, a student support services to aid in the transition to a four-year academic environment, student crisis counseling, and increased support for students with disabilities (which is an unavoidable cost). Student retention results in improved outcomes for the university, state, and the student.



**Agency 208: University Division**  
**Six-Year Plan Submission****July 1, 2013**

**20. Utility and Fixed Cost Increases.** Rising costs of contracts, utility service, and other mandated or required operating costs must be addressed to maintain the delivery of institutional services.

**21. Advance Institutional Efficiencies and Effectiveness.** Continuous improvement of the university's processes and infrastructure requires new investments in systems to reduce costs and address future capacity needs, classroom and equipment upgrades to modernize instructional and other university facilities, and to address issues such as health and safety, sustainability, and regulatory mandates. Strategic investments will result in increased effectiveness of operations and enhance cost containment efforts.

**22. Fringe/Health Increases.** Increases in fringe benefit rates and health insurance expenses will impact the university's expense budget.

**23. VRS Increases.** The 2012 General Assembly established a three-biennium phase-in of actuarial rates for the Virginia Retirement System employer contribution, in which employers will experience increases of 1.4% in FY15, FY17, and FY19. The nongeneral fund share of this increase will impact the university's expense budget.

**24. General Fund Contingency.** The university believes that the fund splits used for strategies included in this plan appropriately reflect required General Fund revenue needs. Assuming the Commonwealth fully funds the General Fund portion of each, the university's realistic tuition capacity would exceed the total non-general fund component of all included strategies. If, however, the Commonwealth does not fully fund the General Fund portion of each of the strategies included in this plan, the university would be forced to apply the remaining tuition capacity to fully fund the following critical activities: utility cost increases, operation and maintenance of new facilities, faculty costs, library inflation, and a portion of the cost of existing resident enrollment growth.

**C. Financial Aid:** Virginia Tech's student financial aid programs are designed to help support student access, enrollment, and retention goals. Virginia Tech provides access to low and middle income students with demonstrated financial need through multiple funding sources including the use of unfunded scholarships, as prescribed in §23-31 of the Code of Virginia, and as required by the university's management agreement.

A key innovation in meeting this need at Virginia Tech is the Funds for the Future program, which ensures tuition rate predictability for returning students through grants to help mitigate the impact of tuition increases based on family income and financial need. The Funds for the Future program provides tuition increase protection for families with incomes up to \$100,000, capturing both low and middle-income students with need. Additionally, the Virginia Tech Safety Net Grant assists in-state Federal Pell Grant recipients and the Virginia



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Tech Grant helps to achieve enrollment goals. The university also supports other, smaller programs that assist financially needy undergraduate low and middle income students.

**D. Evaluation of Previous Six Year Plan:**

As the Commonwealth of Virginia continues to recover from significant budget challenges, opportunities to invest and grow areas of the university's operations have been limited. Addressing fixed cost increases and nongeneral fund assessments related to compensation, fringe benefits, and health and retirement costs, coupled with the cost of prior enrollment growth before state funding was provided for enrollment growth, have limited the progress that the university has made. However, limited General Fund investment in the 12-14 biennium, reallocation of existing resources, and modest increases in self-generated revenue have allowed some measured progress. Significant accomplishments include:

- In fall 2012, Virginia Tech set enrollment records with 3,800 Virginia freshmen, 17,626 Virginia undergraduates, and a total headcount of 31,087; all exceeding their former marks.
- Health science research has advanced rapidly at the university's Virginia Tech Carilion Research Institute, with a growing core of highly-skilled researchers and a current portfolio of \$45 million in externally sponsored research, and continues to play a key role in the revitalization of the Roanoke and Southwest Virginia economy.
- Efforts to enhance degree completion and academic opportunities that encourage year-round utilization of facilities including discounted summer tuition, expanded summer undergraduate research opportunities, and the university's new Summer Academy transitional program for first-year students have resulted in the largest ever summer enrollment in Summer 2013 of 9,374 students. Beginning in 2013-14, the university will also implement a winter session for additional degree credit opportunities.
- The Commonwealth's investment in faculty and staff salaries has allowed the university to begin addressing compensation to retain and reward hard-working faculty and staff who contribute to the university's success. With the July 2013 salary actions, the university projects movement of the Authorized Salary Average from the 20<sup>th</sup> to the 22<sup>nd</sup> percentile of the university's SCHEV Peer group (19<sup>th</sup> of 26). Continued progress towards the Commonwealth's goal of the 60<sup>th</sup> percentile will require considerable and consistent focus on competitive compensation in the coming biennia.

**E. Capital Outlay:**

Virginia Tech is extremely sensitive to the total cost of education passed on to our students and families. We understand that resources are finite, and projects that impact the cost of attendance to our students undergo significant scrutiny and planning to ensure that



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students' value meets or exceeds the impact of any incremental costs. A major project that will occur in the upcoming Six-Year plan period is the renewal of the Upper Quad residence facilities. This project will demolish four severely deteriorated residential facilities that house 1100 students in the Corps of Cadets and will replace the bed inventory with two new facilities at the same site. This project will enable the University to meet student housing needs without a net expansion of the residential inventory and to address significant deferred maintenance costs. Due to multi-year planning and cost control efforts, the Upper Quad project is not expected to have a significant impact on student fees.



## GUIDE FOR SUBMITTING 2011 INSTITUTIONAL SIX-YEAR PLAN

**Due Date: July 1, 2013**

*§ 23-38.87:17. Institutional six-year plans. (See below for complete code reference.)*

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

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

### 2013 Six-Year Plans

The 2013 Six-Year Plan consists of two Parts. Part I is this spreadsheet with four components: Academic-Financial, Finance-T&F, Financial Aid, and Finance-Tuition Waivers. The Enrollment/Degree Projections are being developed in a separate process, but will be incorporated in the Six-Year Plan review. Part II is a Word document addressing several items - see initial email for an outline of Part II. **Note: shaded cells contain formulas.**

The 2013 Six-Year Plans are due July 1, 2013. The group outlined in the Top Jobs 21 Act - see above section B - will meet with each institution during the months of July and August to review the institution's plan. These meetings will be used to discuss each institution's plan and provide comments. If changes to the plans are recommended or if additional items are identified by the Higher Education Advisory Committee (HEAC) in the interim, revised institutional submissions would be due by October 1.



## Academic-Financial Component

The academic component should address academic (including faculty), finance, and support service strategies the institution intends to employ in meeting the stated objective. It is expected that detailed descriptions will be provided in Part II. In the column labeled "TJ21 Objectives," identify the TJ21 Objective(s) that apply to the strategy using the letter codes listed below.

**An institution must submit strategies for each Objective A through D.** An institution is not required to submit strategies for every objective listed under E. Institutional mission, scope, and focus should determine which objectives are addressed.

If a strategy has an impact on funding for the 2012-14 biennium, please identify the amount as either incremental, savings, or reallocation - more than one category may be used. The worksheet includes totals for these values. If you add rows for additional strategies, please update the total cost formulas.

### TJ21 Objectives

- A. Plans for providing financial aid to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families, including the projected mix of grants and loans.
- B. Plans for optimal year-round use of the institution's facilities and instructional resources to improve student completions and cost efficiencies.
- C. Plans for the development of an instructional resource sharing program with other institutions of higher education in the Commonwealth.
- D. New programs or initiatives including quality improvements.
- E. Plans with regard to any other initiatives listed below or any other matters the institution deems appropriate.



- E1. Increased enrollment of Virginia students. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E2. Increased degree completion for Virginia residents who have partial credit completion for a degree. Include enrollment/degree estimates here.
- E3. Increased degree completion in a timely or expedited manner. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E4. Enhanced community college transfer programs and grants and other enhanced degree path programs;.
- E5. Improved retention and graduation rates. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E6. Increased degree production in the areas of science, technology, engineering, and mathematics and other high-need areas such as the health care-related professions. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E7. New programs the institution might consider to further the Commonwealth's objectives.
- E8. Increased research, including regional and public-private collaboration;
- E9. Other efficiency reforms designed to reduce total institutional cost.
- E10. Technology-enhanced instruction, including course redesign, online instruction, and resource sharing among institutions.
- E11. Economic opportunity initiatives.



E12. Innovation and continuous improvement.

E13. Other initiatives the institution might consider to further the Commonwealth's objectives. Include here any strategies that address maintenance of effort/institutional uniqueness.

The Financial Plan is incorporated into the Academic-Financial worksheet and to the 2014-16 biennium only.

### **Finance-T&F Component**

The Finance-T&F worksheet is used for estimating non-general fund revenues by program. This template replaces the SCHEV NGF survey as well as the DPB's NGF survey. For E&G programs, continue the SCHEV NGF survey practice of including annual revenue by student category. For other programs, continue the DPB NGF survey practice of providing only total annual revenue. All NGF revenue entered here must be net of tuition waivers and uncollectible revenue. Student charges are for information only. Provide regular session tuition and mandatory fees (E&G and non-E&G fees) for general students as listed.

### **Financial Aid Component**

The Financial Aid worksheet is similar to previous versions. It is understood that many institutions do not include a separate charge identified as financial aid, but it is important for the review group to get a sense of how much is expected to be collected by student category. It is important to make an estimate by student category. If an estimate is not made, a distribution might be developed for the institution.

### **Finance-Tuition Waivers**

The Tuition Waivers worksheet is a continuation of the SCHEV NGF survey. Standard categories of tuition waivers are listed with a description of each program provided at the bottom of the worksheet.

### **Enrollment/Degree Projections Component**



Detailed six-year enrollment/degree projections are being collected through a separate process. These projections will be incorporated in the Six-Year Plan as part of the July and August review. This review will replace the enrollment projection meetings that have been held in the past.



**Please address any questions to the following individuals:**

Academic or general questions - Jim Alessio ([jamesalessio@schev.edu](mailto:jamesalessio@schev.edu)) or Diane Vermaaten ([dianevermaaten@schev.edu](mailto:dianevermaaten@schev.edu))

Finance - Yan Zheng ([yanzheng@schev.edu](mailto:yanzheng@schev.edu)) or Dan Hix ([danhix@schev.edu](mailto:danhix@schev.edu))

Enrollment/Degree Projections - Tod Massa ([todmassa@schev.edu](mailto:todmassa@schev.edu))



**§ 23-38.87:17. Institutional six-year plans.**

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

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

*C. Each plan shall be structured in accordance with, and be consistent with, the purposes of this chapter set forth in § 23-38.87:10 and the criteria developed pursuant to § 23-38.87:20, and shall be in a form and manner prescribed by the Council, in consultation with the Secretary of Finance, Secretary of Education, Director of the Department of Planning and Budget, Executive Director of the Council, Staff Director of the House Committee on Appropriations, and Staff Director of the Senate Committee on Finance, or their designees.*

*D. Each plan shall address the institution's academic, financial, and enrollment plans, to include the number of Virginia and out-of-state students, for the six-year period and shall include:*

- 1. Financial planning reflecting the institution's anticipated level of general fund, tuition, and other nongeneral fund support for each year of the next biennium. The plan also shall include the institution's anticipated annual tuition and educational and general fee charges required by (i) degree level and (ii) domiciliary status, as provided in § 23-38.87:18, and shall indicate the planned use of any projected increase in general fund, tuition, or other nongeneral fund revenues. The plan shall be based upon any assumptions provided by the Council, following consultation with the Department of Planning and Budget and the staffs of the House Committee on Appropriations and the Senate Committee on Finance, for funding related to state general fund support pursuant to §§ 23-38.87:13, 23-38.87:14, 23-38.87:15, and 23-38.87:16, and shall be aligned with the institution's six-year enrollment projections;*
- 2. Plans for providing financial aid to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families as described in § 23-38.87:15, including the projected mix of grants and loans;*



- 3. Degree conferral targets for Virginia undergraduate students;*
- 4. Plans for optimal year-round use of the institution's facilities and instructional resources;*
- 5. Plans for the development of an instructional resource sharing program with other institutions of higher education in the Commonwealth;*
- 6. Plans with regard to any other incentives set forth in § 23-38.87:16 or to any other matters the institution deems appropriate; and*
- 7. The identification of (i) new programs or initiatives including quality improvements and (ii) institution-specific funding based on particular state policies or institution-specific programs, or both, as provided in subsection C of § 23-38.87:18.*

*E. In developing such plans, each public institution of higher education shall give consideration to potential future impacts of tuition increases on the Virginia College Savings Plan (§ 23-38.75 et seq.) and shall discuss such potential impacts with the Virginia College Savings Plan. The chief executive officer of the Virginia College Savings Plan shall provide to each institution the Plan's assumptions underlying the contract pricing of the program.*



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20****Due: July 1, 2013****Institution:** Virginia Polytechnic Institute & State University**Institution UNITID:** 208**Individual responsible for plan****Name:** M. Dwight Shelton, Jr.**Email address:** [mdsir@vt.edu](mailto:mdsir@vt.edu)**Telephone number:** 540-231-8775



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20**  
**Virginia Polytechnic Institute & State University**  
**ACADEMIC AND FINANCIAL PLAN**

Instructions: In the column entitled "Academic and Support Service Strategies for Six-Year Period (2014-2020)," please provide title to identify strategies (for the three biennia of this six-year period) associated with each objective of the "Preparing for the Top Jobs of the 21<sup>st</sup> Century: The Virginia Higher Education Opportunity Act of 2011." Please use this title to identify a more detailed description of the strategy in the separate Word document.

Priority Ranking	ACADEMIC AND SUPPORT SERVICE STRATEGIES FOR SIX-YEAR PERIOD (2014-2020)									
	Biennium 2014-2016 (7/1/14-6/30/16)						Biennium 2016-2018 (7/1/16-6/30/18)		Biennium 2018-2020 (7/1/18-6/30/20)	
	Strategies (Short Title)	TJ21 Objectives		Cost: Incremental, Savings, Reallocation				Strategies	Strategies	
				2014-2015		2015-2016				
				Amount	Within Increase	Amount	Within Increase			
4	Advance Strategic Research Opportunities	E8, E11, E13	Incremental:	\$ 8,910,410	\$0	\$ 18,150,710	\$0	Continue to invest in emerging research opportunities that result in significant advances in knowledge and contribute to the economic development of the Commonwealth.	Continue to invest in emerging research opportunities that result in significant advances in knowledge and contribute to the economic development of the Commonwealth.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
5	Increase Virginia Undergraduate Enrollment	E1	Incremental:	\$797,750	\$297,750	\$797,750	\$297,750	As classroom and faculty resources allow, the university will explore opportunities to partner with the Commonwealth to expand access to higher education for Virginia residents.	As classroom and faculty resources allow, the university will explore opportunities to partner with the Commonwealth to expand access to higher education for Virginia residents.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
6	Expand and Enhance STEM-H Degree Production	E6, E7	Incremental:	\$5,078,394	\$2,996,252	\$9,670,943	\$5,705,856	The university will continue to grow degree attainment opportunities in the STEM-H fields in emerging areas by increasing integrated study opportunities and high-demand degree options.	The university will continue to grow faculty and degree attainment opportunities in the STEM-H fields in emerging areas.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$250,000	\$0	\$250,000	\$0			
7	Support Faculty Startup Packages, Particularly for New Faculty in the STEM-H Fields	E6, D	Incremental:	\$875,000	\$516,250	\$2,750,000	\$1,622,500	As STEM-H areas grow and degree offerings increase, faculty and infrastructure needs will continually be assessed to ensure that students have access to the best and brightest faculty the discipline has to offer.	As STEM-H areas grow and degree offerings increase, faculty and infrastructure needs will continually be assessed to ensure that students have access to the best and brightest faculty the discipline has to offer.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$1,000,000	\$0	\$1,000,000	\$0			
8	Enhance Degree Attainment and Core Education Through Creative Technologies and the Expansion of Computational Thinking in Degree Programs.	E6, E7, E10	Incremental:	\$1,469,034	\$866,730	\$2,169,034	\$1,279,730	Continue to enhance opportunities to combine technology and design to prepare students with the skills needed to compete and create in the new economy.	Continue to enhance opportunities to combine technology and design to prepare students with the skills needed to compete and create in the new economy.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
9	Support Creation of Faculty of Health Science and Translational Biology, Medicine, and Health Degree Program	E9, E12, D	Incremental:	\$1,595,942	\$941,606	\$3,075,882	\$1,814,770	The university will continue to build upon existing successes with the Virginia Tech Carilion Research Institute and fully develop a university-wide Faculty of Health Sciences that will leverage faculty from all colleges and provide a focal point	Position the Faculty of Health Sciences to continue to provide value-added research while offering enhanced translational and educational support to the Translational Biology, Medicine, and Health (TBMH) program.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$500,000	\$0	\$500,000	\$0			
10	Expand Year-Round Academic Opportunities to Accelerate Degree Completion	A, B, D, E3, E5,	Incremental:	\$500,000	\$295,000	\$1,000,000	\$590,000	As non-academic year activities increase, additional faculty may convert from academic-year to calendar year appointments, new faculty and support staff may be necessary to maintain emerging programs, and student financial aid needs will increase, requiring the university to support additional needs to promote year-round utilization.	As non-academic year activities increase, additional faculty may convert from academic-year to calendar year appointments, new faculty and support staff may be necessary to maintain emerging programs, and student financial aid needs will increase, requiring the university to support additional needs to promote year-round utilization.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$50,000	\$0	\$100,000	\$0			
11	Position the University for Growth in On-Line, Distance, and E-Learning Environments	B, D, E1, E3, E6, E10.	Incremental:	\$1,125,000	\$663,750	\$2,125,000	\$1,253,750	The university will explore opportunities to use existing and emerging technologies to collaborate with public institutions across the Commonwealth.	The university will explore opportunities to use existing and emerging technologies to collaborate with public institutions across the Commonwealth.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$250,000	\$0	\$250,000	\$0			
12	Increase Graduate Enrollment	B, D, E1, E3, E6, E8, E13	Incremental:	\$2,201,857	\$1,299,096	\$4,086,338	\$2,410,939	The university will continue to advance graduate education as a source of innovation, technological development and entrepreneurship that leads to higher paying, high-value jobs that are vital for the continued success of the Virginia economy in the global marketplace.	The university will continue to advance graduate education as a source of innovation, technological development and entrepreneurship that leads to higher paying, high-value jobs that are vital for the continued success of the Virginia economy in the global marketplace.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
14	Expand Effective Economic Development Program and Enhance Statewide Job Creation Opportunities	E13	Incremental:	\$969,607	\$0	\$1,760,185	\$0	Continue to invest in economic development opportunities in areas of potential return to the Commonwealth.	Continue to invest in economic development opportunities in areas of potential return to the Commonwealth.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
16	Support Existing Virginia Student Enrollment Growth and Degree Attainment	E1, E13	Incremental:	\$3,929,438	\$0	\$7,858,877	\$0	Having taken on an significant additional Virginia resident undergraduates without incremental state support, it is critical to continue to address the shortfall in instructional funding necessary to maintain this enrollment.	Having taken on an significant additional Virginia resident undergraduates without incremental state support, it is critical to continue to address the shortfall in instructional funding necessary to maintain this enrollment.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
17	Ensure Access for Low and Middle-Income Families by Continuing to Expand Need-based Financial Aid to Undergraduate Students	A	Incremental:	\$740,764	\$0	\$1,517,825	\$0	Continue to protect low and middle income students from tuition increases, and work to address aggregate unmet need of undergraduate students.	Continue to protect low and middle income students from tuition increases, and work to address aggregate unmet need of undergraduate students.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
18	Expand Enrollment in the University's Veterinary Medicine Program	E1	Incremental:	\$1,274,466	\$420,574	\$1,751,480	\$577,989	Continued growth by 30 students per year during this biennium will fulfill existing plans for Veterinary Medicine enrollment expansion.	Enrollment growth plan complete.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
19	Enhance Student Advising Services and Degree Completion	E3, E5	Incremental:	\$681,681	\$402,192	\$834,620	\$492,426	Growing diversity of backgrounds and preparedness for higher education of our student population will demand evolving approaches to student advising to ensure academic success and continued degree completion.	Growing diversity of backgrounds and preparedness for higher education of our student population will demand evolving approaches to student advising to ensure academic success and continued degree completion.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$0	\$0	\$0	\$0			
21	Advance Institutional Efficiencies and Effectiveness	E9, E12	Incremental:	\$1,216,970	\$718,012	\$3,673,214	\$2,167,196	The university will continually seek opportunities to employ more efficient and effective business practices that contain costs and ensure the effectiveness of the university's efforts.	The university will continually seek opportunities to employ more efficient and effective business practices that contain costs and ensure the effectiveness of the university's efforts.	
			Savings:	\$0	\$0	\$0	\$0			
			Reallocation:	\$400,000	\$0	\$0	\$0			



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20**  
**Virginia Polytechnic Institute & State University**

**ACADEMIC AND FINANCIAL PLAN**

Instructions: In the column entitled "Academic and Support Service Strategies for Six-Year Period (2014-2020)," please provide title to identify strategies (for the three biennia of this six-year period) associated with each objective of the "Preparing for the Top Jobs of the 21<sup>st</sup> Century: The Virginia Higher Education Opportunity Act of 2011." Please use this title to identify a more detailed description of the strategy in the separate Word document.

ACADEMIC AND SUPPORT SERVICE STRATEGIES FOR SIX-YEAR PERIOD (2014-2020)									
Priority Ranking	Biennium 2014-2016 (7/1/14-6/30/16)						Biennium 2016-2018 (7/1/16-6/30/18)		Biennium 2018-2020 (7/1/18-6/30/20)
	Strategies (Short Title)	TJ21 Objectives		Cost: Incremental, Savings, Reallocation				Strategies	Strategies
				2014-2015		2015-2016			
				Amount	Within Increase	Amount	Within Increase		
24	General Fund Contingency		Incremental:				\$4,952,909	In the event that GF is not available to support the goals of the university's six-year plan, tuition revenue will be prioritized to support the university's most pressing priorities.	In the event that GF is not available to support the goals of the university's six-year plan, tuition revenue will be prioritized to support the university's most pressing priorities.
		Savings:	\$0	\$0	\$0	\$0			
		Reallocation:	\$0	\$0	\$0	\$0			
	Total 2014-2016 Costs								
	Incremental (Included in Financial Plan line 61)			\$31,366,313	\$9,417,212	\$61,221,858	\$23,165,815		
	Savings			\$0	\$0	\$0	\$0		
	Reallocation			\$2,450,000	\$0	\$2,100,000	\$0		
	Six-Year Financial Plan for Educational and General Programs, Incremental Operating Budget Need								
	2014-2016 Biennium								
	(Assuming No Additional General Fund)								
				2014-2015		2015-2016			
	Items			Amount	Within Increase	Amount	Within Increase		
	Total Incremental Cost from Academic Plan <sup>3</sup>			\$31,366,313	\$9,417,212	\$61,221,858	\$23,165,815		
1	Increase Faculty Salaries <sup>2</sup>		\$11,448,149	\$6,754,408	\$23,365,690	\$13,785,757			
	Faculty Salary Increase Rate <sup>4</sup>		4.10%	2.42%	4.10%	2.42%			
15	Increase Number of Full-Time Faculty <sup>3</sup> (\$)		\$ 2,159,796	\$921,633	\$ 4,319,593	\$1,843,265.81			
	Increase Number of Full-Time Faculty <sup>3</sup> (FTE)		17.00	7.00	34.00	14.00			
	Increase Number of Part-Time Faculty <sup>3</sup> (\$)		\$0	\$0	\$0	\$0			
	Increase Number of Part-Time Faculty <sup>3</sup> (FTE)		0.00	0.00	0.00	0.00			
	Increase Number of Support Staff (\$)		\$0	\$0	\$0	\$0			
	Increase Number of Support Staff (FTE)		0.00	0.00	0.00	0.00			
13	Library Enhancement (\$)		\$1,650,000	\$973,500	\$2,752,780	\$1,624,140			
	Library Enhancement (FTE)		0.00	0.00	0.00	0.00			
	Technology Enhancement (\$)		\$0	\$0	\$0	\$0			
	Technology Enhancement (FTE)		0.00	0.00	0.00	0.00			
3	O&M for New Facilities (\$)		\$3,111,146	\$1,711,098	\$3,930,136	\$2,192,478			
	O&M for New Facilities (FTE)		0.00	0.00	0.00	0.00			
20	Utility and Fixed Cost Increases		\$750,000	\$442,500	\$1,500,000	\$885,000			
	NGF share of state authorized salary increase/bonus		\$0	\$0	\$0	\$0			
22	Fringe/health insurance benefits increase		\$696,336	\$410,838	\$1,395,544	\$823,371			
23	VRS increase		\$2,091,765	\$1,234,141	\$2,091,765	\$1,234,141			
	Additional In-State Student Financial Aid From Tuition Revenue		\$0	\$0	\$0	\$0			
	Others (Specify, insert lines below)		\$0	\$0	\$0	\$0			
2	Increase Staff Salaries		\$ 3,130,481	\$ 1,846,984	\$ 6,354,876	\$ 3,749,377			
	Staff Salary Increase			3.0%		3.0%	1.8%		
	Total Additional Funding Need		\$56,403,987	\$23,712,314	\$106,932,242	\$49,303,346			

Notes:

(1) Enter staff FTE change over the FY2014 level in appropriate columns.

(2) If planned, enter the cost of any institution-wide increase.

(3) Please ensure that these items shall not be double counted if they are already included in the incremental cost of the academic plan.

(4) Enter planned annual faculty salary increase rate in Cells F63, G63, H63, and I63. Any salary increase entered here will be counted when calculating the gap to reach the 60th percentile in the future.



# Six-Year Plans - Part I (2013): 2014-16 through 2018-20

## Virginia Polytechnic Institute & State University

Attachment R

### Six-Year Financial Plan for Tuition and Fee Increases and Nongeneral Fund Revenue Estimates

Items	2012-2013 (Actual)		2013-2014 (Estimated)			2014-2015 (Planned)			2015-2016 (Planned)		
	Student Charge	Total Revenue	Student Charge	Rate Increase	Total Revenue	Student Charge	Rate Increase	Total Revenue	Student Charge	Rate Increase	Total Revenue
<b>E&amp;G Programs</b>											
Undergraduate, In-State	\$9,250	\$162,594,282	\$9,703	4.9%	\$166,444,203	\$10,178	4.9%	\$175,013,876	\$10,677	4.9%	\$185,416,258
Undergraduate, Out-of-State	\$24,242	\$140,985,854	\$25,459	5.0%	\$144,182,624	\$26,706	4.9%	\$152,760,806	\$28,015	4.9%	\$164,292,135
Graduate, In-State	\$10,740	\$19,651,163	\$11,271	4.9%	\$19,588,347	\$11,823	4.9%	\$20,763,782	\$12,403	4.9%	\$22,085,562
Graduate, Out-of-State	\$21,593	\$28,852,836	\$22,836	5.8%	\$28,725,648	\$23,955	4.9%	\$30,389,904	\$25,129	4.9%	\$32,286,861
Law, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Law, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Medicine, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Medicine, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Dentistry, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Dentistry, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
PharmD, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
PharmD, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Veterinary Medicine, In-State	\$19,761	\$6,402,564	\$20,044	1.4%	\$6,414,080	\$20,645	3.0%	\$6,609,828	\$21,265	3.0%	\$6,811,449
Veterinary Medicine, Out-of-State	\$44,693	\$4,287,630	\$45,706	2.3%	\$5,543,796	\$47,077	3.0%	\$7,051,478	\$48,489	3.0%	\$7,700,837
Other NGF		\$44,310,491			\$45,599,847			\$46,391,284			\$47,208,790
Total E&G Revenue - Gross		\$407,084,820			\$416,498,545			\$438,980,958			\$465,801,891
Total E&G Revenue - Net of Financial Aid		\$407,084,820			\$416,498,545			\$438,980,958			\$465,801,891
<b>Auxiliary Program</b>											
Mandatory Non-E&G Fees											
Undergraduate	\$1,673		\$1,752	4.7%		\$1,820	3.9%		\$1,891	3.9%	
Graduate	\$1,673		\$1,752	4.7%		\$1,820	3.9%		\$1,891	3.9%	
Law	\$0		\$0	%		\$0	%		\$0	%	
Medicine	\$0		\$0	%		\$0	%		\$0	%	
Dentistry	\$0		\$0	%		\$0	%		\$0	%	
PharmD	\$0		\$0	%		\$0	%		\$0	%	
Veterinary Medicine	\$1,673		\$1,752	4.7%		\$1,820	3.9%		\$1,891	3.9%	
Total Auxiliary Revenue (ALL including room and board)		\$276,132,561			286,541,258			297,308,109			\$308,499,880
<b>Total Tuition and Fees</b>											
Undergraduate, In-State	\$10,923		\$11,455	4.9%		\$11,998	4.7%		\$12,568	4.7%	
Undergraduate, Out-of-State	\$25,915		\$27,211	5.0%		\$28,526	4.8%		\$29,906	4.8%	
Graduate, In-State	\$12,413		\$13,023	4.9%		\$13,643	4.8%		\$14,294	4.8%	
Graduate, Out-of-State	\$23,266		\$24,588	5.7%		\$25,775	4.8%		\$27,020	4.8%	
Law, In-State	\$0		\$0	%		\$0	%		\$0	%	
Law, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Medicine, In-State	\$0		\$0	%		\$0	%		\$0	%	
Medicine, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Dentistry, In-State	\$0		\$0	%		\$0	%		\$0	%	
Dentistry, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
PharmD, In-State	\$0		\$0	%		\$0	%		\$0	%	
PharmD, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Veterinary Medicine, In-State	\$21,434		\$21,796	1.7%		\$22,465	3.1%		\$23,156	3.1%	
Veterinary Medicine, Out-of-State	\$46,366		\$47,458	2.4%		\$48,897	3.0%		\$50,380	3.0%	
<b>Student Financial Aid (Program 108)</b>											
		\$0			\$0			\$0			\$0
<b>Sponsored Programs (Program 110)</b>											
		\$290,149,588			\$329,738,140			\$3,503,760,112			\$372,305,580
<b>Unique Military Activities</b>											
		\$0			1 of \$0			\$0			\$0
<b>Workforce Development</b>											
		\$0			\$0			\$0			\$0
<b>Other (Specify)</b>											
		\$0			\$0			\$0			\$0

5/3/2011



# **Six-Year Plans - Part I (2013): 2014-16 through 2018-20** **Virginia Polytechnic Institute & State University**

## **FINANCIAL AID PLAN**

**Note: If you do not have actual amounts for *Tuition Revenue for Financial Aid* by student category, please provide an estimate. If values are not distributed for *Tuition Revenue for Financial Aid*, a distribution may be calculated for your institution.**

### **Allocation of Tuition Revenue Used for Student Financial Aid**

#### **2011-12 (Actual)**

<b>T&amp;F Used for Financial Aid</b>	<b>Gross Tuition Revenue</b>	<b>Tuition Revenue for Financial Aid (Program 108)</b>	<b>% Revenue for Financial Aid</b>	<b>Distribution of Financial Aid</b>
Undergraduate, In-State	\$153,981,555	N/A (1)	N/A (1)	N/A (1)
Undergraduate, Out-of-State	\$130,107,986	N/A (1)	N/A (1)	N/A (1)
Graduate, In-State	\$18,411,492	N/A (1)	N/A (1)	N/A (1)
Graduate, Out-of-State	\$25,270,495	N/A (1)	N/A (1)	N/A (1)
First Professional, In-State	\$5,582,080	N/A (1)	N/A (1)	N/A (1)
First Professional, Out-of-State	\$2,205,738	N/A (1)	N/A (1)	N/A (1)
<b>Total</b>	<b>\$335,559,346</b>	<b>N/A (1)</b>	<b>N/A (1)</b>	<b>N/A (1)</b>
In-State Sub-Total	\$177,975,127	N/A (1)	N/A (1)	N/A (1)

#### **2012-13 (Estimated)**

<b>T&amp;F Used for Financial Aid</b>	<b>Gross Tuition Revenue</b>	<b>Tuition Revenue for Financial Aid (Program 108)</b>	<b>% Revenue for Financial Aid</b>	<b>Distribution of Financial Aid</b>
Undergraduate, In-State	\$161,492,787	N/A (1)	N/A (1)	N/A (1)
Undergraduate, Out-of-State	\$136,827,383	N/A (1)	N/A (1)	N/A (1)
Graduate, In-State	\$19,469,994	N/A (1)	N/A (1)	N/A (1)
Graduate, Out-of-State	\$26,688,059	N/A (1)	N/A (1)	N/A (1)
First Professional, In-State	\$6,402,564	N/A (1)	N/A (1)	N/A (1)
First Professional, Out-of-State	\$4,287,630	N/A (1)	N/A (1)	N/A (1)
<b>Total</b>	<b>\$355,168,417</b>	<b>N/A (1)</b>	<b>N/A (1)</b>	<b>N/A (1)</b>
Total from Finance-T&F worksheet	\$407,084,820	N/A (1)	N/A (1)	N/A (1)
In-State Sub-Total	\$187,365,345	N/A (1)	N/A (1)	N/A (1)

#### **2013-14 (Planned)**

<b>T&amp;F Used for Financial Aid</b>	<b>Gross Tuition Revenue</b>	<b>Tuition Revenue for Financial Aid (Program 108)</b>	<b>% Revenue for Financial Aid</b>	<b>Distribution of Financial Aid</b>
Undergraduate, In-State	\$164,929,291	N/A (1)	N/A (1)	N/A (1)
Undergraduate, Out-of-State	\$143,635,429	N/A (1)	N/A (1)	N/A (1)
Graduate, In-State	\$19,343,837	N/A (1)	N/A (1)	N/A (1)
Graduate, Out-of-State	\$28,460,154	N/A (1)	N/A (1)	N/A (1)
First Professional, In-State	\$6,414,080	N/A (1)	N/A (1)	N/A (1)
First Professional, Out-of-State	\$5,543,796	N/A (1)	N/A (1)	N/A (1)
<b>Total</b>	<b>\$368,326,587</b>	<b>N/A (1)</b>	<b>N/A (1)</b>	<b>N/A (1)</b>
Total from Finance-T&F worksheet	\$416,498,545	N/A (1)	N/A (1)	N/A (1)
In-State Sub-Total	\$190,687,208	N/A (1)	N/A (1)	N/A (1)
Additional In-State	\$3,321,863	N/A (1)	N/A (1)	N/A (1)

#### **2014-15 (Planned)**

<b>T&amp;F Used for Financial Aid</b>	<b>Gross Tuition Revenue</b>	<b>Tuition Revenue for Financial Aid (Program 108)</b>	<b>% Revenue for Financial Aid</b>	<b>Distribution of Financial Aid</b>
Undergraduate, In-State	\$175,013,876	N/A (1)	N/A (1)	N/A (1)
Undergraduate, Out-of-State	\$152,760,806	N/A (1)	N/A (1)	N/A (1)
Graduate, In-State	\$20,763,782	N/A (1)	N/A (1)	N/A (1)



Graduate, Out-of-State	\$30,389,904	N/A (1)	N/A (1)	N/A (1)
First Professional, In-State	\$6,609,828	N/A (1)	N/A (1)	N/A (1)
First Professional, Out-of-State	\$7,051,478	N/A (1)	N/A (1)	N/A (1)
Total	\$392,589,674	N/A (1)	N/A (1)	N/A (1)
Total from Finance-T&F worksheet	\$438,980,958	N/A (1)	N/A (1)	N/A (1)
In-State Sub-Total	\$202,387,486	N/A (1)	N/A (1)	N/A (1)
Additional In-State	\$11,700,278	N/A (1)	N/A (1)	N/A (1)
Additional In-State from Financial Plan		N/A (1)	N/A (1)	N/A (1)

2015-16 (Planned)				
T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$185,416,258	N/A (1)	N/A (1)	N/A (1)
Undergraduate, Out-of-State	\$164,292,135	N/A (1)	N/A (1)	N/A (1)
Graduate, In-State	\$22,085,562	N/A (1)	N/A (1)	N/A (1)
Graduate, Out-of-State	\$32,286,861	N/A (1)	N/A (1)	N/A (1)
First Professional, In-State	\$6,811,449	N/A (1)	N/A (1)	N/A (1)
First Professional, Out-of-State	\$7,700,837	N/A (1)	N/A (1)	N/A (1)
Total	\$418,593,101	N/A (1)	N/A (1)	N/A (1)
Total from Finance-T&F worksheet	\$465,801,891	N/A (1)	N/A (1)	N/A (1)
In-State Sub-Total	\$214,313,269	N/A (1)	N/A (1)	N/A (1)
Additional In-State	\$11,925,783	N/A (1)	N/A (1)	N/A (1)
Additional In-State from Financial Plan		N/A (1)	N/A (1)	N/A (1)

(1) Virginia Tech does not utilize tuition revenue to provide financial aid in Program 108.



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20**  
**Virginia Polytechnic Institute & State University**

Foregone Tuition Revenue As A Result of Tuition Waivers (See references at bottom of tables for waiver programs)

**Educational and General Programs**

The values entered for 2011-12 must match those submitted on the SCHEV S1/S2.							
2011-12 (Actual from S1/S2)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$6,833,988	\$4,032,900	\$10,866,888	\$6,001,930	\$11,516,246	\$17,518,176	\$28,385,064
Foreign exchange student waivers	\$0	\$0	\$0	\$1,592,330	\$598,577	\$2,190,907	\$2,190,907
Virginia's military dependent waivers		\$0	\$0		\$0	\$0	\$0
Virginia's military member waivers	\$60,309	\$352,247	\$412,556		\$0	\$0	\$412,556
Virginia's military veteran waivers							
Federal military member and dependent waivers	\$0	\$0	\$0	\$46,907	\$0	\$46,907	\$46,907
Virginia provision for other state's National Guard duty							
Special arrangement contracts	\$0	\$0	\$0	\$181,623	\$24,359	\$205,982	\$205,982
Academic Common Market		\$0	\$0	\$3,015,392	\$59,163	\$3,074,555	\$3,074,555
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$20,787,651	\$20,787,651	\$20,787,651
Senior Citizen's Tuition and Fee Waivers	\$33,255	\$14,084	\$47,339	\$0	\$0	\$0	\$47,339
Certain Public Safety Personnel Child/Spouse Waivers	\$21,135	\$0	\$21,135	\$0	\$0	\$0	\$21,135
Virginia Military Survivors & Dependents Education Program	\$222,693	\$70,194	\$292,887	\$0	\$0	\$0	\$292,887
Employee Waivers (1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$7,171,380</b>	<b>\$4,469,425</b>	<b>\$11,640,805</b>	<b>\$10,838,182</b>	<b>\$32,985,996</b>	<b>\$43,824,178</b>	<b>\$55,464,983</b>
2012-13 (Estimated)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$7,875,315	\$4,361,772	\$12,237,087	\$5,728,613	\$10,026,660	\$15,755,273	\$27,992,360
Foreign exchange student waivers	\$0	\$0	\$0	\$1,542,355	\$456,354	\$1,998,709	\$1,998,709
Virginia's military dependent waivers			\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$62,661	\$374,791	\$437,452	\$0	\$0	\$0	\$437,452
Virginia's military veteran waivers							
Federal military member and dependent waivers	\$0	\$0	\$0	\$50,378	\$0	\$50,378	\$50,378
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$1,507,696	\$29,582	\$1,537,278	\$1,537,278
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$23,274,589	\$23,274,589	\$23,274,589
Senior Citizen's Tuition and Fee Waivers	\$27,513	\$0	\$27,513	\$3,375	\$0	\$3,375	\$30,888
Certain Public Safety Personnel Child/Spouse Waivers	\$33,776	\$0	\$33,776	\$0	\$0	\$0	\$33,776
Virginia Military Survivors & Dependents Education Program	\$334,669	\$18,631	\$353,300	\$0	\$0	\$0	\$353,300
Employee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$8,333,934</b>	<b>\$4,755,194</b>	<b>\$13,089,128</b>	<b>\$8,832,417</b>	<b>\$33,787,185</b>	<b>\$42,619,602</b>	<b>\$55,708,729</b>
2013-14 (Planned)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$7,740,897	\$4,335,862	\$12,076,759	\$5,887,090	\$10,117,010	\$16,004,100	\$28,080,859
Foreign exchange student waivers	\$0	\$0	\$0	\$1,828,916	\$541,142	\$2,370,058	\$2,370,058
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$32,556	\$194,724	\$227,280	\$0	\$0	\$0	\$227,280
Virginia's military veteran waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal military member and dependent waivers	\$0	\$0	\$0	\$90,675	\$0	\$90,675	\$90,675
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$25,326,309	\$25,326,309	\$25,326,309
Senior Citizen's Tuition and Fee Waivers	\$28,586	\$0	\$28,586	\$3,507	\$0	\$3,507	\$32,093
Certain Public Safety Personnel Child/Spouse Waivers	\$46,029	\$0	\$46,029	\$0	\$0	\$0	\$46,029
Virginia Military Survivors & Dependents Education Program	\$574,523	\$31,984	\$606,507	\$0	\$0	\$0	\$606,507
Employee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$8,422,591</b>	<b>\$4,562,569</b>	<b>\$12,985,161</b>	<b>\$7,810,188</b>	<b>\$35,984,461</b>	<b>\$43,794,649</b>	<b>\$56,779,810</b>



2014-15 (Planned)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$8,120,201	\$4,548,319	\$12,668,520	\$6,175,557	\$10,612,744	\$16,788,301	\$29,456,821
Foreign exchange student waivers	\$0	\$0	\$0	\$1,918,533	\$567,658	\$2,486,191	\$2,486,191
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$34,151	\$204,266	\$238,417	\$0	\$0	\$0	\$238,417
Virginia's military veteran waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal military member and dependent waivers	\$0	\$0	\$0	\$95,118	\$0	\$95,118	\$95,118
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$26,567,298	\$26,567,298	\$26,567,298
Senior Citizen's Tuition and Fee Waivers	\$29,987	\$0	\$29,987	\$3,678	\$0	\$3,678	\$33,666
Certain Public Safety Personnel Child/Spouse Waivers	\$48,284	\$0	\$48,284	\$0	\$0	\$0	\$48,284
Virginia Military Survivors & Dependents Education Program	\$602,675	\$33,551	\$636,226	\$0	\$0	\$0	\$636,226
Employee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$8,835,298</b>	<b>\$4,786,135</b>	<b>\$13,621,434</b>	<b>\$8,192,887</b>	<b>\$37,747,700</b>	<b>\$45,940,587</b>	<b>\$59,562,021</b>

2015-16 (Planned)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$8,518,091	\$4,771,186	\$13,289,277	\$6,478,160	\$11,132,768	\$17,610,928	\$30,900,205
Foreign exchange student waivers	\$0	\$0	\$0	\$2,012,541	\$595,473	\$2,608,014	\$2,608,014
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$35,824	\$214,275	\$250,099	\$0	\$0	\$0	\$250,099
Virginia's military veteran waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal military member and dependent waivers	\$0	\$0	\$0	\$99,779	\$0	\$99,779	\$99,779
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$27,869,096	\$27,869,096	\$27,869,096
Senior Citizen's Tuition and Fee Waivers	\$31,456	\$0	\$31,456	\$3,859	\$0	\$3,859	\$35,315
Certain Public Safety Personnel Child/Spouse Waivers	\$50,650	\$0	\$50,650	\$0	\$0	\$0	\$50,650
Virginia Military Survivors & Dependents Education Program	\$632,206	\$35,195	\$667,401	\$0	\$0	\$0	\$667,401
Employee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$9,268,228</b>	<b>\$5,020,656</b>	<b>\$14,288,884</b>	<b>\$8,594,338</b>	<b>\$39,597,337</b>	<b>\$48,191,676</b>	<b>\$62,480,560</b>

(1) Virginia Tech does not utilize foregone tuition revenue to support employee tuition benefits. Rather, employee tuition is treated as an expense within the university's budget. In 2011-12, \$160,191 in undergraduate and \$1,453,099 in graduate tuition expenses were incurred by the university for employee tuition benefits, as reported on the S1/S2.

Program	FA File Field	Authorization
Unfunded Scholarships	TUIWAIV, IN-1	Code of Virginia § 23-31
Foreign exchange student waivers	TUITION=H	Code of Virginia § 23-7.4.2 C 2
Virginia's military dependent waivers	TUITION=B	Code of Virginia § 23-7.4 E
Virginia's military member waivers	TUITION=M	Code of Virginia § 23-7.4.2 G
Virginia's military veteran waivers	TUITION=U	Code of Virginia § 23-7.4.2 H
Federal military member and dependent waivers	TUITION=R	Federal Higher Education Opportunity Act (Sec. 114)
Virginia provision for other state's National Guard duty	TUITION=T	Code of Virginia § 23-7.4.2 B
Special arrangement contracts	TUITION=I	Code of Virginia § 23-7.4.2 F
Academic Common Market	TUITION=C	Code of Virginia § 23-7.4.2 C 1
Geographic waivers		
Virginia Community College System	TUITION=D	Code of Virginia § 23-7.4.2 D
University of Virginia's College at Wise	TUITION=E	Code of Virginia § 23-7.4.2 E
Old Dominion University's TELETECHNET sites/higher education centers; Radford's Virginia Educators program	TUITION=P	Appropriation Act (ODU)
Other waivers associated with in-/out-of-state differential		
VCCS dual enrollment agreement	TUITION=F	Code of Virginia § 23-7.4.2 C 3
Nonresident employed full time in Virginia provision	TUITION=G	Code of Virginia § 23-7.4.2 A
One-year grace period for dependent whose parent or spouse abandons Virginia domicile	TUITION=L	Code of Virginia § 23-7.4 B
Graduate student employed at a contract rate of \$4K+	TUITION=Q	Appropriation Act § 4-2.01 b 6
Senior Citizen's Tuition and Fee Waivers	TUIWAIV, IN-1	Code of Virginia § 23-38.54 et seq.
Certain Public Safety Personnel Child/Spouse Waivers	TUIWAIV, IN-1	Code of Virginia § 23-7.4.1 B
Virginia Military Survivors & Dependents Education Program	MSDTFW, IN-7	Code of Virginia § 23-7.4.1 A
Other waivers of tuition/fees student would normally be charged	TUIWAIV, IN-1	Appropriation Act § 4-2.01 b 9



**Agency 229:**  
**Cooperative Extension & Agricultural Experiment Station Division**  
**Six-Year Plan Submission**

**July 1, 2013**

**Part II:**

**A. Institutional Mission:**

The Virginia Cooperative Extension and the Virginia Agricultural Experiment Station — the two organizations that make up Virginia Agency 229 — play integral roles in Virginia's land-grant system.

The Virginia Agricultural Experiment Station performs basic and applied research on agricultural, environmental, natural, and community resource issues related to the future needs of Virginia, the region, the nation, and the world.

The Virginia Cooperative Extension helps lead the engagement mission of Virginia Tech and Virginia State University, the commonwealth's land-grant universities. Building local relationships and collaborative partnerships, we help people put scientific knowledge to work through learning experiences that improve economic, environmental, and social well-being.

**B. Strategies**

**229 Program Strategies:**

1. **Advance Faculty Salary Competitiveness to the 60<sup>th</sup> Percentile.** The university's authorized faculty salary is projected to be at the 22<sup>nd</sup> percentile of the SCHEV Peer group for Virginia Tech, ranking 19<sup>th</sup> of 26 institutions. This has made attracting and retaining world-class faculty extremely difficult, and we continue to defend against the loss of our talented faculty members to competing institutions. In order to retain and recruit high-quality faculty to deliver the instructional and research missions of the university, competitive salaries must remain a priority for the institution. The replacement of faculty is far more expensive than the retention of human capital into whom the university has invested significant time and resources. The competition for faculty across institutions has accelerated, creating an environment in which faculty are rewarded for mobility rather than performance. The restoration of an annual merit process that rewards the best and brightest faculty for their efforts to drive the university forward will reduce turnover of our most productive faculty and move the university closer to the state's own goal of achieving the 60<sup>th</sup> percentile of the SCHEV Peer group average salary over 6 years. The university plans for the nongeneral fund share of a statewide compensation process. In the absence of a statewide compensation process, the university will make limited progress with nongeneral fund revenue alone.
2. **Increase Staff Salaries.** Much like faculty, the slow pace of growth of staff compensation has negatively impacted retention and recruitment efforts at the university. The need to competitively compensate the hard-working support staff at the university is a key factor in ensuring a highly productive and innovative organization. Advanced



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knowledge, skills, and abilities are critical for the effective operation of a complex institution of higher learning.

3. **Address Operation and Maintenance of New Facilities.** With a significant portion of the Human and Agricultural Biosciences Building coming online in FY15, Operation and Maintenance support is a primary cost driver in the future budget of Agency 229. Facilities must be open throughout the year in order for the agency to deliver on its mission to provide support to the citizens of the Commonwealth. Bringing new facilities online requires utility service, cleaning/housekeeping, maintenance, and operating supplies. Addressing operation and maintenance of facilities also helps to ensure the maximum facility service life and prevention of building deficiencies. Agency 229 operates overwhelmingly through General Fund support. Nongeneral fund support is extremely limited, and no university tuition resources are available for Agency 229. Without additional General Fund support for O&M of this facility, there will be a significant negative impact on programs and services due to the reallocation of existing resources from current programs to fund the cost of bringing the new space online. Further, operations and maintenance services will be diluted beyond adequate levels to support this facility coming on-line and may significantly impede the agency's ability to fulfill its mission to conduct and disseminate research to the citizens of the Commonwealth. Additionally, a lack of adequate operation and maintenance funding will have a negative impact on the university's ability to attract outstanding faculty, weakening the university's ability to produce research breakthroughs that will benefit industry and the Commonwealth. Ultimately, insufficient support of operation and maintenance activities will result in higher maintenance costs in future years.
4. **Generation and Dissemination of Advancements in Food Safety and Agricultural Productivity Enhancements:** There is no more significant threat to the profitability and sustainability of agricultural production in Virginia than that of potential foodborne illnesses. Outbreaks of salmonellosis, such as those linked to agricultural production on the Eastern Shore of Virginia, can lead to lost revenue and jobs while dramatically altering the national food supply. In response to these and similar incidents, the Food & Drug Administration has proposed a multitude of changes and regulations that will impact the Commonwealth's agricultural producers. This initiative will integrate research to address food safety with Extension efforts to assist Virginia's farmers and agricultural sector in ensuring the safety of the Commonwealth's agricultural products. Additional Extension Agents will advance the provision of state-of-the art information on risk management, finance, economic and marketing strategies to Virginia's agricultural economy. Due in part to the successes of the Extension program, Virginia agricultural exports reached an all-time high of \$2.6 billion in 2012. This strategic investment in Extension Agents and Specialists is necessary to continue to increase Virginia agricultural productivity while supporting job growth and ensuring the safety of the local and national food supply against foodborne illnesses.



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5. **Utility and Fixed Cost Increases.** Rising costs of contracts, utility service, and other mandated or required operating costs must be addressed to maintain the delivery of services to the citizens of the Commonwealth.
6. **Fringe/Health Increases.** Mandatory increases in fringe benefit rates and health insurance expenses, which are largely beyond the university's control, will impact the agency's expense budget.
7. **VRS Increases.** The 2012 General Assembly established a three-biennium phase-in of actuarial rates for the Virginia Retirement System employer contribution, in which employers will experience increases of 1.4% in FY15, FY17, and FY19. This mandatory increase to VRS will impact the agency's expense budget.

**C. Financial Aid: N/A**

**D. Evaluation of Previous Six Year Plan:**

The university was able to make measured progress towards the goals in the 2012 revised Six-Year plan submission. Incremental General Fund investment was helpful in supporting critical compensation issues. Reallocation of existing funding was utilized to reprioritize resources to their highest and best use. Additional General Fund support for the operation and maintenance of the Human and Agricultural Biosciences Building will allow the university to open the new facility and further expand research and the dissemination of knowledge to assist the Commonwealth's agricultural and natural resources industries. Annualization of the partial year O&M funding appropriation is a critical priority of the upcoming state budget development cycle.

Unavoidable cost drivers and fixed cost increases continue to stress the agency. Due to the lack of ability to increase nongeneral fund resources, the ability of the agency to continue to serve the citizens of the Commonwealth and address emerging issues in the agricultural economy is highly dependent upon General Fund support. Additionally, Federal sequestration remains a looming cloud.

In light of these challenges, the agency was successful in helping attract and retain industry in the Commonwealth, as exemplified by a recent announcement of expansion of a joint-venture between several inter-state partners to expand deep sea red crab harvesting operations in the Hampton area. Providing a supportive scientific and economic environment for agricultural industry growth through Cooperative Extension and Agricultural Experiment Station activities is a critical competitive advantage of the Commonwealth and an opportunity to advance the economy and deliver job growth across the state.

**E. Capital Outlay: N/A**



## GUIDE FOR SUBMITTING 2011 INSTITUTIONAL SIX-YEAR PLAN

**Due Date: July 1, 2013**

*§ 23-38.87:17. Institutional six-year plans. (See below for complete code reference.)*

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

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

### 2013 Six-Year Plans

The 2013 Six-Year Plan consists of two Parts. Part I is this spreadsheet with four components: Academic-Financial, Finance-T&F, Financial Aid, and Finance-Tuition Waivers. The Enrollment/Degree Projections are being developed in a separate process, but will be incorporated in the Six-Year Plan review. Part II is a Word document addressing several items - see initial email for an outline of Part II. **Note: shaded cells contain formulas.**

The 2013 Six-Year Plans are due July 1, 2013. The group outlined in the Top Jobs 21 Act - see above section B - will meet with each institution during the months of July and August to review the institution's plan. These meetings will be used to discuss each institution's plan and provide comments. If changes to the plans are recommended or if additional items are identified by the Higher Education Advisory Committee (HEAC) in the interim, revised institutional submissions would be due by October 1.



## Academic-Financial Component

The academic component should address academic (including faculty), finance, and support service strategies the institution intends to employ in meeting the stated objective. It is expected that detailed descriptions will be provided in Part II. In the column labeled "TJ21 Objectives," identify the TJ21 Objective(s) that apply to the strategy using the letter codes listed below.

**An institution must submit strategies for each Objective A through D.** An institution is not required to submit strategies for every objective listed under E. Institutional mission, scope, and focus should determine which objectives are addressed.

If a strategy has an impact on funding for the 2012-14 biennium, please identify the amount as either incremental, savings, or reallocation - more than one category may be used. The worksheet includes totals for these values. If you add rows for additional strategies, please update the total cost formulas.

### TJ21 Objectives

- A. Plans for providing financial aid to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families, including the projected mix of grants and loans.
- B. Plans for optimal year-round use of the institution's facilities and instructional resources to improve student completions and cost efficiencies.
- C. Plans for the development of an instructional resource sharing program with other institutions of higher education in the Commonwealth.
- D. New programs or initiatives including quality improvements.
- E. Plans with regard to any other initiatives listed below or any other matters the institution deems appropriate.



- E1. Increased enrollment of Virginia students. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E2. Increased degree completion for Virginia residents who have partial credit completion for a degree. Include enrollment/degree estimates here.
- E3. Increased degree completion in a timely or expedited manner. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E4. Enhanced community college transfer programs and grants and other enhanced degree path programs;.
- E5. Improved retention and graduation rates. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E6. Increased degree production in the areas of science, technology, engineering, and mathematics and other high-need areas such as the health care-related professions. Enrollment/degree projections will identify the numeric results, list the strategies the institution will use to achieve the projection.
- E7. New programs the institution might consider to further the Commonwealth's objectives.
- E8. Increased research, including regional and public-private collaboration;
- E9. Other efficiency reforms designed to reduce total institutional cost.
- E10. Technology-enhanced instruction, including course redesign, online instruction, and resource sharing among institutions.
- E11. Economic opportunity initiatives.



E12. Innovation and continuous improvement.

E13. Other initiatives the institution might consider to further the Commonwealth's objectives. Include here any strategies that address maintenance of effort/institutional uniqueness.

The Financial Plan is incorporated into the Academic-Financial worksheet and to the 2014-16 biennium only.

### **Finance-T&F Component**

The Finance-T&F worksheet is used for estimating non-general fund revenues by program. This template replaces the SCHEV NGF survey as well as the DPB's NGF survey. For E&G programs, continue the SCHEV NGF survey practice of including annual revenue by student category. For other programs, continue the DPB NGF survey practice of providing only total annual revenue. All NGF revenue entered here must be net of tuition waivers and uncollectible revenue. Student charges are for information only. Provide regular session tuition and mandatory fees (E&G and non-E&G fees) for general students as listed.

### **Financial Aid Component**

The Financial Aid worksheet is similar to previous versions. It is understood that many institutions do not include a separate charge identified as financial aid, but it is important for the review group to get a sense of how much is expected to be collected by student category. It is important to make an estimate by student category. If an estimate is not made, a distribution might be developed for the institution.

### **Finance-Tuition Waivers**

The Tuition Waivers worksheet is a continuation of the SCHEV NGF survey. Standard categories of tuition waivers are listed with a description of each program provided at the bottom of the worksheet.

### **Enrollment/Degree Projections Component**



Detailed six-year enrollment/degree projections are being collected through a separate process. These projections will be incorporated in the Six-Year Plan as part of the July and August review. This review will replace the enrollment projection meetings that have been held in the past.



**Please address any questions to the following individuals:**

Academic or general questions - Jim Alessio (jamesalessio@schev.edu) or Diane Vermaaten (dianevermaaten@schev.edu)

Finance - Yan Zheng (yanzheng@schev.edu) or Dan Hix (danhix@schev.edu)

Enrollment/Degree Projections - Tod Massa (todmassa@schev.edu)



**§ 23-38.87:17. Institutional six-year plans.**

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

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

*C. Each plan shall be structured in accordance with, and be consistent with, the purposes of this chapter set forth in § 23-38.87:10 and the criteria developed pursuant to § 23-38.87:20, and shall be in a form and manner prescribed by the Council, in consultation with the Secretary of Finance, Secretary of Education, Director of the Department of Planning and Budget, Executive Director of the Council, Staff Director of the House Committee on Appropriations, and Staff Director of the Senate Committee on Finance, or their designees.*

*D. Each plan shall address the institution's academic, financial, and enrollment plans, to include the number of Virginia and out-of-state students, for the six-year period and shall include:*

- 1. Financial planning reflecting the institution's anticipated level of general fund, tuition, and other nongeneral fund support for each year of the next biennium. The plan also shall include the institution's anticipated annual tuition and educational and general fee charges required by (i) degree level and (ii) domiciliary status, as provided in § 23-38.87:18, and shall indicate the planned use of any projected increase in general fund, tuition, or other nongeneral fund revenues. The plan shall be based upon any assumptions provided by the Council, following consultation with the Department of Planning and Budget and the staffs of the House Committee on Appropriations and the Senate Committee on Finance, for funding related to state general fund support pursuant to §§ 23-38.87:13, 23-38.87:14, 23-38.87:15, and 23-38.87:16, and shall be aligned with the institution's six-year enrollment projections;*
- 2. Plans for providing financial aid to help mitigate the impact of tuition and fee increases on low-income and middle-income students and their families as described in § 23-38.87:15, including the projected mix of grants and loans;*



- 3. Degree conferral targets for Virginia undergraduate students;*
- 4. Plans for optimal year-round use of the institution's facilities and instructional resources;*
- 5. Plans for the development of an instructional resource sharing program with other institutions of higher education in the Commonwealth;*
- 6. Plans with regard to any other incentives set forth in § 23-38.87:16 or to any other matters the institution deems appropriate; and*
- 7. The identification of (i) new programs or initiatives including quality improvements and (ii) institution-specific funding based on particular state policies or institution-specific programs, or both, as provided in subsection C of § 23-38.87:18.*

*E. In developing such plans, each public institution of higher education shall give consideration to potential future impacts of tuition increases on the Virginia College Savings Plan (§ 23-38.75 et seq.) and shall discuss such potential impacts with the Virginia College Savings Plan. The chief executive officer of the Virginia College Savings Plan shall provide to each institution the Plan's assumptions underlying the contract pricing of the program.*



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20****Due: July 1, 2013****Institution:** Virginia Cooperative Extension and Virginia Agricultural Experiment Station**Institution UNITID:** 229**Individual responsible for plan****Name:** M. Dwight Shelton, Jr.**Email address:** [mdsir@vt.edu](mailto:mdsir@vt.edu)**Telephone number:** 540-231-8775



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20**  
**Virginia Cooperative Extension and Virginia Agricultural Experiment Station**  
**ACADEMIC AND FINANCIAL PLAN**

Instructions: In the column entitled "Academic and Support Service Strategies for Six-Year Period (2014-2020)," please provide title to identify strategies (for the three biennia of this six-year period) associated with each objective of the "Preparing for the Top Jobs of the 21<sup>st</sup> Century: The Virginia Higher Education Opportunity Act of 2011." Please use this title to identify a more detailed description of the strategy in the separate Word document.

ACADEMIC AND SUPPORT SERVICE STRATEGIES FOR SIX-YEAR PERIOD (2014-2020)									
Priority Ranking	Biennium 2014-2016 (7/1/14-6/30/16)						Biennium 2016-2018 (7/1/16-6/30/18)	Biennium 2018-2020 (7/1/18-6/30/20)	
	Strategies (Short Title)	TJ21 Objectives		Cost: Incremental, Savings, Reallocation				Strategies	Strategies
				2014-2015		2015-2016			
				Amount	Within Increase	Amount	Within Increase		
4	Generation and Dissemination of Advancements in Food Safety and Agricultural Productivity Enhancements		Incremental:	\$764,750	\$0	\$1,529,500	\$0	Continue to address food safety and agricultural productivity initiatives that support and enhance the Commonwealth's agricultural economy.	Continue to address food safety and agricultural productivity initiatives that support and enhance the Commonwealth's agricultural economy.
			Savings:	\$0	\$0	\$0	\$0		
			Reallocation:	\$0	\$0	\$0	\$0		
	Total 2014-2016 Costs								
	Incremental (included in Financial Plan line 61)			\$764,750	\$0	\$1,529,500	\$0		
	Savings			\$0	\$0	\$0	\$0		
	Reallocation			\$0	\$0	\$0	\$0		
	Six-Year Financial Plan for Educational and General Programs, Incremental Operating Budget Need								
	2014-2016 Biennium								
	(Assuming No Additional General Fund)								
				2014-2015		2015-2016			
	Items			Amount	Within Increase	Amount	Within Increase		
	Total Incremental Cost from Academic Plan <sup>3</sup>			\$764,750	\$0	\$1,529,500	\$0		
1	Increase Faculty Salaries <sup>2</sup>		\$1,591,654	\$0	\$3,248,569	\$0			
	Faculty Salary Increase Rate <sup>4</sup>		4.10%	0.00%	4.10%	0.00%			
	Increase Number of Full-Time Faculty <sup>3</sup> (\$)		\$0	\$0	\$0	\$0			
	Increase Number of Full-Time Faculty <sup>3</sup> (FTE)		0.00	0.00	0.00	0.00			
	Increase Number of Part-Time Faculty <sup>3</sup> (\$)		\$0	\$0	\$0	\$0			
	Increase Number of Part-Time Faculty <sup>3</sup> (FTE)		0.00	0.00	0.00	0.00			
	Increase Number of Support Staff (\$)		\$0	\$0	\$0	\$0			
	Increase Number of Support Staff (FTE)		0.00	0.00	0.00	0.00			
	Library Enhancement (\$)		\$0	\$0	\$0	\$0			
	Library Enhancement (FTE)		0.00	0.00	0.00	0.00			
	Technology Enhancement (\$)		\$0	\$0	\$0	\$0			
	Technology Enhancement (FTE)		0.00	0.00	0.00	0.00			
3	O&M for New Facilities (\$)		\$1,232,267	\$0	\$1,256,649	\$0			
	O&M for New Facilities (FTE)		0.00	0.00	0.00	0.00			
5	Utility and Fixed Cost Increases		\$250,000	\$0	\$500,000	\$0			
	NGF share of state authorized salary increase/bonus		\$0	\$0	\$0	\$0			
6	Fringe/health insurance benefits increase		\$67,670	\$0	\$135,619	\$0			
7	VRS increase		\$413,039	\$0	\$413,039	\$0			
	Additional In-State Student Financial Aid From Tuition Revenue		\$0	\$0	\$0	\$0			
	Others (Specify, insert lines below)		\$0	\$0	\$0	\$0			
2	Increase Staff Salaries		\$ 544,878	\$0	\$ 1,106,102	\$0			
	Staff Salary Increase Rate		3%	0%	3%	0%			
	Total Additional Funding Need		\$4,864,258	\$0	\$8,189,478	\$0			

## Notes:

(1) Enter staff FTE change over the FY2014 level in appropriate columns.

(2) If planned, enter the cost of any institution-wide increase.

(3) Please ensure that these items shall not be double counted if they are already included in the incremental cost of the academic plan.

(4) Enter planned annual faculty salary increase rate in Cells F63, G63, H63, and I63. Any salary increase entered here will be counted when calculating the gap to reach the 60th percentile in the future.



# Six-Year Plans - Part I (2013): 2014-16 through 2018-20

## Virginia Cooperative Extension and Virginia Agricultural Experiment Station

Attachment R

### Six-Year Financial Plan for Tuition and Fee Increases and Nongeneral Fund Revenue Estimates

Items	2012-2013 (Actual)		2013-2014 (Estimated)			2014-2015 (Planned)			2015-2016 (Planned)		
	Student Charge	Total Revenue	Student Charge	Rate Increase	Total Revenue	Student Charge	Rate Increase	Total Revenue	Student Charge	Rate Increase	Total Revenue
<b>E&amp;G Programs</b>											
Undergraduate, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Undergraduate, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Graduate, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Graduate, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Law, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Law, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Medicine, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Medicine, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Dentistry, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Dentistry, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
PharmD, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
PharmD, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Veterinary Medicine, In-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Veterinary Medicine, Out-of-State	\$0	\$0	\$0	%	\$0	\$0	%	\$0	\$0	%	\$0
Other NGF		\$17,911,000			\$15,360,500			\$14,488,000			\$14,488,000
Total E&G Revenue - Gross		\$17,911,000			\$15,360,500			\$14,488,000			\$14,488,000
Total E&G Revenue - Net of Financial Aid		\$17,911,000			\$15,360,500			\$14,488,000			\$14,488,000
<b>Auxiliary Program</b>											
Mandatory Non-E&G Fees											
Undergraduate	\$0		\$0	%		\$0	%		\$0	%	
Graduate	\$0		\$0	%		\$0	%		\$0	%	
Law	\$0		\$0	%		\$0	%		\$0	%	
Medicine	\$0		\$0	%		\$0	%		\$0	%	
Dentistry	\$0		\$0	%		\$0	%		\$0	%	
PharmD	\$0		\$0	%		\$0	%		\$0	%	
Veterinary Medicine	\$0		\$0	%		\$0	%		\$0	%	
Total Auxiliary Revenue (ALL including room and board)		\$0			\$0			\$0			\$0
<b>Total Tuition and Fees</b>											
Undergraduate, In-State	\$0		\$0	%		\$0	%		\$0	%	
Undergraduate, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Graduate, In-State	\$0		\$0	%		\$0	%		\$0	%	
Graduate, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Law, In-State	\$0		\$0	%		\$0	%		\$0	%	
Law, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Medicine, In-State	\$0		\$0	%		\$0	%		\$0	%	
Medicine, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Dentistry, In-State	\$0		\$0	%		\$0	%		\$0	%	
Dentistry, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
PharmD, In-State	\$0		\$0	%		\$0	%		\$0	%	
PharmD, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
Veterinary Medicine, In-State	\$0		\$0	%		\$0	%		\$0	%	
Veterinary Medicine, Out-of-State	\$0		\$0	%		\$0	%		\$0	%	
<b>Student Financial Aid (Program 108)</b>											
Sponsored Programs (Program 110)		\$0			\$0			\$0			\$0
Unique Military Activities		\$0			\$0			\$0			\$0
Workforce Development		\$0			\$0			\$0			\$0
Other (Specify)		\$0			\$0			\$0			\$0



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20**  
**Virginia Cooperative Extension and Virginia Agricultural Experiment Station**

**FINANCIAL AID PLAN**

**Note:** If you do not have actual amounts for *Tuition Revenue for Financial Aid* by student category, please provide an estimate. If values are not distributed for *Tuition Revenue for Financial Aid*, a distribution may be calculated for your institution.

**Allocation of Tuition Revenue Used for Student Financial Aid**

**2011-12 (Actual)**

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$0	\$0	%	\$0
Undergraduate, Out-of-State	\$0	\$0	%	\$0
Graduate, In-State	\$0	\$0	%	\$0
Graduate, Out-of-State	\$0	\$0	%	\$0
First Professional, In-State	\$0	\$0	%	\$0
First Professional, Out-of-State	\$0	\$0	%	\$0
Total	\$0	\$0	%	\$0
In-State Sub-Total	\$0	\$0	%	\$0

**2012-13 (Estimated)**

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$0	\$0	%	\$0
Undergraduate, Out-of-State	\$0	\$0	%	\$0
Graduate, In-State	\$0	\$0	%	\$0
Graduate, Out-of-State	\$0	\$0	%	\$0
First Professional, In-State	\$0	\$0	%	\$0
First Professional, Out-of-State	\$0	\$0	%	\$0
Total	\$0	\$0	%	\$0
Total from Finance-T&F worksheet	\$17,911,000	\$0	%	
In-State Sub-Total	\$0	\$0	%	\$0

**2013-14 (Planned)**

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$0	\$0	%	\$0
Undergraduate, Out-of-State	\$0	\$0	%	\$0
Graduate, In-State	\$0	\$0	%	\$0
Graduate, Out-of-State	\$0	\$0	%	\$0
First Professional, In-State	\$0	\$0	%	\$0
First Professional, Out-of-State	\$0	\$0	%	\$0
Total	\$0	\$0	%	\$0
Total from Finance-T&F worksheet	\$15,360,500	\$0	%	
In-State Sub-Total	\$0	\$0	%	\$0
Additional In-State	\$0	\$0	%	\$0

**2014-15 (Planned)**

T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$0	\$0	%	\$0
Undergraduate, Out-of-State	\$0	\$0	%	\$0
Graduate, In-State	\$0	\$0	%	\$0



Graduate, Out-of-State	\$0	\$0	%	\$0
First Professional, In-State	\$0	\$0	%	\$0
First Professional, Out-of-State	\$0	\$0	%	\$0
Total	\$0	\$0	%	\$0
Total from Finance-T&F worksheet	\$14,488,000	\$0	%	
In-State Sub-Total	\$0	\$0	%	\$0
Additional In-State	\$0	\$0	%	\$0
Additional In-State from Financial Plan		\$0	%	

2015-16 (Planned)				
T&F Used for Financial Aid	Gross Tuition Revenue	Tuition Revenue for Financial Aid (Program 108)	% Revenue for Financial Aid	Distribution of Financial Aid
Undergraduate, In-State	\$0	\$0	%	\$0
Undergraduate, Out-of-State	\$0	\$0	%	\$0
Graduate, In-State	\$0	\$0	%	\$0
Graduate, Out-of-State	\$0	\$0	%	\$0
First Professional, In-State	\$0	\$0	%	\$0
First Professional, Out-of-State	\$0	\$0	%	\$0
Total	\$0	\$0	%	\$0
Total from Finance-T&F worksheet	\$14,488,000	\$0	%	
In-State Sub-Total	\$0	\$0	%	\$0
Additional In-State	\$0	\$0	%	\$0
Additional In-State from Financial Plan		\$0	%	



**Six-Year Plans - Part I (2013): 2014-16 through 2018-20**  
**Virginia Cooperative Extension and Virginia Agricultural Experiment Station**  
Foregone Tuition Revenue As A Result of Tuition Waivers (See references at bottom of tables for waiver programs)  
**Educational and General Programs**

The values entered for 2011-12 must match those submitted on the SCHEV S1/S2.							
2011-12 (Actual from S1/S2)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Foreign exchange student waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military veteran waivers							
Federal military member and dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia provision for other state's National Guard duty							
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Senior Citizen's Tuition and Fee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Certain Public Safety Personnel Child/Spouse Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia Military Survivors & Dependents Education Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
2012-13 (Estimated)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Foreign exchange student waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military veteran waivers							
Federal military member and dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Senior Citizen's Tuition and Fee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Certain Public Safety Personnel Child/Spouse Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia Military Survivors & Dependents Education Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
2013-14 (Planned)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Foreign exchange student waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military veteran waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal military member and dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Senior Citizen's Tuition and Fee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Certain Public Safety Personnel Child/Spouse Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia Military Survivors & Dependents Education Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
2014-15 (Planned)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Foreign exchange student waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0



Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military veteran waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal military member and dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Senior Citizen's Tuition and Fee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Certain Public Safety Personnel Child/Spouse Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia Military Survivors & Dependents Education Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

2015-16 (Planned)							
Program	In-State			Out-of-State			Total
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total	
Unfunded Scholarships	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Foreign exchange student waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military member waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia's military veteran waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Federal military member and dependent waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia provision for other state's National Guard duty	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Special arrangement contracts	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Academic Common Market	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geographic waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers associated with in-/out-of-state differential	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Senior Citizen's Tuition and Fee Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Certain Public Safety Personnel Child/Spouse Waivers	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Virginia Military Survivors & Dependents Education Program	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other waivers of tuition/fees student would normally be charged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

Program	FA File Field	Authorization
Unfunded Scholarships	TUIWAIV, IN-1	<a href="#">Code of Virginia § 23-31</a>
Foreign exchange student waivers	TUITION=H	<a href="#">Code of Virginia § 23-7.4:2 C 2</a>
Virginia's military dependent waivers	TUITION=B	<a href="#">Code of Virginia § 23-7.4 E</a>
Virginia's military member waivers	TUITION=M	<a href="#">Code of Virginia § 23-7.4:2 G</a>
Virginia's military veteran waivers	TUITION=U	<a href="#">Code of Virginia § 23-7.4:2 H</a>
Federal military member and dependent waivers	TUITION=R	<a href="#">Federal Higher Education Opportunity Act (Sec. 114)</a>
Virginia provision for other state's National Guard duty	TUITION=T	<a href="#">Code of Virginia § 23-7.4:2 B</a>
Special arrangement contracts	TUITION=I	<a href="#">Code of Virginia § 23-7.4:2 F</a>
Academic Common Market	TUITION=C	<a href="#">Code of Virginia § 23-7.4:2 C 1</a>
Geographic waivers		
Virginia Community College System	TUITION=D	<a href="#">Code of Virginia § 23-7.4:2 D</a>
University of Virginia's College at Wise	TUITION=E	<a href="#">Code of Virginia § 23-7.4:2 E</a>
Old Dominion University's TELETECHNET sites/higher education centers; Radford's Virginia Educators program	TUITION=P	<a href="#">Appropriation Act (ODU)</a>
Other waivers associated with in-/out-of-state differential		
VCCS dual enrollment agreement	TUITION=F	<a href="#">Code of Virginia § 23-7.4:2 C 3</a>
Nonresident employed full time in Virginia provision	TUITION=G	<a href="#">Code of Virginia § 23-7.4:2 A</a>
One-year grace period for dependent whose parent or spouse abandons Virginia domicile	TUITION=L	<a href="#">Code of Virginia § 23-7.4 B</a>
Graduate student employed at a contract rate of \$4K+	TUITION=Q	<a href="#">Appropriation Act § 4-2.01 b 6</a>
Senior Citizen's Tuition and Fee Waivers	TUIWAIV, IN-1	<a href="#">Code of Virginia § 23-38.54 et seq.</a>
Certain Public Safety Personnel Child/Spouse Waivers	TUIWAIV, IN-1	<a href="#">Code of Virginia § 23-7.4:1 B</a>
Virginia Military Survivors & Dependents Education Program	MSDTFW, IN-7	<a href="#">Code of Virginia § 23-7.4:1 A</a>
Other waivers of tuition/fees student would normally be charged	TUIWAIV, IN-1	<a href="#">Appropriation Act § 4-2.01 b 9</a>





## **Six-Year Plans for 2014-2020**

M. Dwight Shelton, Jr.,  
VP for Finance and Chief Financial Officer  
September 9, 2013



# Background



## **Higher Education Opportunity Act of 2011 (HEOA)**

- **Establishes goals of higher education system**
- **Prescribes higher education funding model**
- **Requires biennial submission of 6-year plans in each odd year with updates in even years**



# Higher Education Opportunity Act of 2011 (HEOA)

- **Based on the Commonwealth's goals and objectives for higher education**
- **Focuses on four key areas:**
  - Financial Aid for low and middle-income families
  - Optimal year-round use of facilities
  - Instructional resource sharing program with other institutions of higher education in Virginia
  - Enrollment growth and degree completion



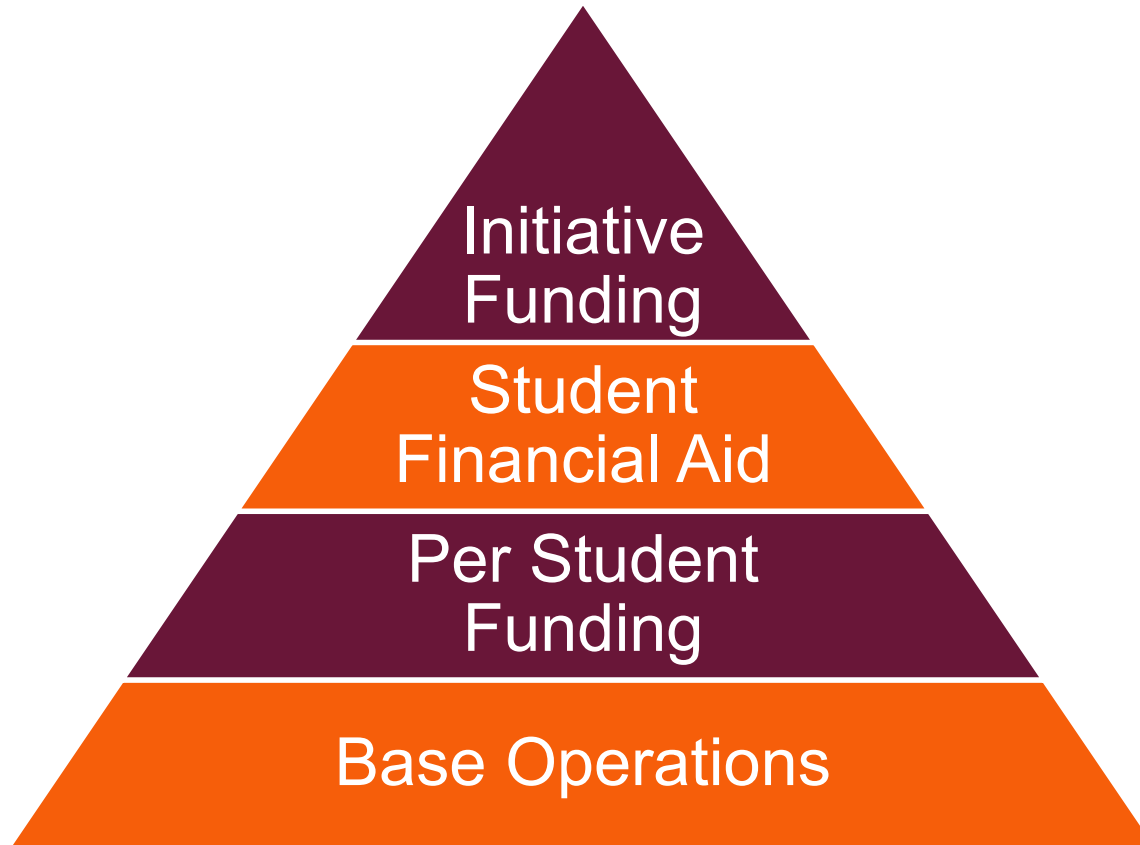
# Higher Education Opportunity Act of 2011 (HEOA)

- **The HEOA established higher education funding model goals including:**
  - Base Budget Adequacy
  - Faculty salaries at 60<sup>th</sup> percentile of peers



# Funding Model for Higher Education

## Funding Components





# Process



## Six-Year Planning Process

- **Six-Year plans aid state officials in understanding institutional resource needs**
  - Due July 1<sup>st</sup> of every odd year, revision in even year
  - Serves as starting point for Executive Budget development
- **August review with:**
  - Secretaries of Education and Finance
  - Directors of DPB and SCHEV
  - Staff of House Appropriations and Senate Finance Committees
- **Plans are to be approved by the Boards of Visitors**
- **Suggestions and revisions to be completed by Oct. 4<sup>th</sup>**



## Six-Year Planning Process

- **This is the university's second time through this process.**
  - The first Six-Year Plans were submitted to the state in July of 2011.
  - Updated version of the Plan was submitted in July of 2012.
  
- **The Six-Year Plan process signals university intentions**
  - Demonstrates commitment to Commonwealth Goals
  - Followed-up with Executive Budget requests and General Assembly advocacy to garner support and partnership



# **Six-Year Plan Submission for 2014-2020**



## Basis of University Submission

- **Six-Year Plan Initiatives are based upon goals identified in the university's strategic planning process**
  - “A Plan for a New Horizon” adopted June 4, 2012, extends through 2018
  - Implementation Plan “A Plan for a New Horizon: Envisioning Virginia Tech 2012-2018” from April 2013
  - Focus on first biennium (2014-16)
- **Operating Budgets - Additional cost assumptions are based upon university projections and codified cost assessments, such as VRS increases.**



# Six-Year Plan Elements

- **Academic plan**

- Academic and support strategies that advance the university's strategic plan.
- Opportunities to support the Commonwealth's objectives as stated in the HEOA.

- **Enrollment Plan**

- **Financial Plan**

- Faculty and Staff compensation strategy
  - Incremental operating needs (e.g. utilities)
  - Known cost increases (VRS)
  - Nongeneral fund revenue estimate
-



# Academic Plan Overview



# ***A Plan for a New Horizon***

## **Challenges**

- Global Interdependence
- Data Driven Society
- Research Expectations
- Organizational Efficiency and Flexibility



## **Responding to the Challenges**

- Research and Innovation – Networked and Interdisciplinary
- The Life of the Mind – Instructional Innovation
- The Virginia Tech Experience – Students, Employees and Community



# Enrollment Plan Overview



# Enrollment Plan

## Headcount Total

Student Group	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Entering In-State Undergraduates	3,638*	3,638	3,638	3,638	3,638	3,638	3,638
Entering Out-of-State Undergraduates	1,712	1,712	1,712	1,712	1,712	1,712	1,712
Continuing Undergraduates and Transfer Students	18,465	18,520	18,822	18,784	18,779	18,770	18,767
<b>Total Undergraduate</b>	<b>23,815</b>	<b>23,870</b>	<b>24,172</b>	<b>24,134</b>	<b>24,129</b>	<b>24,120</b>	<b>24,117</b>
Masters and Doctoral	6,857	6,993	7,229	7,445	7,675	7,851	7,860
Veterinary Medicine	440	468	477	477	477	477	477
<b>Total Graduate</b>	<b>7,297</b>	<b>7,461</b>	<b>7,706</b>	<b>7,922</b>	<b>8,152</b>	<b>8,328</b>	<b>8,337</b>
<b>Total Enrollment</b>	<b>31,112</b>	<b>31,331</b>	<b>31,878</b>	<b>32,056</b>	<b>32,281</b>	<b>32,448</b>	<b>32,454</b>

\*Increase of 144 over 2009-10 entering class of 3,494



# Financial Plan Overview

- University Division
- Cooperative Extension & Agricultural Experiment Station Division (CE/AES)



# University Division

## Academic Strategy Highlights

(\$ in millions)

Initiative	2014-2015	2015-2016*
Advance strategic research opportunities	\$8.9	\$18.2
Increase Virginia undergraduate enrollment	\$0.8	\$0.8
STEM-Health degree production	\$6.0	\$12.5
Creative Technologies and Computational Thinking Programs	\$1.5	\$2.2
Faculty of Health Science and Translational Biology, Medicine, Health	\$1.6	\$3.1
On-Line, Year-Round, Distance, and E-Learning Environments	\$1.6	\$3.1
Increase Graduate Enrollment	\$2.2	\$4.1
Other Initiatives	\$8.8	\$17.5

\* 2015-16 costs are cumulative of both years of the biennium



# University Division

## Operating Budget Needs

(\$ in millions)

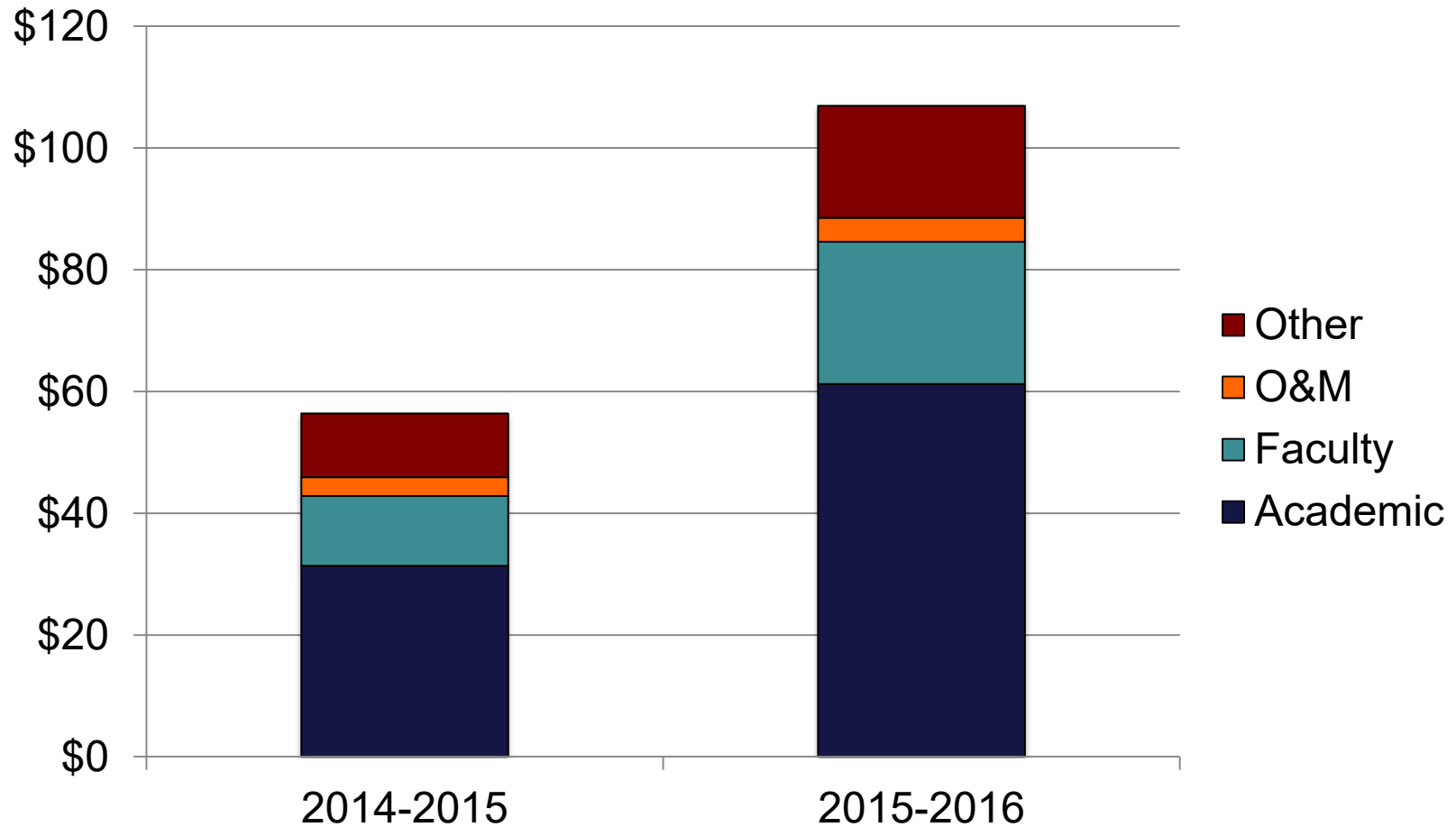
Initiative	2014-2015	2015-2016*
Faculty salary progress to the 60th percentile of peers	\$11.5	\$23.4
Staff salaries	\$3.1	\$6.4
Additional Faculty	\$2.2	\$4.3
Library Enhancements	\$1.7	\$2.8
Operation and maintenance of new facilities coming online	\$3.1	\$3.9
Utility Costs	\$0.8	\$1.5
Fringe rate increases	\$0.7	\$1.4
VRS Increases	\$2.1	\$2.1

\* 2015-16 costs are cumulative of both years of the biennium



# University Division Plan

**Expenditure Total**  
(\$ in millions)



\* 2015-16 costs are cumulative of both years of the biennium



# University Division Financial Plan Summary

\$ in millions

- Plan is not balanced
  - Projected expenses exceed projected NGF revenue.
  - State General Fund support needed to fully implement all envisioned strategies.

Uses	2014-15	2015-16*
Academic Initiatives	\$33.9	\$63.3
Operating Need	25.0	45.7
Total	58.9	109.0
Sources		
NGF Revenue Estimate	23.7	49.3
Internal Reallocations	2.5	2.1
Implicit GF Request	\$32.7	\$57.6

\*2015-16 is cumulative of 2014-16 biennium.



## University Division

# Nongeneral Fund Revenue Estimate

- Six-Year plan does not recommend or commit to specific set of rates. Tuition and fee rates remain authority of Board of Visitors.
- T&F revenue estimates in Six-Year plan are based on:
  - Enrollment plan
  - Rates support the university's share of projected costs of major initiatives.



# University Division

## Nongeneral Fund Revenue Estimate

### *Potential Tuition & Mandatory Fee Increase*

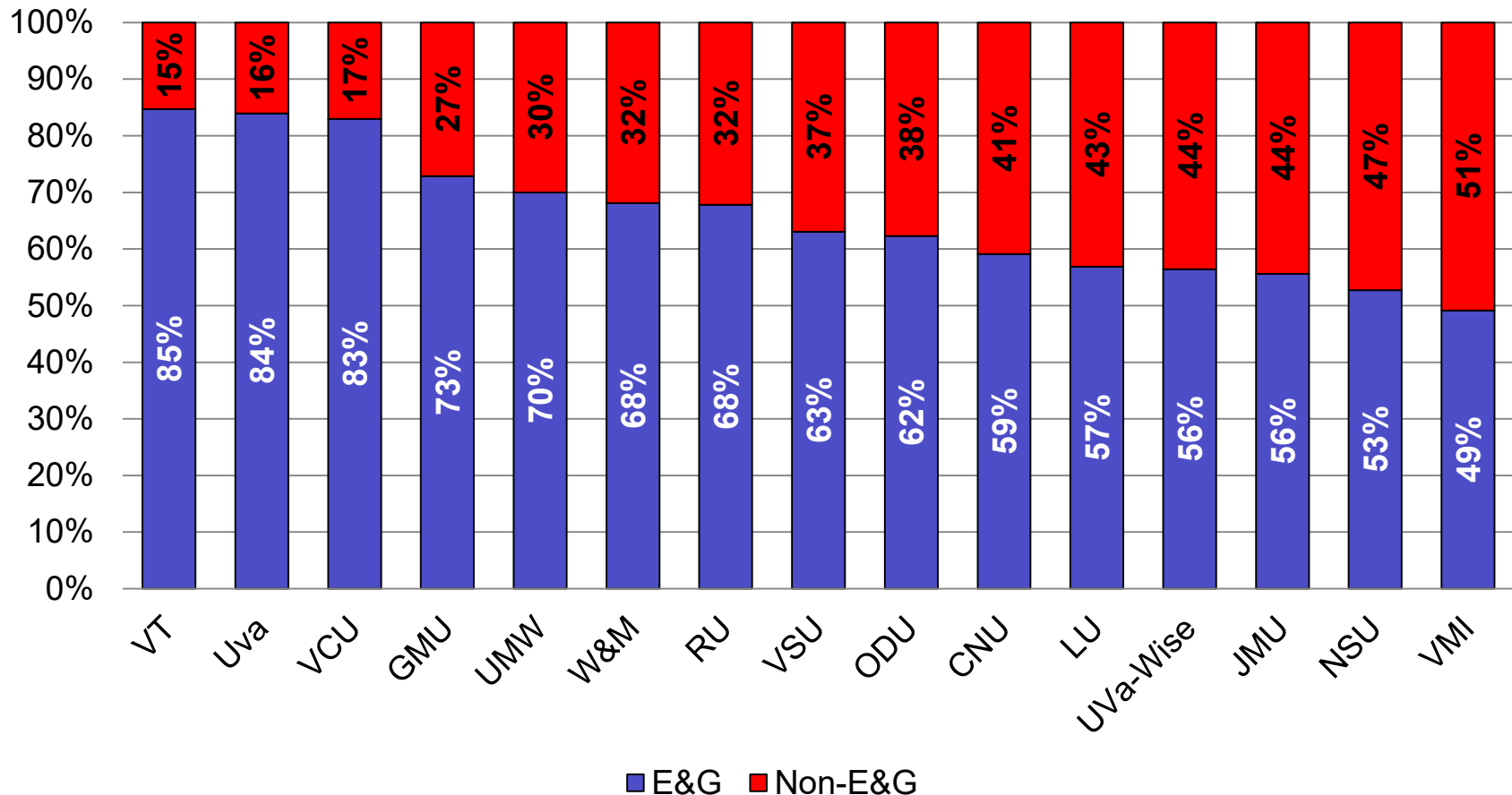
	Resident		Nonresident	
	\$	%	\$	%
<u>2014-15</u>				
Undergraduate	\$543	4.7%	\$1,315	4.8%
Graduate	620	4.8%	1,187	4.8%
<u>2015-16</u>				
Undergraduate	570	4.7%	1,380	4.8%
Graduate	650	4.8%	1,245	4.8%

\*Note: Rates are a placeholder, and do not fulfill NGF need in plan.



# Mandatory Non-E&G Fees as a Percentage of Mandatory Costs

## Virginia Public Institutions, 2013-14





# **Cooperative Extension & Agricultural Experiment Station Division (CE/AES)**



# CE/AES

## Financial Plan Summary

- Major cost drivers in plan include:
  - Faculty & Staff compensation
  - Operating and maintenance support for HABBI facility
  - Food safety and agricultural profitability initiative
- State General Fund support is required to fully implement all planned strategies
- Agency 229 has limited ability to increase NGF revenues.
  - **Federal and local funding environments** will continue to be very challenging.
  - **No tuition revenue** to supplant General Fund support.



# CE/AES Division

## Financial Plan Summary

(\$ in millions)

- Plan is not balanced – projected expenses exceed projected NGF revenue.
- State General Fund support needed to fully implement all envisioned strategies.

Uses	2014-15	2015-16*
Academic Initiatives	\$0.8	\$1.5
Operating Need	4.1	6.7
Total	4.9	8.2
Sources		
NGF Revenue Estimate	0	0
Implicit GF Request	\$4.9	\$8.2

\*2015-16 is cumulative of 2014-16 biennium.



# Current Status





# Summary and Update

- University representatives met with state officials on August 20<sup>th</sup> to discuss the plans
- Growing the university's research program, along with the STEM-H academic opportunities that partner with it, is a primary goal of Virginia Tech. In order to accomplish this, the university must:
  - **Attract and retain the best and brightest faculty**, requiring competitive compensation that rewards performance.
  - **Increase support for research** that enhances the economic opportunities of Virginia and leverage the capability of the university.
  - **Identify operating support** to address increasing costs and academic plan implementation.
  - **Access and affordability** continue to be major goals for 2014-16.



# Questions



## **RESOLUTION OF APPRECIATION HONORING MICHELE L. DUKE**

**WHEREAS**, Ms. Michele (Shelley) L. Duke was appointed by the Governor of Virginia to Virginia Polytechnic Institute and State University's Board of Visitors on July 1, 2005, and reappointed in 2009 for a second term ending June 30, 2013; and,

**WHEREAS**, Ms. Duke is a loyal and devoted Hokie, demonstrated by her recognition as an honorary alumna in 2005, and through her being awarded the Ruffner Medal – the University's highest honor – in 2013; and,

**WHEREAS**, during her years of service on the Board of Visitors, Ms. Duke served as the first female Vice Rector for Virginia Tech, as the Chair and a committee member of both the Academic Affairs Committee and the Research Committee, and as a member of the Executive Committee and the Student Affairs and Athletics Committee; and,

**WHEREAS**, Ms. Duke served on the Board during one of the most challenging periods in the university's history – during the tragedy of April 16, 2007, and its aftermath; and,

**WHEREAS**, Ms. Duke has exhibited her commitment to the development and future of Virginia Tech, demonstrated by her service as a member of the Foundation Board, National Campaign Steering Committee, Women in Leadership and Philanthropy Council, Ferrari Foundation Board, Veterinary Medicine Dean's Advisory Council, and her significant involvement in the Marion duPont Scott Equine Medical Center, the Middleburg Agricultural Research Extension Center and Hokies for Higher Education; and,

**WHEREAS**, Ms. Duke has further displayed her commitment to the continued health and success of the University, recognized through her membership in the Ut Prosim and Legacy Societies; and,

**WHEREAS**, the members of the Board have thoroughly enjoyed getting to know Shelley and her husband, Phil, and have valued 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 do hereby extend their sincere appreciation to Michele L. Duke for her outstanding loyalty and devoted service, and for her faithful dedication to the university and its missions.

### **RECOMMENDATION:**

That the above resolution recognizing Michele L. Duke (Shelley) for her service as a member of the Board of Visitors be approved.

September 9, 2013



## **RESOLUTION OF APPRECIATION HONORING GEORGE NOLEN**

**WHEREAS**, Mr. George Nolen was appointed by the Governor of Virginia to Virginia Polytechnic Institute and State University's Board of Visitors on July 1, 2005, and reappointed in 2009 for a second term ending June 30, 2013; and,

**WHEREAS**, Mr. Nolen is a loyal and dedicated alumnus, and a member of the Class of 1978, having earned a Bachelor of Science degree in Marketing; and,

**WHEREAS**, during his years of service on the Board of Visitors, Mr. Nolen served two terms as Rector, one term as Vice Rector, as the Chair and a member of the Finance and Audit Committee and the Research Committee, and as a member of the Executive Committee and the Student Affairs and Athletics Committee; and,

**WHEREAS**, Mr. Nolen served on the Board during one of the most challenging periods in the university's history – during the tragedy of April 16, 2007, and its aftermath; and,

**WHEREAS**, Mr. Nolen has exhibited his commitment to the development and future of Virginia Tech through his service as a member of the National Campaign Steering Committee and the Foundation Board, and as Chairman of the Virginia Bioinformatics Institute Advisory Board; and,

**WHEREAS**, Mr. Nolen has further displayed his dedication to the continued health and success of the University through his significant philanthropic leadership and contributions to the university, recognized by his membership in the Ut Prosim Society; and,

**WHEREAS**, the members of the Board have thoroughly enjoyed getting to know George and his wife, Michele, and have valued 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 do hereby extend their sincere appreciation to George Nolen for his outstanding loyalty and devoted service to his alma mater, and for his faithful dedication to the university and its missions.

### **RECOMMENDATION:**

That the above resolution recognizing George Nolen for his service as a member of the Board of Visitors be approved.

September 9, 2013



## **RESOLUTION OF APPRECIATION HONORING PAUL W. ROGERS, Jr.**

**WHEREAS**, Mr. Paul W. Rogers, Jr. served on the Virginia Polytechnic Institute and State University's Board of Visitors, representing the Virginia Board of Agriculture and Consumer Services, from July 1, 2009 through June 30, 2013; and,

**WHEREAS**, though a 1969 graduate of North Carolina State University, Mr. Rogers has been a loyal and dedicated Hokie; and,

**WHEREAS**, during his years of service on the Board of Visitors, Mr. Rogers has been a member of the Finance and Audit Committee, the Academic Affairs Committee, the Student Affairs and Athletics Committee, and the Research Committee; and,

**WHEREAS**, Mr. Rogers has exhibited his commitment to the development and future of Virginia Tech through his service as a guest lecturer and philanthropic leader on campus, promoting and garnering support for the agricultural programs of the University; and,

**WHEREAS**, the members of the Board have thoroughly enjoyed getting to know Paul and his wife, Pam, 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 do hereby extend their sincere appreciation to Paul W. Rogers, Jr. for his loyalty and devoted service, and for his faithful dedication to the university and its missions.

### **RECOMMENDATION:**

That the above resolution recognizing Paul W. Rogers, Jr. for his service as a member of the Board of Visitors be approved.

September 9, 2013



## **Presidential Search**

### **Virginia Agribusiness Council Input Session**

#### **Minutes of the July 17, 2013 Meeting**

Representatives of the Presidential Search Committee appointed by the Board of Visitors of Virginia Tech met on Wednesday, July 17, 2013 with the Board of Directors of the Virginia Agribusiness Council at the Eastern Shore Agriculture Research and Extension Center located at 33446 Research Dr. in Painter, Virginia. The meeting was called to order at 3:45PM.

#### **SEARCH COMMITTEE MEMBERS PRESENT:**

Deborah Petrine; Dennis Dean

#### **BOARD OF VISITORS MEMBERS PRESENT:**

Deborah Petrine; Steve Sturgis

#### **SEARCH COMMITTEE STAFF AND GRADUATE STUDENTS PRESENT:**

Nancy Meacham; Meredith Hundley

#### **AGRIBUSINESS COUNCIL BOARD OF DIRECTORS MEMBERS PRESENT:**

Robert B Bahr; Alvin W. Blaha; William H. Hayter; Kern L. Houff; Ollie W. Kitchen, Jr.; Neal H. Martin; Sonny Meyerhoeffer; Robert N. Pemberton III; Douglas R. Phillips; Jim Riddell; Larry E. Seamans, Sr.; Daniel K. Shreckhise; Linda V. Smith; Stever Sturgis; O. Bryan Taliaferro, Jr.; Gerry L. Underwood; Charles T. Wood

#### **AGRIBUSINESS COUNCIL STAFF PRESENT:**

Katie Frazier; Brad Copenhaver; Jennifer Chambers

#### **OTHERS PRESENT:**

Matt Lohr; Bruce Holland; Steve Mallette; David Phillips; Paul Rogers

Meeting began with Ms. Katie Fraizer offering introduction of key members present, including search committee members.

Ms. Deborah Petrine then gave an introduction to the search process, including a detailed description of the steps of the selection process and the overwhelming need for confidentiality when dealing with candidates. Ms. Petrine also emphasized both the university's commitment to agriculture and the importance of feedback from all possible constituency groups.

Dr. Dennis Dean then spoke to emphasize the importance of this search and that the committee and the board are fully devoted to making this a true search evaluating every candidate equally.

***Invent the Future***



Conversation then began amongst the group to discuss the following questions:

- a. What are the greatest opportunities facing Virginia Tech?
- b. What are the greatest challenges facing Virginia Tech?
- c. If you were to look back in 5 years and say “that was a truly transformative president,” what would our president have accomplished?

The discussion concluded with a reminder that a survey is available on the presidential search website for anyone wanting to share their views on the qualities needed in the next president.

The meeting concluded at 4:45PM.





## Presidential Search Committee

### Minutes of the August 29, 2013 Meeting

The Presidential Search Committee appointed by the Board of Visitors of Virginia Tech met on Thursday, August 29, 2013, at The Inn at Virginia Tech in the Cascades Room. The meeting was called to order at 8:30 a.m.

SEARCH COMMITTEE MEMBERS PRESENT: George Nolen, Chair; Deborah Petrine; John Rocovich; John Lee; Stephanie Adams; Erica Bennett; Jacqueline Bixler; Ben Davenport; Dennis Dean; Jesus de la Garza; Patricia Dove; Robert Dunay; Jeff Earley; Alan Grant; Justin Graves; Sarah Karpanty; Arthur Keown; Anne Khademian; William Knocke; XJ Meng; Lance Smith; Sue Teel

#### ALSO PRESENT:

- Ron Forehand, Senior Assistant Attorney General of Virginia, Chief of the Education Section
- Kay Heidbreder, University Legal Counsel
- Larry Hincker, Associate Vice President for University Relations
- Mirah Horowitz, Russell Reynolds Associates
- Mary Tydings, Russell Reynolds Associates
  
- STAFF AND GRADUATE STUDENTS PRESENT: Minnis Ridenour, Nancy Meacham; Judy Ridinger; Meredith Hundley; Kate Preston; Corey Earles; and Fatima Sharif

Search Committee Chair, Mr. Nolen, welcomed the members of the committee and provided a summary of feedback received over the summer and an overview of the preparation to this point for the search and preparation for fall interviews.

Mr. Nolen called for a motion to approve minutes from the June 2, 2013 meeting. Mr. John Rocovich made the motion, the motion was seconded by Mr. John Lee and the motion passed.

Mr. Minnis Ridenour and Ms. Meredith Hundley provided information collected to date on the presidential search survey. The survey went live in mid July. At the time of the meeting, 36% of those completing the survey were students.

Ms. Mirah Horowitz, lead representative from recruiting firm Russell Reynolds Associates, led the group in an exercise to identify Virginia Tech's "elevator speech." Specifically, the group discussed the most important qualities that make Virginia Tech unique.

Ms. Mirah Horowitz provided a summary of Russell Reynolds Associates' meetings with university leadership. Search committee members who led input sessions provided a summary of the information they received from these different constituent groups.



Two search committee members left the meeting at the first break because of scheduling conflicts. The members who left early were Dr. Sarah Karpanty and Mr. Justin Graves.

After a short break, the meeting reconvened at 10:45 a.m. The chair, Mr. George Nolen, then called for the committee to go into Closed Session. Ms. Deborah Petrine made the following motion:

"I move that the committee go into closed meeting:

- 1) Pursuant to Section 2.2-3711.A.1 to discuss personnel matters that will involve discussion of assignment, appointment, promotion, and performance of specific public officers and employees; and will further involve the evaluation of performance of departments or schools of the university where the evaluation will necessarily involve the discussion of the performance of individuals; and
- 2) Pursuant to Section 2.2-3711.A.4 for the protection of privacy of individuals in personal matters not related to public business; and

More specifically, both grounds related to the appointment of a new president for the university.

The motion was seconded by Mr. John Rocovich and the meeting moved into closed session at 10:50 a.m.

During the closed session, the committee discussed only matters lawfully exempted from open meeting requirements and only matters identified in the motion for the closed session.

Mr. George Nolen called for the meeting to return to open session and to be certified. Ms. Deborah Petrine made the following motion:

"I move that the committee go back into open meeting, and that we certify by roll call, that to the best of each member's knowledge (i) only matters lawfully exempted from the open meeting requirements under the Freedom of Information Act were discussed and (ii) only matters identified in the motion to have the closed session were discussed."

The motion was seconded by Mr. John Rocovich and the meeting moved back into open session at 12:11 p.m.

**Recorded Vote:** the following is an affirmative recorded, member by member vote:

- George Nolen, Chair, Search Committee
- John Lee
- Deborah Petrine
- John Rocovich
- Stephanie Adams
- Erica Bennett
- Ben Davenport
- Patricia Dove
- Robert Dunay
- Jeff Early
- Alan Grant
- Arthur Keown



- Anne Khademian
- William Knocke
- XJ Meng
- Lance Smith
- Sue Teel

Ms. Mirah Horowitz led a discussion with the committee to identify desired skill sets and attributes for the next president. She also reviewed the process and expectations of search committee members, which included the importance of confidentiality and being prepared for meetings.

A summary of backgrounds of current sitting presidents was presented by Ms. Fatima Sharif.

The meeting adjourned at 12:25 p.m.



## Virginia Polytechnic Institute and State University

### Job Description

#### University President

The university president is the chief executive officer of Virginia Polytechnic Institute and State University (Virginia Tech), reporting to the Board of Visitors, a 14-member organization appointed by the governor. The president is responsible for leading the commonwealth's largest research university and senior land-grant institution and for overseeing the operations of a \$1.2 billion academic enterprise and its related foundations and corporations. The president will have an in-depth understanding of the global context in which the university operates; the issues that face higher education in general; the diverse missions of a major public research university; and the unique mission of a land-grant university with an agriculture experiment station and Cooperative Extension programs throughout the Commonwealth.

The president will perform the following executive functions required to successfully lead the university and position Virginia Tech to have a global focus in research and engagement, as well as to prepare students for the cultures in which they will work and live:

**Vision.** The president will articulate a vision for the university that will recognize and cultivate innovation; respect and acknowledge creativity; appreciate change and the accompanying process; and possess the leadership competencies to propel the university forward, while understanding and building upon its rich traditions and special resources. The president will expand the international focus of the university and have an innovative vision of the role of technology in teaching, learning, and operating the university. The president must have the ability to inspire others and instill pride in all stakeholders of the university.

**Academic Leadership.** The president will be an able administrator with a record of creative or scholarly achievements and should have an earned doctorate or credentials appropriate for leading a major public research/land-grant university. The president will have a breadth of background essential to understanding the multitude of disciplines at Virginia Tech, a demonstrated record of achievement in building high-quality educational programs, and a commitment to articulating a comprehensive research agenda. The president will exhibit personal integrity and a dedication to continually improving the university experience for students, faculty, and staff. To accomplish this charge, the president will enhance the climate and support for scholarly excellence; recognize and reward exceptional performance; and strive for inclusiveness within the university community by attracting and retaining a diverse and superior faculty, student body, and staff.

**Resource Management and Accountability.** The president will build and maintain an effective and efficient administrative structure led by a high-quality leadership team; be fiscally astute and exercise consistent financial and business oversight with a focus on accountability appropriate to a university; develop a resource base that enables the university to pursue ground-breaking opportunities; support leadership development at all academic and administrative levels; and



commit to a shared governance system, which includes active participation in academic policy decisions by faculty, staff, and students.

**State and Federal Relations.** While private support and self-generative revenues are becoming more important to the university, the president is the key spokesperson on behalf of Virginia Tech in underscoring the importance of state and federal relations to secure funding for operations, special project, and capital appropriations. The president will be a spokesperson on higher education to elected and appointed officials and will build a broad understanding of the importance of funding higher education and the role of higher education in the economic well-being of the commonwealth and the nation.

**Fundraising.** The president will understand the importance of building a significant endowment to enhance the quality of academic programs and teaching, and to provide chairs and professorships for faculty as well as scholarships and fellowships for undergraduate, graduate, and professional students. The president will lead the university in establishing and advancing strategic, private fundraising goals to build the endowment, as well as address the capital and operating needs of the university. The president will provide leadership to strengthen philanthropic support from individuals, foundations, and corporations and be highly effective at developing and nurturing relationships with alumni, donors, and potential donors.

**Building Support through Strategic Partnerships and Relationships.** The president will provide leadership to enhance university resources through creative, collaborative efforts. The president will communicate clearly and effectively with people inside and outside the university and be adept at managing relationships with a broad range of constituents, including faculty, staff, administrators, students, alumni, legislators, donors, and others. The president will encourage and provide leadership to forge strategic partnerships with community leaders, corporations, governmental agencies, and other higher education institutions both within the United States and abroad in an effort to expand and enhance resources, as well as create new programming opportunities that will serve the students and faculty of the university and the commonwealth.



**RESOLUTION ON NAMING THE VIRGINIA TECH CROSS COUNTRY COURSE FOR  
MR. BUFORD MEREDITH**

**WHEREAS**, Buford Meredith served Virginia Tech for 47 years in the Virginia Tech Athletics Department; and

**WHEREAS**, Buford Meredith performed the work responsible for the creation of the existing cross country course in 1992-93; and

**WHEREAS**, Buford Meredith was responsible for the constant care, repair, and race preparation at the course from its inception until his death in January of 2013; and

**WHEREAS**, Buford Meredith was an exemplary employee, a mentor, and an inspiration for over a hundred student workers, graduate assistants, and full time employees working in the Athletics Grounds and Facilities area throughout his 47 years with the department;

**NOW, THEREFORE, BE IT RESOLVED**, that in appreciation of Buford Meredith for his contributions, dedication, and years of service to Virginia Tech and the Virginia Tech Athletics Department, the Cross Country Course be henceforth named the Buford Meredith Cross Country Course.

**RECOMMENDATION:**

That the above resolution naming the Buford Meredith Cross Country Course be approved.

September 9, 2013



## **RESOLUTION ON NAMING THE ARTS CENTER ON THE CAMPUS OF VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY FOR JANE Q. DONOR**

**WHEREAS**, Ms. Jane Q. Donor has been a dedicated and loyal member of the Virginia Tech community for many years, collectively giving of her talent and resources to advance the mission and the initiatives of Virginia Tech; and

**WHEREAS**, Ms. Donor, an alumna of New York's prestigious Cooper Union for the Advancement of Science and Art, is an accomplished artist whose art is represented in over 200 galleries worldwide; and

**WHEREAS**, Ms. Donor is a lifelong supporter of the arts and values the transformational role that the Center for the Arts will play in extending the reach and broadening the impact of Virginia Tech for the local community and the greater region; and

**WHEREAS**, Ms. Donor has distinctive business acumen, building a significant enterprise with global brand recognition, coupled with her roles as artist and philanthropist, have resulted in her receiving numerous honors, awards, and accolades for her talents, efforts, and generosity on local, regional, national, and international stages; and

**WHEREAS**, the artistic abilities and the desire for learning, teaching, and helping others, especially children with learning challenges, were all fueled by Ms. Donor's own experiences with dyslexia and her determination to not be adversely affected by a learning disability, has made her an inspirational champion for and given a distinctive and supportive voice to the learning impaired; and

**WHEREAS**, Ms. Donor has an extensive tenure of community service and generosity through the Jane Q. Donor Society and the Donor Foundation for Children's Education, which emphasizes promoting and integrating the arts into educational programs, with a special focus on children who "learn in different ways," and has already provided millions of dollars in support for innovative methods of art-based education and building collaborative relationships with arts and education-based organizations worldwide; and,

**WHEREAS**, Ms. Donor has elevated the culture of philanthropy at Virginia Tech through consistent and generous philanthropic support to the university with unrestricted operational support and to the College of Liberal Arts and Human Sciences with the creation of a named education endowment; and

**WHEREAS**, Ms. Donor has made a generous 8-figure commitment to aid in the construction of the Arts Center at Virginia Tech, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's, to enhance the visibility and availability of artistic and cultural offerings within this region as well as to expand the scope of the university's educational outreach;

**NOW, THEREFORE, BE IT RESOLVED** that, in appreciation of Ms. Jane Q. Donor's exemplary philanthropy and inspirational vision to connect the arts to Virginia Tech and the surrounding community, that the Arts Center on the campus of Virginia Tech be henceforth known as the Donor Arts Center.

### **RECOMMENDATION:**

That the above resolution naming the Donor Arts Center be approved.

September 9, 2013



**RESOLUTION ON NAMING THE COAT CHECK IN THE CENTER FOR THE ARTS  
FOR THOMAS L. ACKISS '64 AND ANN LYON ACKISS**

**WHEREAS**, Thomas L. Ackiss graduated from Virginia Tech in 1964 with a Bachelor of Science degree in Architecture; and

**WHEREAS**, Tom Ackiss has had a successful and respected career with Lyon Shipyard, Inc.; and

**WHEREAS**, Tom and Ann Ackiss have been recognized as members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the College of Architecture and Urban Studies, Virginia Tech Athletics, VT Class of 1964 Fund for the Alumni and Conference Center, President's Discovery Fund, and the Thomas L. and Ann L. Ackiss Athletic Endowment; and

**WHEREAS**, Tom and Ann Ackiss have provided considerable support to the Performing and Visual Arts Center Planning and Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Tom and Ann Ackiss 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 Tom and Ann Ackiss, and in recognition of past and future benefits to the university, the coat check in the Center for the Arts will be known as the Coat Check gifted by Thomas L. Ackiss '64 and Ann Lyon Ackiss.

**RECOMMENDATION:**

That the above resolution naming the Coat Check gifted by Thomas L. Ackiss '64 and Ann Lyon Ackiss be approved.

September 9, 2013



**RESOLUTION ON NAMING THE HOUSE LEFT BALCONY LEVEL BOX 3 IN THE CENTER FOR THE ARTS FOR DAVID A. BARNES '85 AND JENNIFER E. BARNES**

**WHEREAS**, David A. Barnes graduated from Virginia Tech in 1985 with a Bachelor of Science degree in Management Science; and

**WHEREAS**, David Barnes has had a successful and respected career in banking; and

**WHEREAS**, David and Jennifer Barnes have been recognized as members of the Caldwell Society for their outstanding philanthropy to the university to include support for the Pi Kappa Alpha House, Virginia Tech Athletics, and the Pi Kappa Alpha Award; and

**WHEREAS**, David and Jennifer Barnes have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, David and Jennifer Barnes 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 David and Jennifer Barnes, and in recognition of past and future benefits to the university, the house left balcony level Box 3 in the Center for the Arts will be known as the David A. Barnes '85 and Jennifer E. Barnes Box.

**RECOMMENDATION:**

That the above resolution naming the David A. Barnes '85 and Jennifer E. Barnes Box be approved.

September 9, 2013



**RESOLUTION ON NAMING THE HOUSE RIGHT BALCONY LEVEL BOX 2 IN THE CENTER FOR THE ARTS FOR L. ALLEN BOWMAN '58 AND MARILYN BOWMAN**

**WHEREAS**, L. Allen Bowman graduated from Virginia Tech in 1958 with a Bachelor of Science degree in Business Administration; and

**WHEREAS**, Al Bowman has had a successful and respected career with Litton Industries; and

**WHEREAS**, Al and Marilyn Bowman have been recognized as Senior Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Pamplin College of Business, Class of '58 Reunion Fund, Virginia Tech Athletics, L. Allen Bowman Scholarship in Business, the Alumni and Conference Center, and the Richard E. Sorensen Dean's Chair; and

**WHEREAS**, Al and Marilyn Bowman have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Al and Marilyn Bowman 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 Al and Marilyn Bowman, and in recognition of past and future benefits to the university, the house right balcony level Box 2 in the Center for the Arts will be known as the L. Allen Bowman '58 and Marilyn Bowman Box.

**RECOMMENDATION:**

That the above resolution naming the L. Allen Bowman '58 and Marilyn Bowman Box be approved.

September 9, 2013



**RESOLUTION ON NAMING THE MEZZANINE LEVEL BOX 2 HOUSE LEFT IN THE  
CENTER FOR THE ARTS FOR CONSTANCE AND KEITH CEDRAS**

**WHEREAS,** Constance and Keith Cedras have been among the most esteemed members of the university community; and

**WHEREAS,** Constance Cedras has had a successful and respected career in international business and law, and Keith Cedras has had a successful and respected career in multinational aviation; and

**WHEREAS,** Constance and Keith Cedras have been recognized as Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Keith and Constance Cedras Center for the Arts Excellence Fund; and

**WHEREAS,** Constance and Keith Cedras have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS,** Constance and Keith Cedras 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 Constance and Keith Cedras, and in recognition of past and future benefits to the university, the Mezzanine Level-Box 2-House Left in the Center for the Arts will be known as the Constance and Keith Cedras Box.

**RECOMMENDATION:**

That the above resolution naming the Constance and Keith Cedras Box be approved.

September 9, 2013



**RESOLUTION ON NAMING THE SECOND LEVEL OUTDOOR BALCONY IN THE  
CENTER FOR THE ARTS FOR  
VINOD CHACHRA '68 AND RANJANA W. CHACHRA '80**

**WHEREAS**, Vinod Chachra graduated from Virginia Tech in 1971 with a Doctor of Philosophy degree in Industrial Engineering from the College of Engineering, and Ranjana W. Chachra graduated from Virginia Tech in 1980 with a Certificate of Advanced Graduate Studies in Educational Supervision from the College of Liberal Arts and Human Sciences; and

**WHEREAS**, Vinod Chachra has had a successful and respected career with VTLS, Inc. (Visionary Technology in Library Solutions), and Ranjana has had a successful and respected career in real estate; and

**WHEREAS**, Vinod and Ranjana Chachra have been recognized as Senior Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Computer Science Department, the Department of Industrial and Systems Engineering, the College of Engineering, and the College of Liberal Arts and Human Sciences; and

**WHEREAS**, Vinod and Ranjana Chachra have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Vinod and Ranjana Chachra 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 Vinod and Ranjana Chachra, and in recognition of past and future benefits to the university, the Outdoor Balcony-Second Level in the Center for the Arts will be known as the Vinod Chachra '68 and Ranjana W. Chachra '80 Outdoor Balcony.

**RECOMMENDATION:**

That the above resolution naming the Vinod Chachra '68 and Ranjana W. Chachra '80 Outdoor Balcony be approved.

September 9, 2013



**RESOLUTION ON NAMING THE MUSICIANS' DRESSING ROOM #1 IN THE  
CENTER FOR THE ARTS FOR LARRY CHANG '90 AND HOPE CHANG**

**WHEREAS**, Laurence Y. Chang graduated from Virginia Tech in 1990 with a Bachelor of Science degree in Aerospace Engineering; and

**WHEREAS**, Larry Chang has had a successful and respected career with FGM, Inc.; and

**WHEREAS**, Larry and Hope Chang have been recognized as members of the Pylon Society for their philanthropy to the university; and

**WHEREAS**, Larry and Hope Chang have provided considerable support to the Performing and Visual Arts Center Planning and Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Larry and Hope Chang 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 Larry and Hope Chang, and in recognition of past and future benefits to the university, the Musicians' Dressing Room #1 in the Center for the Arts will be known as the Larry Chang '90 and Hope Chang Musician's Dressing Room.

**RECOMMENDATION:**

That the above resolution naming the Larry Chang '90 and Hope Chang Musicians' Dressing Room be approved.

September 9, 2013



**RESOLUTION ON NAMING THE HOUSE MANAGER'S OFFICE IN THE  
CENTER FOR THE ARTS FOR LARRY COWLEY, M.D. AND PATRICIA COWLEY**

**WHEREAS**, Larry A. Cowley, M.D. and Patricia L. Cowley have been among the most esteemed members of the university community; and

**WHEREAS**, Larry Cowley has had a successful career in the medical profession; and

**WHEREAS**, Larry and Patti Cowley have been recognized as Caldwell Society members for their philanthropy to the university to include support for Virginia Tech Athletics, specifically for Women's Basketball, Men's Basketball and Men's Tennis; and

**WHEREAS**, Larry and Patti Cowley have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Larry and Patti Cowley 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 Larry and Patti Cowley, and in recognition of past and future benefits to the university, the House Manager's Office in the Center for the Arts will be known as the Larry Cowley, M.D. and Patricia Cowley House Manager's Office.

**RECOMMENDATION:**

That the above resolution naming the Larry Cowley, M.D. and Patricia Cowley House Manager's Office be approved.

September 9, 2013



**RESOLUTION ON NAMING THE SMALL ENSEMBLE DRESSING ROOM #2  
IN THE CENTER FOR THE ARTS FOR JOHN W. COX AND SALLY S. COX '79**

**WHEREAS**, Sally Schweitzer Cox graduated from Virginia Tech in 1979 with a Bachelor of Science degree in Accounting; and

**WHEREAS**, Sally Cox has had a successful career with Hewlett-Packard Company, and John W. Cox has had a successful career with Alvarez & Marsal; and

**WHEREAS**, John and Sally Cox have been recognized as Caldwell Society members for their philanthropy to the university to include support for the Sally S. and John W. Cox Scholarship, the Pamplin College of Business, and the Department of Accounting and Information Systems; and

**WHEREAS**, John and Sally Cox have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, John and Sally Cox 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 John and Sally Cox, and in recognition of past and future benefits to the university, the Small Ensemble Dressing Room #2 in the Center for the Arts will be known as the John W. Cox and Sally S. Cox '79 Ensemble Dressing Room.

**RECOMMENDATION:**

That the above resolution naming the John W. Cox and Sally S. Cox '79 Ensemble Dressing Room be approved.

September 9, 2013



**RESOLUTION ON NAMING THE STAR DRESSING ROOM #1 IN THE  
CENTER FOR THE ARTS FOR CHARLES Y. DAVIS AND CAROLE C. DAVIS '78**

**WHEREAS**, Carole C. Davis graduated from Virginia Tech in 1978 with a Bachelor of Arts degree in Architecture and Urban Studies; and

**WHEREAS**, Carole Davis has had a successful and fulfilling career as an artist, and C.Y. Davis has had a successful and respected career in the medical profession; and

**WHEREAS**, C.Y. and Carole Davis have been recognized as Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Dr. and Mrs. C.Y. Davis Scholarship, the Davis Endowed Scholarship in Art, the Merryman Center, and Virginia Tech Athletics; and

**WHEREAS**, C.Y. and Carole Davis have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, C.Y. and Carole Davis 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 C.Y. and Carole Davis, and in recognition of past and future benefits to the university, the Star Dressing Room #1 in the Center for the Arts will be known as the Charles Y. Davis and Carole C. Davis '78 Star Dressing Room.

**RECOMMENDATION:**

That the above resolution naming the Charles Y. Davis and Carole C. Davis '78 Star Dressing Room be approved.

September 9, 2013



**RESOLUTION ON NAMING BALCONY LEVEL BOX 3 HOUSE RIGHT IN THE  
CENTER FOR THE ARTS FOR CARL J. ENG '77 AND JANE KORNEGAY-ENG**

**WHEREAS**, Carl J. Eng graduated from Virginia Tech in 1977 with a Bachelor of Science degree in Engineering; and

**WHEREAS**, Carl Eng has had a successful and respected career with Dominion Virginia Power; and

**WHEREAS**, Carl and Jane Eng have been recognized as members of the Pylon Society for their philanthropy to the university to include support for Virginia Tech Athletics, the College of Engineering, and the Leo A. Padis Scholarship; and

**WHEREAS**, Carl and Jane Eng have provided considerable support to the Performing and Visual Arts Center Planning and Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Carl and Jane Eng 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 Carl and Jane Eng, and in recognition of past and future benefits to the university, the Balcony Level-Box 3-House Right in the Center for the Arts will be known as the Carl J. Eng '77 and Jane Kornegay-Eng Box.

**RECOMMENDATION:**

That the above resolution naming the Carl J. Eng '77 and Jane Kornegay-Eng Box be approved.

September 9, 2013



**RESOLUTION ON NAMING THE SMALL ENSEMBLE DRESSING ROOM #1 IN THE  
CENTER FOR THE ARTS FOR B. KEITH FULTON '89**

**WHEREAS**, B. Keith Fulton graduated from Virginia Tech in 1989 with a Bachelor of Arts degree in Architecture and Urban Studies; and

**WHEREAS**, Keith Fulton has had a successful and respected career with Verizon Communications, Ltd; and

**WHEREAS**, Keith Fulton has served the university as a member of the Board of Visitors; and

**WHEREAS**, Keith Fulton has been recognized for his philanthropy to the university to include support for the College of Architecture and Urban Studies, Urban Affairs and Planning, and the Alumni and Conference Center; and

**WHEREAS**, Keith Fulton has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Keith Fulton has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Keith Fulton, and in recognition of past and future benefits to the university, the Small Ensemble Dressing Room #1 in the Center for the Arts will be known as the B. Keith Fulton '89 Small Ensemble Dressing Room.

**RECOMMENDATION:**

That the above resolution naming the B. Keith Fulton '89 Small Ensemble Dressing Room be approved.

September 9, 2013



**RESOLUTION ON NAMING THE WARDROBE ROOM IN THE  
CENTER FOR THE ARTS FOR LT. COL. J. PAT GREEN '69**

**WHEREAS**, Lt. Col. J. Pat Green graduated from Virginia Tech in 1969 with a Bachelor of Science degree in Liberal Arts and Human Sciences; and

**WHEREAS**, Pat Green has had a successful and respected career with Integrity Burial Boxes, Ltd.; and

**WHEREAS**, Pat Green has been recognized as a Caldwell Society member for his philanthropy to the university to include support for the College of Liberal Arts and Human Sciences, Virginia Tech Athletics, including Lane Stadium and the Merryman Center; and

**WHEREAS**, Pat Green has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Pat Green has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Pat Green, and in recognition of past and future benefits to the university, the Wardrobe Room in the Center for the Arts will be known as the Lt. Col. J. Pat Green '69 Wardrobe Room.

**RECOMMENDATION:**

That the above resolution the naming the Lt. Col. J. Pat Green '69 Wardrobe Room be approved.

September 9, 2013



**RESOLUTION ON NAMING THE THEATRE FOYER IN THE  
CENTER FOR THE ARTS FOR WILLIAM MARSHALL HAHN '74**

**WHEREAS**, the Hahn family to include Dr. and Mrs. T. Marshall Hahn Jr., Elizabeth Hahn and Douglas Scott Chancey, and Anne Hahn Hurst have been among the most esteemed members of the university community, personifying the Virginia Tech motto “Ut Prosim” with their generous service to the university through significant volunteer leadership and philanthropy; and

**WHEREAS**, T. Marshall Hahn Jr. has had a successful and respected career with Georgia Pacific Corporation, has served on numerous corporation and foundation boards, and is retired President Emeritus of Virginia Tech; and

**WHEREAS**, the Hahn family members have been recognized as members of the Ut Prosim Society, the university’s most prestigious donor recognition society, T. Marshall and Jean at the President’s Circle level, and Elizabeth Hahn and Doug Chancey, and Anne Hahn Hurst at the Benefactor level, for their outstanding philanthropy to the university; and

**WHEREAS**, T. Marshall and Jean, Elizabeth and Douglas, and Anne have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960’s, in memory of their son and brother; and

**WHEREAS**, the Hahn 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 the Hahn family, and in recognition of past and future benefits to the university, the theatre foyer in the Center for the Arts will be known as the William Marshall Hahn '74 Theatre Foyer.

**RECOMMENDATION:**

That the above resolution naming the William Marshall Hahn '74 Theatre Foyer be approved.

September 9, 2013



## **RESOLUTION ON NAMING THE CENTER FOR THE ARTS AMPHITHEATER FOR LEON HARRIS '64 AND BEVERLY HARRIS**

**WHEREAS**, Leon Price Harris graduated from Virginia Tech in 1964 with a Bachelor of Science degree in Industrial Engineering; and

**WHEREAS**, Leon Harris has had a successful and respected career with Keltech, Inc.; and

**WHEREAS**, Leon and Beverly Harris have been recognized as members of the President's Circle of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Virginia Tech Corps of Cadets, the College of Engineering, Virginia Tech Athletics, the VTCC Leon Harris '64 & Beverly Harris Scholarship, Industrial and Systems Engineering, the Alumni and Conference Center, and the Taubman Museum of Art; and

**WHEREAS**, Leon and Beverly Harris have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Leon and Beverly Harris 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 Leon and Beverly Harris, and in recognition of past and future benefits to the university, the Amphitheater in the Center for the Arts will be known as the Leon Harris '64 and Beverly Harris Amphitheater.

### **RECOMMENDATION:**

That the above resolution naming the Leon Harris '64 and Beverly Harris Amphitheater be approved.

September 9, 2013



**RESOLUTION ON NAMING THE CENTER FOR THE ARTS CONFERENCE ROOM  
FOR MRS. ANN F. HOLTZMAN**

**WHEREAS**, Ann F. Holtzman has been among the most esteemed members of the university community; and

**WHEREAS**, Ann Holtzman, and her husband, Bill, have been recognized as members of the President's Circle of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Virginia Center for Civil War Studies, the Holtzman Alumni Center, and the President's Discovery Fund; and

**WHEREAS**, Ann Holtzman has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Ann Holtzman has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Ann Holtzman, and in recognition of past and future benefits to the university, the conference room in the Center for the Arts will be known as the Ann F. Holtzman Conference Room.

**RECOMMENDATION:**

That the above resolution naming the Ann F. Holtzman Conference Room be approved.

September 9, 2013



**RESOLUTION ON NAMING THE TURNER STREET GALLERY IN THE  
CENTER FOR THE ARTS FOR MR. MILES C. HORTON, JR.**

**WHEREAS**, Miles C. Horton Jr. was among the most esteemed and loyal friends of the Virginia Tech family; and

**WHEREAS**, Miles Horton had been recognized as a Distinguished Benefactor member of the Ut Prosim Society, the university's most prestigious donor recognition society, for his outstanding philanthropy to the university; and

**WHEREAS**, the estate of Miles Horton provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Miles Horton was a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Miles Horton, and in recognition of past and future benefits to the university, the Turner Street Gallery in the Center for the Arts will be known as the Miles C. Horton Gallery.

**RECOMMENDATION:**

That the above resolution naming Miles C. Horton Gallery be approved.

September 9, 2013



**RESOLUTION ON NAMING THE ALUMNI MALL GALLERY IN THE  
CENTER FOR THE ARTS FOR MRS. RUTH C. HORTON**

**WHEREAS**, Ruth C. Horton was among the most esteemed members friends of Virginia Tech; and

**WHEREAS**, Ruth Horton had been recognized as a member of the President's Circle of the Ut Prosim Society, the university's most prestigious donor recognition society, for her outstanding philanthropy to the university; and

**WHEREAS**, Ruth Horton was an exceptional supporter of the Visual Arts program; and

**WHEREAS**, the estate of Ruth Horton provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Ruth Horton will always be remembered as a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Ruth Horton, and in recognition of past and future benefits to the university, the Alumni Mall Gallery in the Center for the Arts will be known as the Ruth C. Horton Gallery.

**RECOMMENDATION:**

That the above resolution naming the Ruth C. Horton Gallery be approved.

September 9, 2013



**RESOLUTION ON NAMING THE EDITING SUITE IN THE CENTER FOR THE ARTS  
FOR THE HARRY H. HUNT FAMILY**

**WHEREAS**, Harry H. Hunt III and Mary Ellen Hunt have been among the most esteemed members of the university community; and

**WHEREAS**, Harry Hunt has had a successful and respected career in real estate development and management; and

**WHEREAS**, Harry and Mary Ellen Hunt have each been recognized as Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university, to include support for Virginia Tech Athletics, the Alumni and Conference Center, the College of Science, and the College of Architecture and Urban Studies; and

**WHEREAS**, Harry and Mary Ellen Hunt have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Harry and Mary Ellen Hunt 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 Harry and Mary Ellen Hunt, and in recognition of past and future benefits to the university, the Editing Suite in the Center for the Arts will be known as the Harry H. Hunt Family Editing Suite.

**RECOMMENDATION:**

That the above resolution naming the Harry H. Hunt Family Editing Suite be approved.

September 9, 2013



**RESOLUTION ON NAMING THE PERFORMANCE HALL ELEVATORS IN THE  
CENTER FOR THE ARTS FOR DUNCAN C. KENNEDY III '60 GIVEN IN LOVING  
MEMORY BY HIS WIFE NANCIE ROOP KENNEDY**

**WHEREAS**, Nancie Roop Kennedy has been among the most esteemed members of the university community; and

**WHEREAS**, Nancie Kennedy has had a successful and respected career with Eastman Community Music School; and

**WHEREAS**, Nancie Kennedy has been recognized as a Benefactor member of the Ut Prosim Society, the university's most prestigious donor recognition society, for her outstanding philanthropy to the university, to include support for the Summer Music Festival Opera Initiative, the Virginia Tech Corps of Cadets Commandant's Priorities, and the Ora G. Roop Endowed Scholarship; and

**WHEREAS**, Nancie Kennedy has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Nancie Kennedy has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Nancie Roop Kennedy, and in recognition of past and future benefits to the university, the Elevators in the Performance Hall in the Center for the Arts will be known as the Duncan C. Kennedy III '60 Elevators Given in Loving Memory by his Wife Nancie Roop Kennedy.

**RECOMMENDATION:**

That the above resolution naming the Duncan C. Kennedy III '60 Elevators Given in Loving Memory by his Wife Nancie Roop Kennedy be approved.

September 9, 2013



**RESOLUTION ON NAMING MEZZANINE LEVEL BOX 3 HOUSE LEFT IN THE  
CENTER FOR THE ARTS FOR JACOB A. LUTZ III '78 AND ROBIN R. LUTZ**

**WHEREAS**, Jacob A. Lutz III graduated from Virginia Tech in 1978 with a Bachelor of Science degree in Finance; and

**WHEREAS**, Jacob Lutz has had a successful and respected career in the legal profession, and has served his alma mater as Rector of the Board of Visitors and member of the Virginia Tech Foundation Board of Directors, Inc.; and

**WHEREAS**, Jacob and Robin Lutz have each been recognized as Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university, to include support for the Jacob A. Lutz III Scholarship, the J.A. Lutz Teaching Greenhouse Complex, and the Alumni and Conference Center; and

**WHEREAS**, Jacob and Robin Lutz have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Jacob and Robin Lutz 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 Jacob and Robin Lutz, and in recognition of past and future benefits to the university, the Mezzanine Level-Box 3-House Left in the Center for the Arts will be known as the Jacob A. Lutz III '78 and Robin R. Lutz Box.

**RECOMMENDATION:**

That the above resolution naming the Jacob A. Lutz III '78 and Robin R. Lutz Box be approved.

September 9, 2013



**RESOLUTION ON NAMING THE BOX OFFICE IN THE CENTER FOR THE ARTS  
FOR JAMES D. PENNY '77 AND PAMELA J. PENNY**

**WHEREAS**, James D. Penny graduated from Virginia Tech in 1977 with a Bachelor of Science degree in Accounting; and

**WHEREAS**, Jim Penny has had a successful and respected career in the legal profession, and Pamela Penny has had a successful and respected career in finance; and

**WHEREAS**, Jim and Pamela Penny have each been recognized as Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university, to include support for the James D. Penny Accounting Excellence Fund, the James D. Penny Accounting Scholarship, the Department of Accounting and Information Systems, and the Hokie Spirit Memorial Fund; and

**WHEREAS**, Jim and Pamela Penny have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Jim and Pamela Penny 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 Jim and Pamela Penny, and in recognition of past and future benefits to the university, the Box Office in the Center for the Arts will be known as the James D. Penny '77 and Pamela J. Penny Box Office.

**RECOMMENDATION:**

That the above resolution naming the James D. Penny '77 and Pamela J. Penny Box Office be approved.

September 9, 2013



**RESOLUTION ON NAMING THE FIRST BALCONY LEVEL THEATRE FOYER IN  
THE CENTER FOR THE ARTS FOR THE PERRY FAMILY**

**WHEREAS**, Brandon D. Perry graduated from Virginia Tech in 1991 with a Bachelor of Science degree in Marketing Management; and

**WHEREAS**, Brandon Perry has had a successful and respected career in business development; and

**WHEREAS**, Brandon and Karen Perry have been recognized as Senior Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Pamplin College of Business, Virginia Tech Athletics, specifically Women's Lacrosse and Golf, and the President's Discovery Fund; and

**WHEREAS**, Brandon and Karen Perry have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Brandon and Karen Perry 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 Brandon and Karen Perry, and in recognition of past and future benefits to the university, the Theatre Foyer-First Balcony Level in the Center for the Arts will be known as the Perry Family Foyer.

**RECOMMENDATION:**

That the above resolution naming the Perry Family Foyer be approved.

September 9, 2013



**RESOLUTION ON NAMING HOUSE RIGHT MEZZANINE LEVEL BOX 2 IN THE  
CENTER FOR THE ARTS FOR CARL J. PFEIFFER AND LINDA J. PFEIFFER**

**WHEREAS**, Carl J. Pfeiffer and Linda J. Pfeiffer have been among the most esteemed friends of Virginia Tech; and

**WHEREAS**, Carl Pfeiffer has had a successful and respected career with Virginia Tech, now Retired Professor Emeritus of Biomedical Sciences, and Linda Pfeiffer has had a successful and respected career with Virginia Tech; and

**WHEREAS**, Carl and Linda Pfeiffer have been recognized as Caldwell Society members for their philanthropy to the university to include support for the Virginia-Maryland Regional College of Veterinary Medicine; and

**WHEREAS**, Carl and Linda Pfeiffer have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Carl and Linda Pfeiffer 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 Carl and Linda Pfeiffer, and in recognition of past and future benefits to the university, the House Right-Mezzanine Level-Box 2 in the Center for the Arts will be known as the Carl J. Pfeiffer and Linda J. Pfeiffer Box.

**RECOMMENDATION:**

That the above resolution naming the Carl J. Pfeiffer and Linda J. Pfeiffer Box be approved.

September 9, 2013



**RESOLUTION ON NAMING THE SECOND LEVEL OUTDOOR BALCONY  
IN THE CENTER FOR THE ARTS FOR  
BRUCE PRICHARD '75 AND NANCY BEVILLE PRICHARD '74**

**WHEREAS**, Bruce Prichard graduated from Virginia Tech in 1975 with a Bachelor of Science degree in Architecture, and Nancy Beville Prichard graduated from Virginia Tech in 1974 with a Bachelor of Arts degree in Art; and

**WHEREAS**, Bruce Prichard has had a successful and respected career in architecture, and Nancy Prichard has had a successful and respected career in elementary and secondary education; and

**WHEREAS**, Bruce and Nancy Prichard have been recognized as members of the Caldwell Society for their philanthropy to the university to include support for the College of Architecture and Urban Studies, Virginia Tech Athletics Lane Stadium-West Side Expansion, and the Basketball Complex; and

**WHEREAS**, Bruce and Nancy Prichard have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Bruce and Nancy Prichard 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 Bruce and Nancy Prichard, and in recognition of past and future benefits to the university, the Outdoor Balcony-Second Level in the Center for the Arts will be known as the Bruce Prichard '75 and Nancy Beville Prichard '74 Balcony.

**RECOMMENDATION:**

That the above resolution naming the Bruce Prichard '75 and Nancy Beville Prichard '74 Balcony be approved.

September 9, 2013



**RESOLUTION ON NAMING THE ADMINISTRATIVE OFFICE TEAM ROOM #2  
IN THE CENTER FOR THE ARTS FOR  
CHARLES W. PRYOR, JR. '66 AND MARY JANE PRYOR**

**WHEREAS**, Charles W. Pryor, Jr. graduated from Virginia Tech in 1970 with a Doctorate of Philosophy degree in Civil Engineering; and

**WHEREAS**, Charlie Pryor has had a successful and respected career with URENCO, Incorporated; and

**WHEREAS**, Charlie Pryor has served the Virginia Tech Foundation Board of Directors, Inc. as Chairman of the Board; and

**WHEREAS**, Charlie and Mary Jane Pryor have been recognized as Senior Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for the Charles W. Pryor, Jr. Scholarship, the Charles W. Pryor, Jr. Engineering Scholarship, the Charlie and Mary Jane Pryor Athletic Scholarship, Virginia Tech Athletics, the College of Engineering, and the Institute for Critical Technology and Applied Science; and

**WHEREAS**, Charlie and Mary Jane Pryor have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Charlie and Mary Jane Pryor 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 Charlie and Mary Jane Pryor, and in recognition of past and future benefits to the university, the Administrative Office-Team Room 2 in the Center for the Arts will be known as the Charles W. Pryor, Jr. '66 and Mary Jane Pryor Meeting Room.

**RECOMMENDATION:**

That the above resolution naming the Charles W. Pryor, Jr. '66 and Mary Jane Pryor Meeting Room be approved.

September 9, 2013



**RESOLUTION ON NAMING THE RECEPTION GALLERY IN THE  
CENTER FOR THE ARTS FOR SHERWOOD PAYNE QUILLEN '71**

**WHEREAS**, Sherwood P. Quillen graduated from Virginia Tech in 1971 with a Bachelor of Science degree in Health and Physical Education; and

**WHEREAS**, Sherry Quillen has had a successful and respected career in education; and

**WHEREAS**, Sherry Quillen has been recognized as a member of the President's Circle of the Ut Prosim Society, the university's most prestigious donor recognition society, for her outstanding philanthropy to the university to include support for the Sherwood Payne Quillen Director's Fund for Excellence, the Women in Leadership and Philanthropy Endowed Lecture Fund, and the Center for 21<sup>st</sup> Century Studies; and

**WHEREAS**, Sherry Quillen has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Sherry Quillen has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Sherry Quillen, and in recognition of past and future benefits to the university, the Reception Gallery in the Center for the Arts will be known as the Sherwood Payne Quillen '71 Reception Gallery.

**RECOMMENDATION:**

That the above resolution naming the Sherwood Payne Quillen '71 Reception Gallery be approved.

September 9, 2013



**RESOLUTION ON NAMING THE GRAND LOBBY ELEVATOR IN THE  
CENTER FOR THE ARTS FOR THE ROANOKE TIMES**

**WHEREAS**, the Roanoke Times/Landmark Foundation has been involved with the university since 1996; and

**WHEREAS**, the Roanoke Times/Landmark Foundation has provided meaningful philanthropy for the W. E. Skelton 4-H Educational Conference Center and the Institute for Governance & Accountabilities; and

**WHEREAS**, the Roanoke Times/Landmark Foundation has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, the Roanoke Times/Landmark Foundation has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of the Roanoke Times/Landmark Foundation, and in recognition of past and future benefits to the university, the grand lobby elevator in the Center for the Arts will be known as the Roanoke Times Grand Lobby Elevator.

**RECOMMENDATION:**

That the above resolution naming the Roanoke Times Grand Lobby Elevator be approved.

September 9, 2013



**RESOLUTION ON NAMING BALCONY LEVEL BOX 2 HOUSE LEFT IN THE  
CENTER FOR THE ARTS IN MEMORY OF SALLY STEPHENSON  
BY BILL STEPHENSON, DAUGHTER, KATE, AND FAMILY**

**WHEREAS**, Frederick William Stephenson has been among the most esteemed members of Virginia Tech faculty and the university community; and

**WHEREAS**, Bill Stephenson has had a successful and respected career with Virginia Tech serving as Dean of the College of Engineering; and

**WHEREAS**, Bill Stephenson has been recognized as a Pylon Society member for his philanthropy to the university to include support for the College of Engineering, the Institute for Critical Technology and Applied Science, and Electrical and Computer Engineering; and

**WHEREAS**, Bill Stephenson has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Bill Stephenson has been, and continues to be, a valued member of the university community;

**NOW, THEREFORE, BE IT RESOLVED**, that in acknowledgement of the service and generosity of Bill Stephenson, and in recognition of past and future benefits to the university, the Balcony Level-Box 2-House Left in the Center for the Arts will be known as the Sally Stephenson Box Given in her Memory by Bill Stephenson, daughter, Kate, and family.

**RECOMMENDATION:**

That the above resolution naming the Sally Stephenson Box Given in her Memory by Bill Stephenson, daughter, Kate, and family be approved.

September 9, 2013



**RESOLUTION ON NAMING THE FIRST LEVEL OUTDOOR BALCONY IN THE  
CENTER FOR THE ARTS FOR  
DOUGLAS L. TROTT '78 AND NINA KELLEY TROTT '78**

**WHEREAS**, Douglas L. Trott graduated from Virginia Tech in 1978 with a Bachelor of Science degree in Finance, and Nina Kelley Trott graduated from Virginia Tech in 1978 with a Bachelor of Science degree in Management; and

**WHEREAS**, Doug and Nina Trott both have had successful and respected careers with Capital Pension Services, Inc.; and

**WHEREAS**, Doug and Nina Trott have been recognized as Benefactor members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university to include support for Virginia Tech Athletics including Men's Basketball and Volleyball, the Virginia Center for Civil War Studies, and the Pamplin College of Business; and

**WHEREAS**, Doug and Nina Trott have provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Doug and Nina Trott 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 Doug and Nina Trott, and in recognition of past and future benefits to the university, the Outdoor Balcony-First Level in the Center for the Arts will be known as the Douglas L. Trott '78 and Nina Kelley Trott '78 Balcony.

**RECOMMENDATION:**

That the above resolution naming the Douglas L. Trott '78 and Nina Kelley Trott '78 Balcony be approved.

September 9, 2013



**RESOLUTION ON NAMING THE ORCHESTRA PIT IN THE  
CENTER FOR THE ARTS FOR THE WOLLENBERG FOUNDATION**

**WHEREAS**, the Wollenberg Foundation, represented by Christopher R. Wollenberg, Trustee, has been involved with the university since 2007; and

**WHEREAS**, the Wollenberg Foundation has provided meaningful support for the arts program; and

**WHEREAS**, Chris and Gail Wollenberg have been recognized as members of the Ut Prosim Society, the university's most prestigious donor recognition society, for their outstanding philanthropy to the university establishing the Arts Opportunity Scholarship; and

**WHEREAS**, the Wollenberg Foundation has provided considerable support to the Center for the Arts, a landmark building which represents the most significant transformation of the Virginia Tech campus since the 1960's; and

**WHEREAS**, Chris and Gail Wollenberg 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 Chris and Gail Wollenberg and the Wollenberg Foundation, and in recognition of past and future benefits to the university, the orchestra pit in the Center for the Arts will be known as the Wollenberg Foundation Orchestra Pit.

**RECOMMENDATION:**

That the above resolution naming the Wollenberg Foundation Orchestra Pit be approved.

September 9, 2013



## **ALUMNI DISTINGUISHED PROFESSOR**

Dr. Jacqueline Bixler, professor of Spanish and Chair of the Department of Foreign Languages and Literatures in the College of Liberal Arts and Human Sciences is an exceptional scholar, teacher, and researcher. She has served Virginia Tech for 33 years. In 2003, Dr. Bixler was appointed as an Alumni Distinguished Professor for a period of 10 years, and she has served admirably in this capacity. Dr Bixler's passion for her discipline and teaching has resulted in numerous awards.

Dr. Bixler's academic career has been devoted to educating students and to making significant contributions to the international scholarship on Latin American drama and politics. Dr. Bixler is the leading American scholar and expert on major dramatists such as Emilio Carballido, Sabina Berman, and Víctor Hugo Rascón Banda. One of Dr. Bixler's greatest honors was to speak in 2008, to over 2,000 people, at a memorial service held at the National Palace of Fine Arts in Mexico City honoring dramatist Emilio Carballido.

Her commitment to international affairs and education is exemplified in the number of successful programs Dr. Bixler has inaugurated and continues to lead. Under Dr. Bixler's tutelage, Virginia Tech students have studied and experienced intensive language and culture programs in Mexico. Dr. Bixler has established and maintained teaching and exchange relationships with international universities in Latin America.

As a scholar, Dr. Bixler has been honored with being selected as the editor for Latin American Theater Review, the preeminent journal for her field and a journal with which she has been affiliated since 1976. In addition, Dr. Bixler organized a highly successful Latin American theatre festival at Virginia Tech in 2008. The conference drew over 200 scholars from all over the world and included presentations and performances. Over the past 10 years, Dr. Bixler's scholarly contributions include five books, 12 book chapters, and six journal articles. She has published in the U.S., Cuba, Mexico, and Brazil in multiple prestigious journals.

As an academic leader, in her role as chair, Dr. Bixler has implemented a vision for her department that has expanded international and language experiences for students. She has expanded the curriculum, established graduate degrees, secured funding, hired exceptional faculty members, and implemented specially designed education abroad programs such as a summer international experience program for 18 cadets. Dr. Bixler's department collaborates with other universities in the Commonwealth using the 4-VA system to teach classes in advanced Italian, Chinese, Arabic, Portuguese, and Turkish.

As an Alumni Distinguished Professor, Dr. Bixler continues to make significant contributions to the university community through service and leadership of important university, domestic, and international initiatives. She was invited to serve on the university's presidential search committee.

Dr. Bixler truly embodies the qualities central to Virginia Tech's mission and motto *Ut Prosim* (that I may serve). Her enduring commitments to teaching, scholarship and service are evident in her own words: "...I will teach with passion and vigor, relentlessly promote study abroad, build programs in the critical languages, maintain my reputation as a scholar...mentor and guide ...and lead my department."

### **RECOMMENDATION:**

That Dr. Jacqueline E. Bixler be reappointed as Alumni Distinguished Professor effective September 9, 2013 for a period of 10 years.

September 9, 2013



## **Summary**

### **Emeriti Faculty Resolutions (12)**

**September 9, 2013**

#### **Pamplin College of Business**

James Hicks	Professor Emeritus of Accounting and Information Systems
Ken McCleary	Professor Emeritus of Hospitality and Tourism Management
Pamela Weaver	Professor Emerita of Hospitality and Tourism Management

#### **College of Liberal Arts and Human Sciences**

JoAnn Emmel	Associate Professor Emerita of Apparel, Housing and Resource Management
Carolyn Rude	Professor Emerita of English
Ernest Sullivan	Professor Emeritus of English

#### **College of Engineering**

Gordon Kirk	Professor Emeritus of Mechanical Engineering
L. Glenn Kraige	Professor Emeritus of Engineering Science and Mechanics

#### **Virginia-Maryland College of Veterinary Medicine**

Nathaniel White	Professor Emeritus of Large Animal Clinical Sciences
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#### **University Libraries**

David Beagle	Assistant Professor Emeritus of University Libraries
Charles Litchfield	Assistant Professor Emeritus of University Libraries
Lane Rasmussen	Assistant Professor Emeritus of University Libraries



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, Dr. James O. Hicks, Jr. served Virginia Tech for 37 years in the Department of Accounting and Information Systems in the Pamplin College of Business beginning in 1976; and

**WHEREAS**, as a member of the faculty in the Department of Accounting and Information Systems, and in its predecessor, the Department of Accounting, he was a dedicated teacher of courses at the undergraduate and graduate levels; and

**WHEREAS**, he led 12 very successful Study Abroad programs; oversaw many independent studies; and contributed significantly to international outreach through many valuable initiatives; and

**WHEREAS**, he published numerous books and refereed journal articles in both academic and practice related journals, and refereed proceedings in the information systems area; and was a pioneer in accounting information systems. He published the first book in this area that brought significant recognition to Virginia Tech; and

**WHEREAS**, he served on numerous dissertation committees and made numerous presentations at academic meetings. His insights on the use of technology in accounting education were ahead of his time; and

**WHEREAS**, he provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous committees;

**THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Dr. James O. Hicks, Jr. for his service to the university with the title of Professor Emeritus of Accounting and Information Systems.

### **RECOMMENDATION:**

That the above resolution recommending Dr. James O. Hicks, Jr. for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1989, Dr. Ken McCleary has faithfully served Virginia Tech with distinction for 24 years in the College of Liberal Arts and Human Sciences and the Pamplin College of Business; and

**WHEREAS**, as a senior professor in the Department of Hospitality and Tourism Management he has helped guide the Department to its current status as one of the premier programs worldwide; and

**WHEREAS**, he has contributed significantly to our knowledge of hospitality marketing strategy through a lifetime of scholarly research that led to the publication of numerous research papers, reviews, and book chapters; and

**WHEREAS**, he has chaired 10 Doctor of Philosophy students, 12 Master of Science students, and served on 25 additional committees leading to successful completion of over 40 graduate degrees in Hospitality and Tourism Management; and

**WHEREAS**, as a dedicated teacher, he has introduced many thousands of students to the principles of hospitality marketing, most notably (a) Hospitality Marketing Management, (b) Hospitality and Tourism Marketing Strategy and Policy, (c) Seminar in Hospitality and Tourism Marketing Research, and (d) Winery Tourism; and

**WHEREAS**, he has provided many years of dedicated service to the hospitality industry, the International Council for Hospitality, Restaurant and Institutional Education, the American Hotel and Lodging Association, and the International Academy of Hospitality Research; and

**WHEREAS**, he has extensively served and represented Virginia Tech on the editorial boards of major hospitality and tourism research journals over the past 24 years; and

**WHEREAS**, he has provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous committees, task forces and commissions;

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors recognizes Dr. Ken W. McCleary for his service to the university with the title of Professor Emeritus of Hospitality and Tourism Management.

### **RECOMMENDATION:**

That the above resolution recommending Dr. Ken W. McCleary for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITA STATUS**

**WHEREAS**, Beginning in 1989, Professor Pamela A. Weaver has faithfully served Virginia Tech with distinction for 24 years in the College of Human Resources and Education and the Pamplin College of Business; and

**WHEREAS**, as a senior professor in the Department of Hospitality and Tourism Management she has helped guide the department to its current status as one of the premier programs worldwide; and

**WHEREAS**, she has contributed significantly to our knowledge of hospitality research methods and statistics through a lifetime of scholarly research that led to the publication of numerous research papers, reviews, and book chapters; and

**WHEREAS**, she has extensively served the Hospitality and Tourism Management Department, the Pamplin College of Business, and the College of Liberal Arts and Human Sciences through her leadership of the Hospitality Tourism Management Undergraduate Curriculum Committee and the Pamplin College of Business Undergraduate Curriculum and Policy Committee and through many years of distinguished service on numerous other committees, task forces and commissions; and

**WHEREAS**, she has chaired seven Doctor of Philosophy students, seven Master of Science students and served on 24 additional committees leading to successful completion of over 35 graduate degrees in Hospitality and Tourism Management; and

**WHEREAS**, as a dedicated teacher, she has introduced many thousands of students to the hospitality industry, to hospitality research methods, and to event management in hospitality settings, most notably by teaching the following (a) Introduction to Hotel, Restaurant, and Institutional Management, (b) Hospitality and Tourism Research Methods, (c) Events Management, (d) Research Methods for Hospitality Applications, and (e) Advanced Quantitative Methods for Hospitality Applications; and

**WHEREAS**, she has provided many years of dedicated service to the hospitality industry, the International Council for Hospitality, Restaurant and Institutional Education, the American Hotel and Lodging Association, and the International Academy of Hospitality Research; and

**WHEREAS**, she has extensively served and represented Virginia Tech on the editorial boards of major hospitality and tourism research journals over the past 24 years;

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors recognizes Professor Pamela A. Weaver for her service to the university with the title of Professor Emerita of Hospitality and Tourism Management.

### **RECOMMENDATION:**

That the above resolution recommending Professor Pamela A. Weaver for emerita status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITA STATUS**

**WHEREAS**, beginning in 1997 and continuing for 16 years, Dr. JoAnn M. Emmel faithfully served Virginia Tech as a faculty member in the Department of Apparel, Housing, and Resource Management in the College of Liberal Arts and Human Sciences; and

**WHEREAS**, with dedication, she taught, through lecture, laboratory, and online methods, undergraduate courses on housing and residential technology; and

**WHEREAS**, she made important contributions to students and the kitchen and bath industry by co-authoring two editions of the books *Kitchen Planning* and *Bath Planning*, conducting industry sponsored research, and supporting the accreditation of the housing option, and

**WHEREAS**, she made significant contributions to the understanding of housing and consumers through her research on residential energy and appliance use, kitchen design, and consumer behavior; and

**WHEREAS**, she ably represented consumers by serving on national and international appliance testing and standardization committees, and

**WHEREAS**, she supported the scientific research enterprise as a conference organizer, an associate editor of the scholarly journals *Housing and Society* and *Family and Consumer Sciences Research Journal*, and a frequent reviewer for national and international journals and conferences; and

**WHEREAS**, she held leadership positions in professional organizations, including president of the Virginia Family and Consumer Sciences Association, and treasurer of the Association of Home Equipment Educators, 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 Dr. JoAnn M. Emmel for her distinguished service to the university with the title Associate Professor Emerita of Apparel, Housing, and Resource Management.

### **RECOMMENDATION:**

That the above resolution recommending Dr. JoAnn M Emmel for emerita status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITA STATUS**

**WHEREAS**, beginning in 2003 and continuing for eleven years, Dr. Carolyn Rude has faithfully served Virginia Tech as a faculty member in the Department of English in the College of Liberal Arts and Human Sciences; and

**WHEREAS**, her strong leadership abilities and compassionate wisdom expertly guided the department through recovery to resilience from 2006 through 2011; and

**WHEREAS**, with dedication, she has taught and lectured in undergraduate and graduate courses; and

**WHEREAS**, she has authored three books and over 30 refereed journal articles, book chapters, encyclopedia articles, and reviews; and

**WHEREAS**, she has ably served her professional community through her membership in the Modern Language Association, Association of Teachers of Technical Writing, Council for Programs in Technical and Scientific Communication, Society for Technical Communication, and National Council of Teachers of English; and

**WHEREAS**, she held leadership positions in professional organizations, including president of the Association of Teachers of Technical Writing and vice-president of the Council for Programs in Technical and Scientific Communication; and

**WHEREAS**, she served on the editorial boards of numerous professional periodicals, including *Technical Communication* and *Technical Communication Quarterly*; and

**WHEREAS**, she received many professional honors and awards, including awards from the Society for Technical Communication and the Council for Programs in Technical and Scientific Communication, and was elected as fellow in two professional societies; and

**WHEREAS**, she has provided many years of distinguished contributions to the department, the college, and the university, as department head and through dedicated service on commissions and committees;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognize Dr. Carolyn Rude for her distinguished service to the university with the title of Professor Emerita of English.

### **RECOMMENDATION:**

That the above resolution recommending Dr. Carolyn Rude for emerita status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1994 and continuing for twenty years, Dr. Ernest W. Sullivan II has faithfully served Virginia Tech as a faculty member in the Department of English in the College of Liberal Arts and Human Sciences; and

**WHEREAS**, with dedication, he has taught and lectured in undergraduate courses as an Edward S. Diggs Endowed Professor, placing strong emphasis on student learning excellence in critical thinking; and

**WHEREAS**, he has authored four books, co-authored eight books, and written over 60 refereed journal articles, book chapters, encyclopedia articles, and reviews; and

**WHEREAS**, he was principal or co-principal investigator on grants funding the production of critical editions of the works of Early Modern English authors, John Donne and Abraham Cowley in particular; and

**WHEREAS**, he served on proposal review panels for the National Endowment for the Humanities, American Council of Learned Societies, American Philosophical Society, and Social Sciences and Humanities Research Council of Canada, among others; and

**WHEREAS**, he has ably served his professional community through his membership in 17 learned societies, including the Modern Language Association, Renaissance English Text Society, Joseph Conrad Society, John Donne Society, Milton Society of America, Early Book Society, and Renaissance Society of America; and

**WHEREAS**, he has advised numerous students to help them develop skills necessary for successful careers; and

**WHEREAS**, he has provided many years of distinguished contributions to the department, the college, and the university through dedicated service on numerous commissions and committees;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognize Dr. Ernest W. Sullivan II for his distinguished service to the university with the title of Edward S. Diggs Professor Emeritus of English.

### **RECOMMENDATION:**

That the above resolution recommending Dr. Ernest W. Sullivan II for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1985 and continuing for 28 years, Dr. Gordon Kirk faithfully served Virginia Tech as a faculty member in the Department of Mechanical Engineering in the College of Engineering; and

**WHEREAS**, he made significant contributions to the understanding of rotating machinery through his work in mechanical vibrations focusing on bearing and seal excited instabilities; and

**WHEREAS**, he ably served the machinery industry community as a leading researcher and Director of the Virginia Tech Rotor Dynamics Industry Affiliates Group for 27 years; and

**WHEREAS**, he supported the scientific research enterprise as a conference organizer and frequent reviewer for national and international journals and funding agencies; and

**WHEREAS**, with dedication, he taught undergraduate and graduate courses in the mechanical design and controls area, placing strong emphasis on standards and student learning; and

**WHEREAS**, he advised 25 master's and 7 doctoral dissertations and helped these students develop successful careers in both academic and industrial settings; and

**WHEREAS**, he authored or co-authored over 175 refereed journal and conference articles, four patents and one patent pending, book chapters, and reviews; and

**WHEREAS**, he received Best Paper and Best Presentation Award in 2000 and Best Paper Award again in 2012 at the International Institution of Mechanical Engineers conference series Vibrations in Rotating Machinery; and

**WHEREAS**, he has received many other professional honors and awards, and was elected as Fellow in both American Society of Mechanical Engineers and Society of Tribologists and Lubrication Engineers; 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 Dr. Gordon Kirk for his distinguished service to the university with the title Professor Emeritus of Mechanical Engineering.

### **RECOMMENDATION:**

That the above resolution recommending Dr. Gordon Kirk for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, Dr. L. Glenn Kraige faithfully served Virginia Tech for 38 years in the College of Engineering, beginning in 1975; and

**WHEREAS**, as a member of the faculty in the Department of Engineering Science and Mechanics, he was a dedicated teacher of a wide range of courses with an emphasis on providing foundational instruction in mechanics at the undergraduate level; and

**WHEREAS**, he is a co-author on an internationally renowned engineering mechanics textbook series; and

**WHEREAS**, he was named a fellow of the American Society of Engineering Education and received the AT&T Foundation Award for Outstanding Teaching in the Southeast Section and its Archie Higdon Distinguished Educator Award from the Mechanics Division; and

**WHEREAS**, he has been recognized by the Department of Engineering Science and mechanics with its Maher Award for excellence in education, by the College of Engineering with its Dean's Award for Excellence in Teaching, and the White Chair for Innovation in Engineering Education, and by Virginia Tech with the Sporn Award and the Wine Award; and

**WHEREAS**, he was recognized with the 1988 Outstanding Faculty Award by the State Council of Higher Education for Virginia, and the 1998 Virginia Professor of the Year Award by the Carnegie Foundation for the Advancement of Teaching and the Council for the Advancement and Support of Education;

**NOW THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Dr. L. Glenn Kraige for his service to the university with the title of Professor Emeritus of Engineering Science and Mechanics.

### **RECOMMENDATION:**

That the above resolution recommending Dr. L. Glenn Kraige for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1985 and continuing for 28 years, Dr. Nathaniel A. White II faithfully served Virginia Tech as a faculty member in the Department of Large Animal Clinical Sciences at the Marion DuPont Equine Medical Center in Leesburg, Virginia; and

**WHEREAS**, he was the Theodora Ayer Randolph Professor of Surgery from 1987 to 2003 and the Jean Ellen Shehan Professor and Director of the Equine Medical Center from 2003-2012; and

**WHEREAS**, he made significant contributions to the understanding of colic and orthopedic disorders in horses through his work in equine surgery focusing on diagnosis, surgical correction and post-operative management of these debilitating disorders; and

**WHEREAS**, he authored several books on the topic including *Equine Acute Abdomen*, and *Handbook of Equine Colic* as well as being a senior editor for the surgical texts *Current Techniques in Equine Surgery and Lameness*, and *Current Practice of Equine Surgery*; and

**WHEREAS**, he supported the veterinary community through his role as a director of the American College of Veterinary Surgeons Symposium since 1997, and is a past president of the American College of Veterinary Surgeons and of the American College of Veterinary Surgeons Research and Education Foundation. Dr. White is the former director-at-large for the American Association of Equine Practitioners (AAEP) and also a past president of this austere body; and

**WHEREAS**, through his research endeavors, he has expanded knowledge in the areas of ischemia-reperfusion injury, epidemiology of colic, abdominal and orthopedic surgery, and treatment of orthopedic diseases; and

**WHEREAS**, he advised numerous students on master's and surgery residency training programs and helped them develop successful careers in academic, practice, and industry 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 Dr. Nathaniel A. White II for his distinguished service to the university with the title Professor Emeritus of Large Animal Clinical Sciences.

### **RECOMMENDATION:**

That the above resolution recommending Dr. Nathaniel A. White II for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1976 and continuing for 37 years, Mr. Dave Beagle faithfully served Virginia Tech as a faculty member in the University Libraries; and

**WHEREAS**, he spearheaded the project that provided the first remote access to library resources through a CBX terminal in the library; and

**WHEREAS**, he provided expert support to facilitate access to online resources for distance education students; and

**WHEREAS**, Mr. Beagle has been a strong advocate for providing equitable library services to distance education students; and

**WHEREAS**, he cultivated a strong proctoring program that has become a premier proctoring program that supports Virginia Tech's growing body of online and distance learners; and

**WHEREAS**, he was the initial 'architect' of and has since provided leadership for the development of virtual reference services that support Virginia Tech's online researchers; and

**WHEREAS**, Mr. Beagle has provided tailored support and championed the use of EndNote and other bibliographic management systems throughout the university; and

**WHEREAS**, his strong project management skills enabled the University Libraries to effectively accomplish several collection reorganizations during his tenure; and

**WHEREAS**, Mr. Beagle mentored many friends and colleagues in the library over the years; and

**WHEREAS**, he made significant contributions as a citizen of the university and the University Libraries through regular and varied roles involving university governance, including Faculty Senate, Commission on Faculty Affairs, three-time president of the Library Faculty Association;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Mr. David R. Beagle for his distinguished service to the university with the title Assistant Professor Emeritus of University Libraries.

### **RECOMMENDATION:**

That the above resolution recommending Mr. Dave Beagle for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1976 and continuing for 37 years, Charles A. Litchfield III faithfully served Virginia Tech as a faculty member in the University Libraries; and

**WHEREAS**, Mr. Litchfield, a Renaissance librarian is talented in many areas including cataloging, reference, instruction, and computer systems; and

**WHEREAS**, he spearheaded early library automation projects involving the Virginia Tech Library System (VTLS), the library's locally developed online catalog; and

**WHEREAS**, he served in various leadership capacities in the University Libraries, including as department head for Systems and User Services; and

**WHEREAS**, Mr. Litchfield contributed his expertise to Virginia Tech's international outreach efforts involving automation of an agricultural library system in Albania; and

**WHEREAS**, Mr. Litchfield was an early facilitator for cataloging of online journals that greatly enhanced electronic access for Virginia Tech's researchers; and

**WHEREAS**, he contributed significantly to the enhancement of the library's customer service through the coordination and collection of student and faculty feedback on library services, programs, and facilities, ensuring that appropriate library units were apprised of current user needs;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Mr. Charles A. Litchfield III for his distinguished service to the University with the title Assistant Professor Emeritus of University Libraries.

### **RECOMMENDATION:**

That the above resolution recommending Mr. Charles A. Litchfield III for emeritus status be approved.

September 9, 2013



## **RESOLUTION FOR EMERITUS STATUS**

**WHEREAS**, beginning in 1977 and continuing for 35 years, Mr. Lane Rasmussen faithfully served Virginia Tech as a faculty member in the University Libraries; and

**WHEREAS**, Mr. Rasmussen developed an online research portal of Slavic, East European, and Former USSR Resources that has supported many researchers globally; and

**WHEREAS**, he has contributed to the development of the Libraries Alumni Portal that provides access to myriad research resources for Virginia Tech's alumni; and

**WHEREAS**, Mr. Rasmussen was an anchor for business, humanities, and social sciences reference services in the University Libraries, and spent countless hours providing one-on-one research help to students in those disciplines; and

**WHEREAS**, he was an early advocate for providing public access to important online resources in business, such as the Dow Jones News/Retrieval Service that supported research in the Pamplin College of Business; and

**WHEREAS**, he was instrumental in the collaborative initiative between the University Libraries and the Pamplin College of Business to obtain key resources such as Center for Research in Security Prices to support faculty and graduate student research and education;

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Visitors recognizes Mr. Lane D. Rasmussen for his distinguished service to the university with the title Assistant Professor Emeritus of University Libraries.

### **RECOMMENDATION:**

That the above resolution recommending Mr. Lane Rasmussen for emeritus status be approved.

September 9, 2013



## **Summary**

### **Endowed Professorships and Fellowships (4)**

**September 9, 2013**

#### Pamplin College of Business

Robert Sumichrast	Richard E. Sorensen Dean's Chair
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#### College of Science

Harry Dorn	Dr. A.C. Lilly, Jr., Faculty Fellowship of Nanoscience
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Leo Piilonen	William E. Hassinger, Jr. Senior Faculty Fellowship of Physics
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Webster Santos	Blackwood Junior Faculty Fellow of Life Sciences
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## **ENDOWED DEAN'S CHAIR**

### **Richard E. Sorensen Dean's Chair in the Pamplin College of Business**

The Richard E. Sorensen Dean's Chair, is a more generously funded endowed professorship, that was established in 2012 through the generous gifts of multiple friends of the Pamplin College of Business in honor of Richard E. Sorensen, Dean of the Pamplin College from 1982 to 2013. The Department of Business Information Technology has nominated Dr. Robert T. Sumichrast for appointment as the recipient of the Richard E. Sorensen Dean's Chair. The Pamplin College Honorifics Committee has concurred with this recommendation. Dean Richard E. Sorensen also supports this nomination.

Dr. Sumichrast has demonstrated outstanding achievement as an educational leader through his strong research program, his teaching and mentorship of graduate and undergraduate students, and his service as Dean of the Ourso College of Business at Louisiana State University and the Terry College of Business at the University of Georgia. He received the Ph.D. from Clemson University and his B.S. in Physics from Purdue University. In his career as a faculty member at Virginia Tech he served on 40 graduate committees throughout the university, and taught 17 different courses in the Department of Business Information Technology. He is a recipient of the Pamplin College of Business Certificate of Teaching Excellence, the University Certificate of Teaching Excellence, and the Pamplin College MBA Faculty Award.

Dr. Sumichrast's outstanding research record includes numerous publications in some of the leading refereed research journals in the fields of management science and operations management. He has served as president of the Southwestern Virginia Chapter of the American Production and Inventory Control Society, and president of the Southeastern Chapter of the Institute for Operations Research and Management Science. He is a member of the board of the Southern Business Administration Association, and is a member of the board of directors of the Association to Advance Collegiate Schools of Business, International (AACSB).

Dr. Sumichrast's scholarly and administrative accomplishments embody the ideals of work and dedication to learning and business education innovation that were demonstrated during the career of Richard E. Sorensen as Dean of the Pamplin College.

### **RECOMMENDATION:**

That Dr. Robert T. Sumichrast be appointed the Richard E. Sorensen Dean's Chair in the Pamplin College of Business beginning September 10, 2013.

September 9, 2013



## ENDOWED FELLOWSHIP

### Dr. A.C. Lilly, Jr., Faculty Fellowship of Nanoscience

The Dr. A.C. Lilly, Jr., Faculty Fellowship was established in the College of Science through an endowment by Dr. A.C. Lilly, Jr., a former professor of the Physics Department. Dr. Lilly established the Faculty Fellowship Endowment in Nanoscience to provide support for an outstanding faculty member in the field of nanoscience.

Dr. Lay Nam Chang, dean of the College of Science, has nominated Professor Harry Dorn to this 3-year endowed position, concurring with the recommendation of the College of Science Honorifics Committee.

Dr. Dorn joined the Department of Chemistry in 1974 as an assistant professor and rose through the ranks to full professor in 1985. He is currently the director of two centers, the Center for Self-Assembled Nanostructures and Devices (CSAND), and the Carbonaceous Nanomaterials Center (CNC).

Dr. Dorn's expertise with nanomaterials has been recognized internationally, nationally, and within the Commonwealth of Virginia. He was invited to serve on the National Science Foundation Working Group to Define Major Research Facilities for Nanoscale Science & Technology (2001), the First (and Second) Conference on Nanoscience and Nanotechnology (co-sponsored by Oak Ridge National Lab, (2000 & 2001), and the steering committee of INANOVA, a conference on nanotechnology in Virginia. Dr. Dorn was awarded the Virginia Tech Alumni Award for Research Excellence in 2006.

Dr. Dorn's scholarship record is truly remarkable. He has published over 160 peer reviewed articles including several in *Science and Nature* (one paper in *Nature* (1999) has nearly 500 citations). Dr. Dorn has had approximately 400 citations per year since 2008 and he is the holder of three U.S. patents. He has been funded to pursue both the basic science of nanomaterials and their applications. Dr. Dorn has been a PI or co-PI on proposals bringing in more than \$10.4 million since 2005.

Dr. Dorn has also been involved in nanoscience education. He has developed "A Hands-On Short Course on Buckyballs, Nanotubes, and Other Nanomaterials," which was funded by a grant from the National Science Foundation-Nanotechnology Undergraduate Education. He has also created a new graduate-level interdisciplinary course on carbonaceous nanomaterials first offered in 2008 and co-taught with Professor Mool Gupta in the Department of Electrical Engineering at the University of Virginia.

### **RECOMMENDATION:**

That Dr. Harry Dorn be reappointed the Dr. A.C. Lilly, Jr., Faculty Fellowship of Nanoscience for a period of three years beginning August 10, 2013, with a salary supplement as provided by the endowment and, if available with funds from the eminent scholars match program.

September 9, 2013



## **ENDOWED FELLOWSHIP**

### **William E. Hassinger, Jr. Senior Faculty Fellowship of Physics**

The William E. Hassinger Jr. Senior Faculty Fellowship of Physics was established in August 2007 by a generous gift from William E. Hassinger, Jr. to enhance the national and international prominence of the Physics Department at Virginia Tech, by supporting and rewarding those research programs in the department which are most likely to generate important scientific breakthroughs of a fundamental or applied nature. The fellowship is awarded for a period of three years with possible renewals, and the recipient professor carries the title "Hassinger Senior Fellow of Physics."

Dr. Lay Nam Chang, Dean of the College of Science, has nominated Professor Leo Piilonen to this endowed position, concurring with the recommendations of the Department of Physics Selection Committee and the College of Science Honorifics Committee.

Dr. Piilonen joined the Virginia Tech Department of Physics in 1987 as an assistant professor, was tenured and promoted to associate professor in 1993 and promoted to professor in 2002.

Dr. Piilonen has a long and consistent record of research funding. Uninterrupted since 1989, he has served as PI or Co-PI on grants totaling approximately \$9.6 million, with his personal share being approximately \$5.1 million. Dr. Piilonen has supervised nine Ph.D. students and has trained seven postdoctoral fellows over his career. He has authored or coauthored 453 refereed publications in international journals and conference proceedings.

Dr. Piilonen enjoys a distinguished record of leadership in his professional community. He is a co-spokesperson of the Belle collaboration and an executive board member of the second-generation Belle II collaboration, which brings together over 560 physicists from 94 institutions around the world to pursue elementary particle physics research in Japan. Previously, he chaired the Institutional Board (IB) of both collaborations. As IB Chair, he was responsible for policy formulation, processing of new member applications, and the biennial election of the spokespersons for these organizations. Piilonen hosted the general meetings of both collaborations at Virginia Tech in July 2013.

### **RECOMMENDATION:**

That Dr. Leo Piilonen be reappointed the William E., Hassinger, Jr. Senior Faculty Fellowship of Physics for a period of three years beginning August 10, 2013, with a salary supplement as provided by the endowment and, if available, with funds from the eminent scholars match program.

September 9, 2013



## **ENDOWED FELLOWSHIP**

### **Blackwood Junior Faculty Fellowship of Life Sciences**

The Blackwood Junior Faculty Fellowship of Life Sciences in the College of Science was established in 2010 by Mary N. and Willis P. Blackwood to support instruction, research, and collaboration to advance the life sciences with a complementary focus on the development of entrepreneurial opportunities. The Blackwood Junior Faculty Fellow is a three-year appointment and the recipient will work with the Bringing Science to Market (BS2M) Program, a collaborative effort between the College of Science and the Pamplin College of Business.

Dr. Lay Nam Chang, 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 is an expert in drug discovery and has a strong interest in drug development. His research is currently focused on the development of new drugs for cancer therapy. His work has implications for patients with three common cancers: breast, ovarian, and prostate. One of the major goals of Dr. Santos's research program is to discover drugs that can be brought to market to benefit society.

Dr. Santos has received seven issued and pending patents with Virginia Tech Intellectual Property. He has 34 published papers in peer-reviewed journals, and five others submitted or in preparation. He has current and pending grant funding from the National Institutes of Health to support his drug discovery research and has an active laboratory that involves undergraduate, graduate, and postdoctoral students in chemistry.

### **RECOMMENDATION:**

That Dr. Webster Santos be reappointed the Blackwood Junior Faculty Fellow of Life Sciences for a period of one year beginning August 10, 2013, with a salary supplement as provided by the endowment and, if available, with funds from the eminent scholars match program.

September 9, 2013



## Faculty Personnel Changes Report

### ACADEMIC AFFAIRS COMMITTEE AND FINANCE AND AUDIT COMMITTEE

**Quarter ending June 30, 2013**

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	5
New Appointments to Tenure-Track or Continued Appointment-Track	15
New Appointments to Non-Tenure Track	0
Adjustments in Salary	3
Administrative and Professional Faculty	
New Appointments	7
Adjustments in Salary	21
One-time payments for Post-Season Sports Events	26

### **RECOMMENDATION:**

That the Board ratify the Faculty Personnel Changes Report.

September 9, 2013



**FACULTY PERSONNEL CHANGES**  
**September 9, 2013**

**TEACHING AND RESEARCH FACULTY**

***NEW APPOINTMENTS***

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Agriculture &amp; Life Sciences</u>								
Archibald, Thomas	Assistant Professor	Agricultural & Extension Education	Reg	9	10-Aug-13	100	\$	75,000
Cockrum, Rebecca	Assistant Professor	Dairy Science	Reg	9	10-Jan-14	100	\$	77,250
Mehl, Hillary	Assistant Professor	Tidewater Agricultural Research Extension Center	Reg	12	10-Aug-13	100	\$	76,000
Stewart, Amanda	Assistant Professor	Food Science and Technology	Reg	9	10-Aug-13	100	\$	78,000
<u>Business</u>								
Soulek, Kimberly	Assistant Professor	Hospitality and Tourism Management	Reg	9	10-Aug-13	100	\$	96,000
Xiang, Zheng	Assistant Professor	Hospitality and Tourism Management	Reg	9	10-Aug-13	100	\$	115,000
<u>Engineering</u>								
Choi, Seongim	Assistant Professor	Aerospace and Ocean Engineering	Reg	9	10-Aug-13	100	\$	84,000
Ghaffazadegan, Navid	Assistant Professor	Industrial Systems Engineering	Reg	9	10-Aug-13	100	\$	83,000
Kong, Zhenyu	Associate Professor - Tenured	Industrial Systems Engineering	Reg	9	10-Aug-13	100	\$	92,000
Knight, David	Assistant Professor	Engineering Education	Reg	9	10-Aug-13	100	\$	84,500
Lester, Luke	Professor - Tenured	Electrical and Computer Engineering	Reg	12	10-Aug-13	100	\$	215,000
<u>Liberal Arts and Human Sciences</u>								
Nichols, Charles	Assistant Professor	School of Performing Arts	Reg	9	10-Aug-13	100	\$	65,000
Sano-Franchini, Jennifer	Assistant Professor	English	Reg	9	10-Aug-13	100	\$	60,000
<u>Natural Resources</u>								
Cobourn, Kelly	Assistant Professor	Forest Resources and Environmental Conservation	Reg	9	10-Aug-13	100	\$	73,000
<u>Science</u>								
Embree, Mark	Professor - Tenured	Mathematics	Reg	9	25-Dec-13	100	\$	140,000
Hauf, Silke	Assistant Professor	Biological Sciences	Reg	9	25-Dec-13	100	\$	75,000
Johnson, Estrella	Assistant Professor	Mathematics	Reg	9	10-Aug-13	100	\$	70,000
Nimchuk, Zachary	Assistant Professor	Biological Sciences	Reg	9	10-Aug-13	100	\$	75,000



continued

**TEACHING AND RESEARCH FACULTY**

***NEW APPOINTMENTS***

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME

Veterinary Medicine

Clarke, Cyril	Professor and Dean - Tenured	College of Veterinary Medicine	Reg	12	1-Oct-13	100	\$ 260,000	
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Vice President for Research

Keller, Sallie	Professor - Tenured	Virginia Bioinformatics Institute	Reg	12	1-Sep-13	100	\$ 300,000	
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**TEACHING AND RESEARCH FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<b><u>Liberal Arts and Human Sciences</u></b>								
Doolittle, Peter	Assistant Provost	Senior Vice President & Provost	Reg	12	10-Jun-13	100	\$ 110,969	
<b><u>Natural Resources</u></b>								
McMullin, Steven	Associate Professor	Fish and Wildlife Conservation	Reg	12	10-May-13	100	\$ 110,694	
<b><u>Vice President for National Capital Region</u></b>								
Raman, Sanjay	Professor	Research Development Team	Reg	12	15-Apr-13	100	\$ 219,780	



**ADMINISTRATIVE AND PROFESSIONAL FACULTY****NEW APPOINTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Dean of Libraries</u>								
Shen, Yi	Research Environments Librarian	Library	Reg	12	25-Jun-13	100	\$	60,000
<u>President</u>								
Harris, Robert	Director of Operations, Men's Basketball	Athletics	Reg	12	10-Jul-13	100	\$	57,025
Hogan, Elizabeth	Assistant Lacrosse Coach	Athletics	Reg	12	10-Jul-13	100	\$	45,000
Shelby, Betty	Assistant Women's Basketball Coach	Athletics	Reg	12	1-May-13	100	\$	90,000
Woodard, Robert	Assistant Baseball Coach	Athletics	Reg	12	12-Jul-13	100	\$	75,000
Woods, Jermaine	Assistant Women's Basketball Coach	Athletics	Reg	12	1-Jul-13	100	\$	90,000
Young, Perren	Head Spirit Coach	Athletics	Reg	12	10-Jul-13	100	\$	35,000



**ADMINISTRATIVE AND PROFESSIONAL FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<u>Agriculture &amp; Life Sciences</u>								
Deitch, Ursula	Extension Agent, Crop and Soil Sciences	Northampton County Cooperative Extension	Reg	12	25-May-13	100	\$	37,500
Harpole, Douglas	Center Director	Northern Virginia 4-H Educational Center	Reg	12	25-Apr-13	100	\$	59,000
Morris, Reginald	Extension Agent, 4-H Youth Development	Alexandria County Cooperative Extension	Reg	12	25-May-13	100	\$	42,000
<u>Diversity and Inclusion</u>								
Deramo, Michele	Director, Diversity Education and Initiatives	Diversity and Inclusion	Reg	12	1-May-13	100	\$	74,000
<u>Natural Resources</u>								
Smith, Robert	Associate Dean & Department Head	College of Natural Resources & Environment	Reg	12	10-Apr-13	100	\$	188,500
<u>President</u>								
Bell, Aaron	Assistant Swim Coach	Athletics	Reg	12	2-Apr-13	100		\$ 3,000
Brauns, Alfred	Assistant Softball Coach	Athletics	Reg	12	25-Jun-13	100		\$ 1,000
Capaldo, Stephen	Associate University Legal Counsel	University Legal Counsel	Reg	12	10-Apr-13	100	\$	84,000
Cavanaugh, James	Director of Recruiting and High School Relations	Athletics	Reg	12	1-Jul-13	100	\$	65,000
Cianelli, David	Director, Track & Field/ Cross Country Programs	Athletics	Reg	12	25-Jun-13	100		\$ 1,500
					25-Jun-13	100		\$ 2,000
					25-Jun-13	100		\$ 4,000
Foster, Charles	Assistant Coach, Track & Field/Cross Country	Athletics	Reg	12	25-Jun-13	100		\$ 1,000
					25-Jun-13	100		\$ 2,000
Gess, Mark	Associate University Legal Counsel	University Legal Counsel	Reg	12	10-Apr-13	100	\$	80,000
Heidbreder, Kay	University Counsel	University Legal Counsel	Reg	12	10-Apr-13	100	\$	166,000
Hite, William	Assistant to Head Football Coach and Senior Advisor	Athletics	Reg	12	1-Jul-13	100	\$	65,000
Hughes, Peter	Head Baseball Coach	Athletics	Reg	12	10-Jun-13	100		\$ 2,000



continued

**ADMINISTRATIVE AND PROFESSIONAL FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION				
					EFF DATE	% APPT	ANNUAL RATE		
							BASE	ONE-TIME	
Jack, Gregory	Associate Head Coach	Athletics	Reg	12	10-Apr-13	100	\$	2,500	
					25-Jun-13	100	\$	1,000	
					25-Jun-13	100	\$	2,000	
					25-Jun-13	100	\$	1,500	
Joyce, Thomas	Associate Head Women's Basketball Coach	Athletics	Reg	12	10-Jun-13	100	\$	95,000	
Kanaskie, Kurt	Assistant Men's Basketball Coach	Athletics	Reg	12	10-Jun-13	100	\$	200,000	
Kunigonis, Michael	Assistant Baseball Coach	Athletics	Reg	12	10-Jun-13	100		\$	1,000
Mason, Patrick	Head Baseball Coach	Athletics	Reg	12	10-Jun-13	100		\$	1,000
					1-Jul-13	100	\$	145,600	
Moore, Andrew	Assistant Men's Basketball Coach	Athletics	Reg	12	10-Jun-13	100	\$	130,000	
Phillips, Robert	Assistant Coach, Track & Field/Cross Country	Athletics	Reg	12	25-Jun-13	100		\$	1,000
					25-Jun-13	100		\$	2,000
Piemonte, Ronald	Head Diving Coach	Athletics	Reg	12	2-Apr-13	100		\$	6,000
Robelot, Reed	Assistant Swim Coach	Athletics	Reg	12	2-Apr-13	100		\$	3,000
Sherwood, Barbara	Assistant Softball Coach	Athletics	Reg	12	25-Jun-13	100		\$	1,000
Skinner, Ned	Director, Swimming & Diving	Athletics	Reg	12	2-Apr-13	100		\$	6,000
Stockwell, Sarah	Assistant Swim Coach	Athletics	Reg	12	2-Apr-13	100		\$	3,000
Thomas, Nelson Scot	Head Softball Coach	Athletics	Reg	12	25-Jun-13	100		\$	2,000
Thomas, Benjamin	Assistant Coach, Track & Field/Cross Country	Athletics	Reg	12	25-Jun-13	100		\$	1,000
					25-Jun-13	100		\$	2,000
Vidt, Stacey	Technical Director, Track & Field/Cross Country	Athletics	Reg	12	25-Jun-13	100		\$	1,000
					25-Jun-13	100		\$	2,000
<b><u>Senior Vice President &amp; Provost</u></b>									
Holloway, Rachel	Vice Provost for Undergraduate Academic Affairs	Senior Vice President and Provost	Reg	12	10-Sep-13	100	\$	175,000	



continued

**ADMINISTRATIVE AND PROFESSIONAL FACULTY****ADJUSTMENTS**

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
<b><u>Vice President for Administrative Services</u></b>								
Beckett, Malcom	Interim Director for IT for Administrative Services	Information Technology for Administrative Services	Reg	12	10-Apr-13	100	\$ 93,000	
Hassall, James	Associate Director for Enterprise Systems	Facilities Services	Reg	12	10-Apr-13	100	\$ 62,759	
Kropff, Catherine	Assistant Director for Hokie Wellness	Human Resources	Reg	12	1-May-13	100	\$ 53,000	
McCoy, Robin	Interim Director, Financial Affairs	Business Services Planning	Reg	12	10-May-13	100	\$ 65,385	
<b><u>Vice President for Information Technology</u></b>								
Conley, Wesley	Developer Analyst	Web Services and Development	Reg	12	10-May-13	100	\$ 55,000	
<b><u>Vice President for Outreach &amp; International Affairs</u></b>								
Martin, Perry	Senior Associate Director of Community Learning	VT Engage	Reg	12	1-May-13	100	\$ 60,100	



**Erica Wood**

**Undergraduate Representative to the Board of Visitors**

**Virginia Tech**

**September 9<sup>th</sup>, 2013**

Good afternoon Rector Nolen, President Steger, distinguished members of the Board, administration, and guests. I would like to start off today by thanking you all for the opportunity to represent the Undergraduate body. It is an honor for me to be here. I'd like to use today as an opportunity to share my visions for the year, with high hopes that we can work collaboratively to better the undergraduate experience. Like previous undergraduate representatives before me, I believe in the transformative power of inclusion and engagement on campus.

In this regard, one of many things Virginia Tech does well is providing opportunities for students to establish communities around shared experiences. Be it at within a cultural, religious, or hobby oriented organization, among many other options, a majority of students feel like they have a place to call their own. I am pleased to tell you, however, that students no longer want to remain exclusive, and wish to build bridges across organizations and people. We all bring a unique and valuable perspective to the Hokie Community, and students are recognizing that a larger focus on inclusion and interconnectedness would benefit all. I would like to encourage UCSOs to support one another's' programming, among other ideas for collaboration. We must also ensure that Veteran students have all of the resources necessary to ensure a smooth transition from military to university life: these students need a much different welcome experience than do traditional transfers and new freshman. Similarly, the council for international students has distributed a survey throughout the international student community, and found that international students feel very welcome here. However, they do not feel as if



they have ample opportunity to branch out from the international community. This year, I would like to help the international community become more engaged in the Hokie experience, and introduce domestic students to more international influence. Strengthening our efforts for inclusion will display our commitment to the Principles of Community and will prepare students to work in an increasingly diverse work-place post-graduation.

This brings me to my next topic of concern. Molding globally aware and engaged students should be a top priority for Virginia Tech: students must be prepared to work with a variety of personalities and cultures, and feel comfortable with the fast paced environment that is globalized business culture. Efforts to increase global awareness may include better foreign language class availability and opportunities for studying abroad. I will be working with the Global Initiatives Forum planning committee this fall to showcase and expand our international work.

My third goal is to facilitate academic engagement by joining the dialogue regarding Curriculum for Liberal Education revisions. We need classes that will help students post-graduation, rather than a checklist which few students take seriously. While it is important to expose undergraduates to a variety of subjects in which they might not have otherwise studied, there is definitely a demand for more life-applicable, contextual, and engaging classes. We should provide students with an infrastructure to complement their personal and professional careers. Perhaps including data or business management, personal nutrition, or personal finance courses to the CLE roster would be more beneficial overall.

Last but certainly not least, I am working with my peers to gather opinions regarding the presidential search. It is my mission to facilitate conversations between students and search committee members, as well as market any opportunities where undergraduates are able to voice



their concerns and wishes. As many of you know, the presidential search info session, specifically for undergraduates, is this afternoon.

Clearly there is much work to be done. Last May I interviewed dozens of students interested in serving on my advisory committee, and found 11 students who together represent a diverse array of undergraduate constituents, and embody Ut Prosim in their desire to better Virginia Tech. I'm confident that with their help, as well as with collaboration between myself, Nick, and the Student Government Association, we will see tangible results at the end of the year. In fact, we are already planning undergraduate academic and student affairs forums. I am very excited to serve Virginia Tech undergraduates in this capacity and look forward to learning from, and working with all of you.

Thank you.



## **Constituency Report**

Nick Warrington, Graduate Representative  
Virginia Tech Board of Visitors  
September 9, 2013

Good Afternoon Rector Quillen, President Steger, members of the board, university administrators, and guests, let me start off by saying how grateful I am to be serving as the graduate representative to the Virginia Tech Board of Visitors for this upcoming year!

The fall is truly the most exciting time to be on Virginia Tech's campus. One of my favorite parts of the fall are welcoming new students to campus and learning about who they are as individuals. I am reminded as I work with my constituent group that every person has a story to tell. Everyone has come from somewhere and have experience influences in their lives that have lead them to Virginia Tech. Over these past few weeks I have strived to listen to as many stories as possible. As you can imagine, on a campus with nearly 7, 000 graduate and professional student, in addition to the Northern Capital Region, I have heard a lot, and I have been inspired! I encourage each one of you, when you get the chance to speak with students, ask them what their story is- I promise, they will share! I have learned that Virginia Tech have a remarkably diverse group of graduate students attending this campus, not one student has the same story. I have truly been inspired by what each and every one of them have shared with me.

In addition to getting to know our new students these past few weeks, I have also spent a considerable amount of time promoting and encouraging our students to participate in the Graduate Student Forum for the Presidential Search that will be taking place this week. As you know, a great deal of thought and consideration needs to be put into Virginia Tech's search for a President, and rightfully so. This is why I have put a specific emphasis on informing our graduate students about this ongoing process/search, and I am happy to report there has been some great discussion on this subject during the recent, "Lunch with the Dean" event this past week. This assures me that the turnout for the forum will not only be very strong, but the overall outcome will be nothing short of a success.

Over the past few weeks, I have had the opportunity, and privilege to meet with constituents of nearly every facet of graduate education. From our formal orientation programs, to random students stopping me around town, I have had great dialogue with our graduate students regarding their transition and personal academic ambitions. I can report to you today, with full confidence that our graduate student community not only feels extremely welcome, but is very excited for what is to come this year!

These past few weeks, I have also been promoting and encouraging the participation in the Graduate Student forum for the presidential search that is this taking place Thursday. There was some great dialogue on this subject during the "Lunch with the Dean" event this past Thursday, which leads me to believe the turn out for the forum will be very strong.

For this upcoming year, there are four areas I plan to focus on that I believe will advance not only the graduate community, but the entire university. First, I will continue advocating for adequate and affordable childcare facilities as well as quality housing for our graduate students. As this is still a major discussion point among graduate students, I hope to continue my predecessors' efforts to make it a priority for the board. Secondly, I plan to focus on learning more about the research initiatives of our



University, and how I can better advocate for the needs of our graduate students who are doing innovative, ground-breaking work right here on our campus. Having an academic background that is not necessarily considered to be “research intensive”, I know I have some learning to do, but it is a challenge I welcome with open arms and an open mind, and I hope Members of the Board will join me on this learning endeavor. Third, I want to continue the discussion on diversity, and inclusion at our University, with specific emphasis on “inclusion”. The graduate student population at Virginia Tech is uniquely diverse, and I want to work with various stakeholders on campus to ensure our values of community are being upheld, and that all students feel as they are a welcomed member of the Hokie Nation. Finally, I want to work with Dean DePauw, Vice President and Dean of Graduate Education as well as Dr. Perillo, Vice President for Student Affairs on finding opportunities to better incorporate the Division of Student Affairs Aspirations for Student Learning into the graduate student experience.

As you can see, I have an ambitious agenda, but I am confident in my abilities, and I am dedicated to serving my constituency in every way that I know how to make a positive impact in the lives of our graduate and professional students. As I have shared, I realize I still have a lot to learn, and more students to meet, but I am positive that through my initiatives, we will achieve excellence. Over the next few weeks I will be finalizing my Graduate Student Think Tank, which will serve to me as a diverse group of graduate and professional students, who come together once a month to discuss issues and trends occurring in graduate education here at Virginia Tech and at other academic institutions.

Before I conclude my report, I want to take a moment to recognize a graduate or professional student who I have personally met and strongly believe is doing exceptional work at our university. I have heard many stories over these past few weeks, but none have been as powerful as the one of Shaimaa Abdallah. Shaimaa is a Ph. D candidate in Electrical Engineering focusing on designing a highly sensitive image sensor to improve skin cancer detection and low light vision applications, and what I believe is so incredible about Shaimaa is that in addition to being the President of the Graduate Student Assembly (for two years now), she has also maintained a strong academic record of success and is the mother of two children, a 9-year old son Ziad and a 3 year old daughter, Sohaila. To make things more challenging, while Shaimaa is here in the United States completing her degree and caring for her daughter; her husband, Haithem and son are in her home country of Egypt working and attending school, respectively. Shaimaa has received the citizen scholar award for raising awareness among youth for risk of skin cancer due to ill habits, established the program, Little Hokies, where parents or community members can donate gently used clothes, toys, and other items for graduate student who are in need of these items. Little Hokies is a huge asset to the graduate-family community. Shaimaa is the one of the hardest working and caring individuals I have met since being here at Virginia Tech. She is truly dedicated and committed to making a positive impact on the graduate community here at Virginia Tech and I am proud to call her a friend and colleague.

Once again, thank you for allowing me to serve in this position and I look forward to working with all of you over the next academic year. Remember, don't forget to ask a student about their story.

GO HOKIES!

- nick



**Staff Senate Constituency Report**  
**Virginia Tech Board of Visitors**  
**September 8-9, 2013**  
**Presented by Sue Teel, Staff Senate President**

Rector Quillen, members of the Board of Visitors, President Steger, administrators, and guests: Thank you for this opportunity to speak with you about Virginia Tech's staff.

Activities went into full swing again as the students returned and Fall classes started. The staff appreciates the opportunity to provide input into the Presidential Search. Though the turnout for the campus session was small, everyone is pleased that there are other venues, such as the survey, through which they can provide their thoughts. I have heard from many staff who apologized for not making the session but they were consumed with preparing for the deluge of parents and students into Blacksburg and our campus.

A newly developed event that I have the pleasure of sharing with you is the "Me First!" Fridays staff leadership program. I worked with Anna LoMascolo, Co-Director of the Women's Center, to develop a series of brownbag sessions to provide leadership training to Virginia Tech's female staff. This week we opened registration for the October session, Branding Yourself, and had a tremendous response. We reached full capacity in less than a day and are having to waitlist staff. Future sessions include a Resume and Cover Letter Workshop, Utilizing Your Strengths for Success, The How of Happiness: A Work/Life Workshop, and more. This series was truly uncharted water and Anna and I were hopeful of interest when we began planning. We were thrilled that it was received so positively. I think this demonstrates the staff's desire for expanded professional and personal development geared specifically towards staff. Plus, we were cognizant of schedules and purposefully planned this during lunch hour, encouraging staff to bring their lunch and eat during the session.

The staff are appreciative of the voice that is given to us through the shared governance system. The University and governance provide a way for us to make positive changes to our work-life situations. My hope is that as we move toward the next era of leadership that this does not change.

Thank you for your time and I would be happy to answer any questions you might have about the staff at Virginia Tech.

Respectfully,  
Sue Teel  
President, Staff Senate



**Professor Joseph S. Merola**  
**Faculty Representative to the Virginia Tech Board of Visitors**  
**Constituency Report**  
**September 9, 2013**

Rector Quillen, members of the board, President Steger, Provost McNamee and all the distinguished guests: I as well thank you for this great honor to have an opportunity to say some words on behalf of the faculty.

I hope it doesn't come across as being a little bit egotistical, but I wanted to spend a few seconds telling you about my background. I spent 10 years at Exxon research and engineering before joining the faculty at Virginia Tech some 26 years ago. During that time I've also been an associate dean of the college of arts and sciences, acting dean of the graduate school, senior administrative fellow for restructuring, the chair of the Department of chemistry and now I'm a faculty member back to where I started. I wanted to mention this because I think that gives me an interesting perspective on the issues facing faculty here at Virginia Tech.

I toyed with the idea of a half empty/half full glass analogy but I ran into an interesting statement from my good buddy from the psychology department Jack Finney who said in his best couch side manner: "Is that really the important issue? Does it matter whether the glass is half full or half empty? Let's talk about what's really bothering you!"

So, in actual fact what I really want to talk about is that there is so much good and that the faculty here at Virginia Tech are among the most passionate and the most zealous of supporters of Virginia Tech. You all had a first-hand experience at observing that and seeing that at last night's dinner. President Steger, Provost McNamee and Vice President Tillar all pointed out that those receiving awards last night was just the tip of the iceberg and they just represented a few of the people who were singled out for honors. We have so many more faculty operating at exactly that same high level.

Faculty are really appreciative of the say that we have in governance. The faculty senate is an important forum where we can discuss a great number of issues and we're very appreciative of our ability to affect policy and to make great strides in communication with the administration. Last year there were two issues that the administration was very responsive to. The first was the actual location of the building that may have had some negative impact on some of our science research. That building is been relocated, based on input from faculty and people around campus. The issues facing stadium woods is one that, again with great responsiveness from the university, has been made a non-issue although I am still hearing from my colleagues, especially in the Departments of Natural Resources in the College of Agriculture and Life Sciences that they plan to continue to use the woods as a research facility and please make sure that the university remains vigilant to maintain that as that great resource.



In terms of the presidential search - number one, the size of that search committee to accommodate a large number of faculty that Minnis talked about is just unprecedented in terms of presidential search committees. Also, in addition to the open forums the committee is holding, members of the search committee have agreed to attend the very first faculty senate meeting tomorrow for further input from the faculty. So the faculty are happy with our ability to have inputs into the university.

I think we *also* see that we have some great opportunities for further input that will help us move this great university even further. I was amazed because this morning at the academic affairs committee breakfast with UDPs and ADPs, one UDP Professor, Patricia Dove used exactly the words that I was planning to use in this report and that is we now we have an opportunity to look at our investments and to think about putting them into balance. Meaning, we have done great things that you saw from the presentation to the research committee in moving us forward in the research expenditure area but, unfortunately that also came at the expense of a lack of investment in our core departments for our core professors and Patricia Dove said exactly that. She gave the one specific of the College of Science, one of the cores of the university, that has 200 faculty. However, for a university of our size, our peers have typically 300 faculty and so some investments in those core departments really would move us further.

We heard a lot about research institutes and if I could use it at least one very recent anecdote, one of my own colleagues in the department of chemistry just heard he was awarded a \$1.5 million grant over the next three years so don't forget what those single investigators can also accomplish if given the right support - those dollars add up as well.

I also need to make sure that I talk to you on behalf of my colleagues in other departments who say "please stop talking about our quality in terms only of dollars." My colleagues in English and History and in the social sciences many times point out that their scholarship is very important and yet it *doesn't* measure in terms of dollars, so I wanted to make sure this point is understood.

My last point thought is one that you have already touched upon in terms of needing a clear message to the faculty and actually to the public. You heard about this so-called JLARC survey and the faculty got their own version of the survey that made us very disgruntled. We're working very hard, we are working at a very high level and we've heard our faculty compensation is nowhere near at the level that it should be. Yet the message from the survey and it is unfortunate perhaps that they used the kinds of words that they did but they asked questions such as "over the last couple of years how many hours per week did you work on research, teaching and service" and then they switched to "how has that percentage change and by the way, way if you say something has gone up something else had better go down." So by switching from hours to percentage, they lose the fact that many faculty who I talk to, who are both active in teaching, research and the whole gamut of activities have *increased* their hours because of their passion. The next question was "if you get *more* students, how are you



going to handle them?" "Technology, a bigger teacher load, more students in class?" It was simply very disconcerting for a faculty who are already working at their limits to be asked "how are you guys going to do more work with less?"

And so I think what we're saying as a faculty is that we want to continue to hear from our administration of the importance of faculty who do the whole gamut of our creative activities and that you continue to support us even in light of many of these external attacks. Unfortunately some of them, such as these Washington Post articles shared with the board are always continuing to make it seem as though we've got the high life of sitting back and only working three hours a week. I would like to invite anybody who would like to follow any of my colleagues on any one given day to do so and see what the week of a Virginia Tech faculty member really looks like. (Board member John Rocovich jokes "Joe, we know you work four hours a week.")

So thank you all for listening. I greatly appreciate the opportunity to work with this board and to be a conduit of communication between the board, the administration and the faculty. Thank you.