

**WILLIAM & MARY  
RESOLUTIONS**

WILLIAM & MARY  
APPOINTMENTS TO FILL VACANCIES IN THE  
INSTRUCTIONAL FACULTY

Vacancies in the Instructional Faculty of William & Mary have resulted because of resignations, terminations or the approval of additional positions.

BE IT RESOLVED, That upon recommendation of the President, the Board of Visitors of William & Mary approves the appointment of the following individuals to fill these positions effective with the 2018-19 academic year:

JODY LYNN ALLEN, Assistant Professor of History

B.A., University of Delaware, 1980  
M.S., Michigan State University, 1987  
Ph.D., College of William & Mary, 2007

The University of the South at Sewanee  
Visiting Assistant Professor, 2017-2018

William & Mary  
Director, The Lemon Project: A Journey to Reconciliation, 2012-2018  
Visiting Assistant Professor, 2007-2017

Randolph-Macon College  
Adjunct Instructor, January 2009, 2010, and 2011

MATTHEW D. DEAN, Clinical Associate Professor of Business

B.S., College of William & Mary, 1997  
Ph.D., University of Connecticut, 2010

University of Southern Maine  
Associate Professor, 2014-2018  
Assistant Professor, 2011-2014  
Visiting Assistant Professor, 2010-2011

University of New Orleans  
Assistant Professor, 2008-2010

WILLIAM & MARY  
APPOINTMENTS TO FILL VACANCIES IN THE  
INSTRUCTIONAL FACULTY

JAMIE DIAZ, Clinical Associate Professor of Business

B.S., University of Richmond, 2003  
Ph.D., New York University, 2012

William & Mary  
Assistant Professor, 2011-2018

New York University  
Instructor and Research Assistant, 2006-2011

CHRISTINA MARIE JONES, Professor of the Practice and Director of the  
PELE Special Education Advocacy Clinic

B.S., University of California, Berkeley, 2013  
J.D., University of Notre Dame Law School, 2016

William & Mary Law School  
Visiting Professor of the Practice, Director of the PELE Special Education  
Advocacy Clinic, 2017-2018

The Arc of the United States  
Attorney Fellow, 2016-2017

SEFIKA KUMRAL, Assistant Professor of Sociology

B.A., Koç University, Istanbul, Turkey, 2006  
M.A. (2009) and Ph.D. (2018), Johns Hopkins University

Johns Hopkins University  
Instructor, 2011-2017  
Teaching Assistant, 2007-2012

WILLIAM & MARY  
APPOINTMENTS TO FILL VACANCIES IN THE  
INSTRUCTIONAL FACULTY

SIYUAN LI, Assistant Professor of Business Analytics

B.B.A., Hong Kong University of Science and Technology, 2006  
Ph.D., University of Georgia, 2013

Clemson University  
Assistant Professor, 2014-2018  
Visiting Assistant Professor, 2013-2014

CHRISTOPHER MCCOY, Assistant Professor of Accounting

B.A., University of Florida, 2001  
B.C.B.A. (2013), M.Acc. (2014) and Ph.D. (2018), The University of Alabama

The University of Alabama  
Instructor, 2014-2016

MARC B. MOYERS, Clinical Associate Professor of Business

B.S., University of Virginia, 1977

KPMG LLP  
National Sector Leader, 2011-2015  
Global Lead Partner, 2006-2015  
Office Managing Partner, 2000-2008  
Audit Engagement Partner, 1986-2006  
Staff Associate through Senior Manager, 1977-1986

DAVID B. RUDDERS, Research Assistant Professor of Marine Science

B.S., University of Massachusetts at Amherst, 1994  
M.S. (1999) and Ph.D. (2010), College of William & Mary

William & Mary  
Interim Associate Director for Marine Advisory Services, 2016-2018  
Senior Research Scientist, 2015-2018  
Associate Research Scientist, 2012-2015  
Assistant Research Scientist, 2011-2012  
Marine Scientist II, 1999-2011

WILLIAM & MARY  
APPOINTMENTS TO FILL VACANCIES IN THE  
INSTRUCTIONAL FACULTY

ANGELICA SERNA, Assistant Professor of Modern Languages and  
Literatures

B.A., Universidad Mayor de San Marcos, Lima, Peru, 2002  
M.A., Johns Hopkins University, 2008  
Ph.D., University of Michigan, 2018

University of Michigan  
Graduate Student Instructor, 2009-2017

WILLIAM L. SKIMMYHORN, Assistant Professor of Finance

B.S., United States Military Academy, 1997  
M.A. and M.S., Stanford University, 2006  
Ph.D., Harvard University, 2012

United States Military Academy  
Assistant Professor, 2012-2018

AYSE DURUKAN SONMEZ, Clinical Assistant Professor of Business

B.S., Fatih University, Istanbul, Turkey, 2006  
Ph.D., University of Houston, 2012

University of Illinois Urbana-Champaign  
Lecturer, January 2018-August 2018

North American University  
Assistant Professor, 2012-2017

University of Houston  
Research Assistant, 2008-2012

WILLIAM & MARY  
APPOINTMENTS TO FILL VACANCIES IN THE  
INSTRUCTIONAL FACULTY

SUZETTE A. SPENCER, Assistant Professor of English and Africana Studies

B.A. (1993) and M.A. (1996), Clark Atlanta University  
Ph.D., University of California, Berkeley, 2002

William & Mary  
Visiting Assistant Professor, 2016-2018

Hampshire College  
Visiting Assistant Professor, 2013-2014

University of Wisconsin  
Assistant Professor, 2007-2010

University of Connecticut  
Assistant Professor, 2004-2006

Cornell University  
Instructor & Post-Doctoral Research Associate, 2002-2004

YU AMY XIA, Associate Professor of Business Analytics

B.E., Huazhong University of Science and Technology, 1994  
M.E., Shanghai Jiaotong University, 1997  
M.S. (2003) and Ph.D. (2004), Washington State University

Northeastern University  
Associate Professor, 2011-2018

Middle Tennessee State University  
Assistant Professor, 2005-2011

Fort Hays State University  
Assistant Professor, 2003-2005

WILLIAM & MARY  
APPOINTMENTS TO FILL VACANCIES IN THE  
INSTRUCTIONAL FACULTY

WEI YANG, Assistant Professor of Finance

B.S., Peking University, 1994

Ph.D., Carnegie Mellon University, 2000

Ph.D., Stanford University, 2005

Indiana University

Assistant Professor, 2012-2018

University of Rochester

Assistant Professor, 2005-2012

WILLIAM & MARY  
DESIGNATED PROFESSORSHIPS

The following members of the Instructional Faculty of William & Mary have been recommended for designated professorships.

BE IT RESOLVED, That upon recommendation of the President, the Board of Visitors of William & Mary approves designated professorships for the following members of the Faculty, effective with the 2018-2019 academic year:

JASON A. CHEN, Gerdelman Family Term Distinguished Associate  
Professor of Education

DAVISON M. DOUGLAS, John Stewart Bryan Professor of Jurisprudence

SHIWEI ZHANG, Chancellor Professor of Physics

TIMOTHY ZICK, John Marshall Professor of Government and Citizenship



WILLIAM & MARY  
FACULTY LEAVES OF ABSENCE

The following faculty members have requested a leave of absence without pay or with partial pay during the 2018-2019 academic year for the reasons given.

BE IT RESOLVED, That upon recommendation of the President, the Board of Visitors of William & Mary approves these leaves of absence:

MARTHA LEE ALEXANDER, Senior Lecturer of English, to accept a Fulbright Lecturer position at Liepaja University in Latvia and to serve as a fellow at the State University of Santa Catarina in Brazil.

CHELSEY JOHNSON, Assistant Professor of English, to accept a position at Northern Arizona University.

LAWRENCE L. LEEMIS, Professor of Mathematics, to accept a visiting appointment at the University of Richmond.

ZHENMING LIU, Assistant Professor of Computer Science, to accept a visiting fellowship at the Alan Turing Institute in London, England.

PRIYA MUKHERJEE, Assistant Professor of Economics and Public Policy, for research purposes.

FABRICIO P. PRADO, Assistant Professor of History, to accept a National Endowment for the Humanities Fellowship at Brown University.

JEREMY D. STODDARD, Professor of Education, to accept a position at the University of Wisconsin-Madison.

KARA T. THOMPSON, Assistant Professor of English and American Studies, to accept a position at Northern Arizona University.

WILLIAM & MARY  
FACULTY PROMOTIONS

The following members of the Instructional Faculty of William & Mary have been recommended for promotion in academic rank by the appropriate departmental committees and chairs, the appropriate deans, and by the Provost and President.

BE IT RESOLVED, That upon recommendation of the President, the Board of Visitors of William & Mary approves the academic promotion of the following members of the Faculty of the university, effective with the beginning of the 2018-19 academic year:

Research Assistant Professor to Research Associate Professor

Jennifer R. Cross, School of Education

Clinical Assistant Professor to Clinical Associate Professor

Mihyeon Kim, School of Education

Assistant Professor to Associate Professor

Kevin C. Weng, School of Marine Science

WILLIAM & MARY  
AWARD OF ACADEMIC TENURE

The following members of the Instructional Faculty at William & Mary have been recommended for the award of academic tenure by the appropriate departmental committee and chairs, the appropriate deans, and by the Provost and President.

BE IT RESOLVED, That upon recommendation of the President, the Board of Visitors of William & Mary approves the following members of the Faculty be awarded academic tenure, effective with the beginning of the 2018-19 academic year:

KEVIN C. WENG, Associate Professor of Marine Science

YU AMY XIA, Associate Professor of Business Analytics

WILLIAM & MARY  
RESOLUTION TO APPROVE A BACHELOR OF ARTS PROGRAM IN  
JAPANESE STUDIES

WHEREAS, the William & Mary Faculty of Arts & Sciences proposes to offer an undergraduate program that will confer a Bachelor of Arts (B.A.) Degree in Japanese Studies starting in August 2019, and

WHEREAS, this undergraduate program has been developed by faculty members in the Japanese Studies section of the Department of Modern Languages and Literatures, with cooperation from faculty in other disciplines in Arts & Sciences and is supported by the Arts & Sciences senior administration, and

WHEREAS, the proposal has received approval from the Arts & Sciences Educational Policy Committee in February 2018 and the Faculty of Arts & Sciences in April 2018, and

WHEREAS, the demand for people with intercultural and diverse linguistic skills is growing and this program will prepare students for multiple career options in language-related career fields, international relations, public service and business in a global marketplace, where Japan has the third largest economy in the world, and offer students credentials that are highly desirable to employers, and

WHEREAS, this program will utilize the core competencies of existing faculty members in the Japanese Studies section of the Department of Modern Languages and Literatures who have the expertise to teach and shepherd this program successfully,

THEREFORE, BE IT RESOLVED, That upon recommendation of the President and the Provost, the Board of Visitors approves the creation of a Bachelor of Arts in Japanese Studies, which will be taught and administered by the Faculty of Arts & Sciences.

BE IT FURTHER RESOLVED, That the university will create this new program in compliance with all requirements of the State Council of Higher Education for Virginia (SCHEV) and the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

WILLIAM & MARY  
RESOLUTION TO APPROVE A MASTER OF SCIENCE PROGRAM IN  
PSYCHOLOGICAL SCIENCES

WHEREAS, the William & Mary Faculty of Arts & Sciences proposes to offer a graduate program that will confer a Master of Science (M.S.) Degree in Psychological Sciences in place of the current Master of Arts (M.A.) Degree in Psychology starting in August 2019, and

WHEREAS, this graduate program has been developed by faculty members in the Department of Psychological Sciences and is supported by the Arts & Sciences senior administration, and

WHEREAS, the degree change from Master of Arts (M.A.) to Master of Science (M.S.) has received approval from the Arts & Sciences Committee on Graduate Studies in April 2017, and

WHEREAS, the Master of Science degree in Psychological Sciences will accurately reflect the research orientation of the program and a curriculum rooted in the empirical method, and will be classified as a STEM Designated Degree Program in the list of fields of study that the Department of Homeland Security considers to be science, technology, engineering or mathematics (STEM) and in the inventory of degree programs maintained by the State Council of Higher Education for Virginia (SCHEV); and,

WHEREAS, this program will utilize the core competencies of existing faculty members in the Department of Psychological Sciences who have the expertise to teach and shepherd this program successfully,

THEREFORE, BE IT RESOLVED, That upon recommendation of the President and the Provost, the Board of Visitors approves the creation of a Master of Science in Psychological Sciences, which will be taught and administered by the Faculty of Arts & Sciences.

BE IT FURTHER RESOLVED, That the university will create this new program in compliance with all requirements of the State Council of Higher Education for Virginia (SCHEV) and the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

**REVISIONS TO THE BYLAWS OF  
THE BOARD OF VISITORS**

Amendments and revisions to the *Bylaws of the Board of Visitors* have been proposed in order to (1) streamline the Board's committee structure and focus; (2) give flexibility to the new President of William & Mary to implement organizational changes; and (3) clean up typographical errors.

BE IT RESOLVED, That on the recommendation of the Rector of the College, officials at both William and Mary and Richard Bland College, and University Counsel, the *Bylaws of the Board of Visitors* are hereby amended, effective immediately, as shown on the following pages.

## **BYLAWS OF THE BOARD OF VISITORS**

### **ARTICLE I**

#### **I. Board Authority**

- A. The Board of Visitors (Board) of The College of William and Mary in Virginia (the University or William & Mary) is the corporate body established by the Royal Charter and the Code of Virginia to govern William & Mary (including the Virginia Institute of Marine Science). The Board is also established by the Code of Virginia to govern Richard Bland College (the College or RBC).
- B. The Board has the powers and duties conferred upon it by the Royal Charter, the Code of Virginia, and the Management Agreement with the Commonwealth of Virginia.
- C. The Board has adopted these Bylaws to set forth the workings of the Board, the University and the College, and to fulfill its obligations under the law. The Board adopted codes of ethics for the University and the College that apply to all members of the institutional community – board members, employees, students, and volunteers (see Section XII. A. and B.). The Board strives to preserve the ideals and traditions of the institutions under its jurisdiction, including the student-administered Honor System that originated in the earliest years of the University.

### **ARTICLE II**

#### **II. Membership**

- A. **Board of Visitors Members:** The Board consists of seventeen members appointed by the Governor of Virginia and confirmed by the General Assembly of Virginia.
- B. **Advisory representatives:** The Board is assisted by various non-voting advisory representatives who may attend committee meetings and the full meetings of the Board and any closed sessions of Board committees, as determined by the respective committee chair or the full Board, as determined by the Rector. In the event an advisory representative is unable to complete the term, the Rector will, in consultation with the President of William & Mary or the President of RBC, as appropriate, appoint a replacement representative to complete the term, with no effect on eligibility to serve a full term. The representatives will be appointed by the Rector annually, as follows:

1. **Student Representative of William & Mary:** The President of the Student Assembly for a one-year term.
2. **Student Representative of Richard Bland:** A student nominated by the President of RBC for a one-year term.
3. **Faculty Representative of William & Mary:** A faculty member selected, in consultation with the chair of the Committee on Academic Affairs and recommended by the President and Provost, from among the former presidents of the William & Mary Faculty Assembly, for no more than two consecutive one-year terms.
4. **Faculty Representative of Richard Bland College:** A faculty member recommended by the President of RBC, in consultation with the chair of the RBC Faculty Assembly, for no more than two consecutive one-year terms.
5. **Staff Liaison of William & Mary:** The President of the professional or operational/classified staff Assembly for a one-year term. Such appointments alternate each year between the professional and operational/classified staffs.

**C. Terms of Board members**

1. Members of the Board of Visitors have such terms as provided by law.
2. The terms of student and faculty advisory representatives begin on the day following Commencement at each institution and continue through Commencement the following year.
3. The term of the staff liaison begins on July 1 and continues until June 30 of the following year.

**D. Removal of Board members**

1. If any member of the Board fails to perform the duties of the office for one year without written justification to the Rector, the Rector may, after notifying that member, report such failure to the Governor and may request that the Governor exercise the authority under § 2.2-108 of the Code of Virginia to remove the member from the Board. Such action must be recorded in the minutes of the next meeting.

The Governor may remove from office for malfeasance, misfeasance, incompetence, or gross neglect of duty any member of the Board of



Visitors, and fill the resulting vacancy, subject to confirmation by the General Assembly.

2. If any member of the Board fails to attend (i) the meetings of the Board for one year without sufficient cause, as determined by a majority vote of the Board, or (ii) the educational programs required by § 23.1-1304 of the Code of Virginia during the first two years of membership without sufficient cause, as determined by a majority vote of the Board, the remaining members will record such failure in the minutes of the next meeting, and the Rector will notify the Governor. Pursuant to § 23.1-1300.E of the Code of Virginia, the member's office is vacated upon such notification.

### ARTICLE III

#### III. Meetings

- A. **Regular meetings:** The Board meets regularly at least four times each year on dates selected by the Rector. The last meeting of the academic year is the annual meeting.
- B. **Special meetings:** Special meetings, including emergency meetings and annual retreats, may be called by the Rector, or in the Rector's absence or inability, by the Vice Rector, or at the request of five members of the Board.
- C. **Electronic meetings:** The Board may conduct meetings electronically in accordance with the requirements of the law.
- D. **Remote location participation:** Pursuant to § 2.2-3708.2 of the Code of Virginia, a member who is unable to attend a meeting of the Board may participate from a remote location, as follows:
  1. The member must disclose to the Rector on or before the date of the meeting that the member is unable to attend due to:
    - a. a personal matter, the nature of shall be identified with specificity. A member's remote participation due to a personal matter is limited to two meetings per calendar year; or
    - b. a temporary or permanent disability or other medical condition that prevents the member's physical attendance;
  2. The Board will determine by majority vote whether the member has satisfied that the requirements for remote participation.

3. If the Board approves the member's participation, the Board shall arrange for the voice of the remote participant to be heard by all persons at the Board's meeting location. The minutes of the meeting shall note the remote location from which the member participated. If the member was unable to attend the meeting due to a temporary or permanent disability or other medical condition, the minutes shall note this. If the member was unable to attend due to a personal matter, the minutes shall note the specific nature of the personal matter.
  4. If the Board disapproves the member's participation, such disapproval shall be recorded in the minutes with specificity. If a member's participation is not approved, the member may continue to monitor the meeting from the remote location, but may not participate in the proceeding and may not be counted as present at the meeting.
  5. Committees or subcommittees of the Board, or those committee or subcommittees appointed by the Board or the Rector to perform a delegated function or to advise the Board, are authorized to allow members to participate remotely, subject to the same requirements as the Board has imposed on itself.
- E. **Notice of meetings:** Notice of meetings is provided in accordance with relevant provisions of the Virginia Freedom of Information Act, Chapter 37 of Title 2.2. The appointee or representative of the Virginia Attorney General is notified and may attend meetings of the Board and all Board committees.
- F. **Quorum:** A simple majority of the voting members of the Board (or of a committee, in the case of a committee meeting) serving at any time constitutes a quorum. The Rector is a member of each Board committee for purposes of a quorum. The Rector may appoint members to a committee on an ad-hoc basis in the event a quorum is needed for a specific meeting.
- G. **Resolutions of the Board:** All proposed resolutions of the Board are presented to the Board-appointed Secretary to the Board prior to the meeting at which they are to be considered, with mailing to the members and non-voting advisory representatives at least six calendar days prior to the meeting, except that the introduction of a motion and/or resolution for Board action may be offered at any time at the request of the Rector, the President of the University or the President of the College, or on those occasions when a two-thirds majority of the members present at the meeting vote in the affirmative to suspend this rule. At the same time such resolutions and all materials are furnished to members of the Board, they are made available for review by members of the public.

- H. **Public and closed meetings:** The discussions of the Board and any actions taken by it are conducted in open meeting, unless a closed or executive session is authorized by law. Any action taken in a closed meeting must be officially approved in open meeting before it has effect. Attendance at meetings of the Board during closed or executive sessions is determined by the Rector in consultation with the President of the University or the President of the College and in coordination with the Secretary to the Board. Attendance at committee meetings during closed or executive sessions is determined by the committee chair in consultation with the Rector.
- I. **Minutes:** The Board-appointed Secretary to the Board maintains minutes of all open meetings of the Board. The Secretary ensures that minutes are posted on the Board's website and made available as required by law.
- J. **Annual Executive Summary:** The Board submits to the General Assembly and the Governor an annual executive summary of its work no later than the first day of each regular session of the General Assembly, in accordance with procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports for publication on the General Assembly's website.
- K. **Board Evaluation:** The Board shall conduct a self-evaluation biennially during the Board Retreat with a process discussed by the Executive Committee and approved by the Rector. The Board may occasionally have a formal evaluation of its processes and procedures conducted by an external evaluator at the discretion of the Executive Committee.

## ARTICLE IV

### IV. Officers of the Board

#### A. The officers of the Board are:

1. **Rector of the College:** The Rector presides over all meetings of the Board and determines the order of its business. The Rector serves as the spokesperson for the Board and its designated representative. The Rector performs other duties as prescribed by law or these Bylaws, or as expressly authorized by the Board, including the appointment of members to all committees of the Board, special committees, and ad hoc committees.

2. **Vice Rector of the College:** The Vice Rector performs the duties of the Rector when the Rector is absent or unable to discharge the duties of the office.
  3. **Secretary of the Board (elected):** The Secretary performs the duties of the Rector when neither the Rector nor the Vice Rector is present or able to discharge such duties.
- B. **Election of officers:** Prior to the annual meeting in every even year, the Rector appoints a committee of at least three members of the Board to nominate candidates for the offices of Rector, Vice Rector, and Secretary. Nominations will also be accepted from the floor. The Board elects officers from any members nominated at the annual meeting. By statute, either the Rector or the Vice Rector must be a resident of Virginia (§23.1-1300).
- C. **Term of office:** Each officer serves a two-year term beginning July 1 following the annual meeting. Officers are eligible for re-election for one additional term.
- D. **Vacancy of office:** Should an office be vacated prior to the conclusion of an elected term, the Rector, or officer pursuant to IV.A.2. and 3., appoints a committee of at least three members of the Board to nominate a candidate to stand for election at the next meeting of the Board to complete the unexpired portion of such term.

## ARTICLE V

### V. Organization of the Board

#### A. Executive committee:

1. **Membership:** The Executive Committee consists of: (1) the Rector, who serves as chair; (2) the Vice Rector; (3) the Secretary of the Board; (4) the chair of the Committee on Financial Affairs; and (5) three members of the Board at large appointed by the Rector.
2. **Delegation of the authority of the Board:** Except as provided otherwise by law or these Bylaws, the Executive Committee exercises the powers and transacts the business of the Board of Visitors between meetings of the full Board as needed. All members of the Board will be informed promptly of any action taken.
3. **Responsibilities:** The Executive Committee organizes the working processes of the Board and recommends best practices for Board

governance, consistent with relevant provisions of Title 23.1, § 23.1-1306, of the Code of Virginia.

4. **Staffing:** The Board-appointed Secretary to the Board staffs the Committee.

#### B. Standing committees

1. **Designation:** The Board has the following standing committees with members appointed by the Rector:
  - a) Committee on Academic Affairs
  - b) Committee on Administration, Buildings and Grounds
  - c) Committee on Athletics and Student Affairs
  - d) Committee on Audit, Risk and Compliance
  - e) Committee on Financial Affairs
  - f) Committee on Institutional Advancement
  - g) Richard Bland College Committee
2. **Membership:**
  - a) The Rector appoints one or more members of the Board to chair each committee, and may appoint one or more Board members to serve as vice chair(s) of each committee.
  - b) The Rector appoints at least three members of the Board to each standing committee, and may designate committees of the whole.
  - c) The Rector may replace chairs as necessary and remove members from committees or fill committee vacancies as necessary.
3. **Subcommittees:** Upon approval of the Rector, committees may appoint subcommittees of not less than three voting Board members from within their memberships to consider such specific matters as will facilitate the business of the committee. All subcommittee action is subject to ratification by the committee.
4. **Meetings of committees:** The chair, or vice chair acting when the chair is absent or unable to perform the duties of the chair, or a majority of the membership of the committee or subcommittee, may call meetings after consultation and approval by the Rector. Notice of meetings of committees and subcommittees is published as required by law.

5. **Faculty representative members of committees:** Annually, the Rector in consultation with the President, Provost, and chair of the Academic Affairs Committee appoints a faculty member from those nominated by the William & Mary Faculty Assembly Executive Committee, to the positions of non-voting faculty representative to each of the Committees on Administration, Buildings and Grounds, Athletics and Student Affairs, and Financial Affairs. No faculty member may serve on more than one committee. The William & Mary faculty representative to the Board (Section II.B.3.) serves as a non-voting advisory member of the Committee on Academic Affairs.
  6. **Student representative members of committees:** Annually, the Rector in consultation with the W&M President, Vice President for Student Affairs and Student Assembly President, shall appoint one W&M student from among the Student Assembly President, Vice President of the Student Assembly and the two student liaisons to the Board to the position of non-voting student representative to each of the Committees on Academic Affairs, Administration, Buildings and Grounds, Athletics and Student Affairs and Financial Affairs, with the understanding that such student shall serve for a term of one academic year.
- C. **Committee on Academic Affairs:** The Committee on Academic Affairs considers and makes recommendations on matters affecting educational policies and new degrees or programs, instructional faculty affairs, including academic tenure, and the academic organization of William & Mary, and advises the President of the University on matters of personnel policy in regard to members of the instructional faculty. The Committee meets on a regular basis with representatives of the faculties. The William & Mary faculty representative to the Board serves as a non-voting advisory member of the Committee. The Rector may appoint a student, as detailed in Section V.B.6., to the position of non-voting student committee representative. The Provost staffs the Committee.
- D. **Committee on Administration, Buildings and Grounds:** The Committee on Administration, Buildings and Grounds considers and makes recommendations on all matters relating to the administrative operations of the University, including human resources policy in regard to classified employees, university employees and other non-instructional faculty members; the buildings and grounds of William & Mary, including the naming of buildings; information technology; procurement; and any other matters referred to it by the Rector or the President particularly regarding authority granted under The Restructured Higher Education

Financial and Administrative Operations Act (Title 23.1 Chapter 10). The Rector may appoint a faculty member and student, as detailed in Section V.B.5. and 6., to the positions of non-voting faculty and student committee representatives. The Senior Vice President for Finance and Administration staffs the Committee.

The Chair and Vice Chair of the Committee serve on the Design Review Board, of which the Committee Chair serves as chair. The Design Review Board is advisory to the President of William & Mary.

- E. **Committee on Athletics and Student Affairs:** The Committee on Athletics and Student Affairs considers and makes recommendations on matters affecting the University's intercollegiate and recreational athletic policies, plans, and personnel, as well as student life, discipline, extracurricular activities and physical and behavioral health. The Rector may appoint a faculty member and student, as detailed in Section V.B.5. and 6., to the positions of non-voting faculty and student committee representatives. The Committee meets on a regular basis with student representatives of the University designated by the President of the Student Assembly. The Director of Athletics and the Vice President for Student Affairs staff the Committee.
- F. **Committee on Audit, Risk and Compliance:** The Committee considers and makes recommendations on policy matters pertaining to compliance, campus safety and security, and enterprise risk management, including financial, operational and reputational risks. The Committee on Audit, Risk and Compliance supervises the Director of Internal Audit, who is charged with auditing William & Mary and Richard Bland. The Committee reviews and approves the annual Audit Plan recommended by the Director of Internal Audit. The Committee performs an annual evaluation of the Director of Internal Audit during the Board's annual meeting for recommendation to the full Board. The Committee provides oversight of the compliance program and approves the Compliance Charter. The Presidents of the University and of the College may advise and consult with the Committee on any matter pertaining to internal auditing. The Director of Internal Audit, the Chief Compliance Officer, the Senior Vice President for Finance and Administration, and the RBC President or designee staff the Committee.
- G. **Committee on Financial Affairs:** The Committee on Financial Affairs considers and makes recommendations concerning the financial affairs of William & Mary and the Virginia Institute of Marine Science, which includes the submission and approval of all budgets and the administration of the financial policies and procedures established by the Board. The Committee has power and authority, subject to the guidelines set by the Board, to invest and reinvest all funds held by

the Board as an endowment or in trust for the uses and purposes of William & Mary, the Virginia Institute of Marine Science, and Richard Bland, with the assistance of the Presidents; and the Committee directs and controls the handling of investments by an investment counsel or depository agent at any time employed by the Board. The Rector may appoint a faculty member and student, as detailed in Section V.B.5. and 6., to the positions of non-voting faculty and student committee representatives. The Senior Vice President for Finance and Administration and the Vice President for Finance and Chief Financial Officer staff the Committee.

- H. **Committee on Institutional Advancement:** The Committee on Institutional Advancement consults with the President to promote William & Mary and foster the relationship between the University and its communities and friends. The Committee considers and makes recommendations on policies fostering lifelong relationships and connections between William & Mary and its alumni and fundraising, as well as legislative affairs, branding and communications. A representative of the Alumni Association and a representative of the William & Mary Foundation may meet with the Committee during Board meetings. The Vice President for University Advancement and the Vice President for Strategic Initiatives & Public Affairs staff the Committee.
- I. **Richard Bland College Committee:** The Richard Bland College Committee considers and makes recommendations on matters affecting educational and faculty policies, new degrees or programs, instructional faculty affairs and appointments, including academic tenure, executive appointments, and the academic organization of the College, and advises the President of the College on matters of personnel policy in regard to all classes of employees. The Committee considers and makes recommendations concerning the financial affairs of the College, which includes the submission and approval of all budgets and the administration of the financial policies and procedures established by the Board, as well as internal audits and compliance. The Committee considers and makes recommendations on all matters relating to the buildings and grounds of Richard Bland College, including the naming of buildings; the administrative operations of the College; information technology; procurement; and any other matters referred to it by the Rector or the President. The Committee consults with the President to promote Richard Bland's advancement and foster the relationship between the College and its communities and friends. The Committee considers and makes recommendations on policies fostering lifelong relationships and connections between Richard Bland and its alumni and fundraising. The Committee performs an annual evaluation of the President of Richard Bland



College during the Board's annual meeting for recommendation to the full Board. The Richard Bland student and faculty representatives serve as non-voting advisory members of the Committee. The President of the College staffs the Committee.

- J. **Special or ad hoc committees:** The Rector may appoint special or ad hoc committees of the Board as needed for the benefit of the Board and/or the University or the College.

## ARTICLE VI

### VI. Executive positions reporting to the Board of Visitors

A. **President of William & Mary:** The Board elects the President of the University, who serves at its pleasure and pursuant to a contract with the Board. Any change to the President's employment contract is made only by a vote of a majority of the Board. The duties and responsibilities of the President are prescribed by law, these Bylaws, and such employment contract.

1. The President may attend all meetings of the Board of Visitors or its committees, except as otherwise directed by the Board or committee. The President brings to the attention of the Rector and the Board such matters as require the attention or action of the Board, and may participate in the discussions of the Board or its committees.
2. In case of the incapacitation, death or resignation of the President, the Board of Visitors designates as promptly as possible an Interim President to serve until a President is elected by the Board and assumes office.
3. At least annually, on a date set by the Rector of the College, the Board conducts an evaluation of the performance of the President for the preceding year. Such evaluation may be held in a closed meeting pursuant to § 2.2-3711.A.1. of the Code of Virginia.

B. **President of Richard Bland College:** The Board elects the President of Richard Bland College, who serves at its pleasure and pursuant to a contract with the Board. Any change to the President's employment contract is made only by a vote of a majority of the Board. The duties and responsibilities of the President are prescribed by law, these Bylaws, and such employment contract.

1. The President may attend all meetings of the Board of Visitors or its committees, except as otherwise directed by the Board or committee. The

President brings to the attention of the Rector and the Chair of the Richard Bland College Committee such matters as require the attention or action of the Board, and may participate in the discussions of the Board or its committees.

2. In case of the incapacitation, death or resignation of the President, the Board of Visitors designates as promptly as possible an Interim President to serve until a President is elected by the Board and assumes office.
3. At least annually, on a date set by the Rector of the College, the Board conducts an evaluation of the performance of the President for the preceding year. Such evaluation may be held in a closed meeting pursuant to § 2.2-3711.A.1. of the Code of Virginia.

## ARTICLE VII

### VII. **Administrative positions reporting to the Board of Visitors**

- A. **Director of Internal Audit:** On recommendation of the President of the University, the Board appoints a Director of Internal Audit. The Director is responsible for the formation of an annual Audit Plan and for the administration and operation in the Office of Internal Audit. The Director consults with the President of William & Mary and the President of Richard Bland in the administration and operation of the Office of Internal Audit. The Director reports to the Committee on Audit, Risk and Compliance, and is evaluated annually by the Committee during the Board's annual meeting for review with full Board.
- B. **Building Official:** On recommendation of the President of the University, the Board appoints a Building Official certified by the Virginia Department of Housing and Community Development. The Building Official is authorized to determine the suitability for occupancy of, and to issue certifications for building occupancy for, all capital projects undertaken at William & Mary. Prior to issuing any such certification, the Building Official ensures that the Virginia Uniform Statewide Building Code requirements are met for that capital project and that such project has been inspected by the Fire Marshal or authorized designee. The Building Official reports directly and exclusively to the Board of Visitors through the Committee on Administration, Buildings and Grounds, and is evaluated annually by the Committee during the Board's annual meeting for review with the full Board.

## ARTICLE VIII

### VIII. **Administrative positions of the Board of Visitors**

- A. **University Counsel:** The Attorney General of Virginia, in consultation with the President of the University, appoints an Assistant Attorney General and Special Counsel from the Office of the Attorney General as counsel to the Board, the University and the College to provide necessary legal services on both routine matters and special projects.
- B. **Secretary to the Board:** The Board-appointed Secretary to the Board provides assistance to the Rector and members of the Board of Visitors, maintains minutes of all meetings of the Board and makes them available to any member of the Board, the Presidents of the University and College, and such others as required by law, with the authority to provide certification to the minutes of the meetings of the Board when necessary. On recommendation of the President of the University, the appointment of the Secretary to the Board is approved by resolution of the Board of Visitors.

## ARTICLE IX

### IX. **Chancellor**

Upon recommendation of the President, the Board of Visitors may elect a Chancellor of the University. The Chancellor's position is honorary, without responsibility, authority or compensation except for those duties and responsibilities specifically assigned to that position by the Board of Visitors. The Chancellor serves for seven years, and is eligible for re-election for additional terms upon recommendation of the President.

## ARTICLE X

### X. **Responsibilities of the President and Officers of William & Mary**

- A. The President is the chief executive officer of the University, oversees its overall operation under the direction of the Board and in accordance with its policies, and is accountable to the Board for its performance. The President may adopt such rules and regulations as appropriate to the proper administration of the University, provided they are not inconsistent with the policies of the Board of Visitors or the requirements of law. The President is assisted in the performance of duties by

officers as defined under Article X. B. The President recommends the appointment of such officers of the University, subject to the approval of the Board of Visitors.

Among other duties as the University's chief executive officer, the President:

1. Approves the salaries, appointments, promotions, and dismissals of members of the staff and faculties of the University.
2. Oversees the admission of students, seeing to their well-being and administering a student disciplinary and Honor Code.
3. Oversees the financial, budgetary, transactional and strategic activities of the University, as well as the use and maintenance of its physical facilities.
4. The President, in consultation with the Rector, recommends to the Board candidates for honorary degrees.
5. Confers all properly authorized degrees, with the exception of honorary degrees, which are conferred by the Rector or the Chancellor or their designee.
6. Has the authority to transact business in the name of the University.
7. Has the authority to further delegate such authority as has been conferred to the President, subject to guidelines for its exercise, and the President remains responsible for the delegated function.

- B. The Provost and other senior officers of the University report to the President. Such senior officers may include the Senior Vice President for Administration and Finance and the Vice Presidents for Strategic Initiatives and Public Affairs, Student Affairs, University Advancement, and the Director of Athletics.
1. The Provost serves as the chief academic officer and senior administrative officer of the University, and has general purview over all its educational programs, activities, personnel and policies. The Provost administers the affairs of the University during the temporary absence or disability of the President, except as otherwise directed by the Board.

The Provost is responsible jointly with the Senior Vice President for Finance and Administration for budgetary planning, and for submitting recommendations to the President regarding allocation of the University's resources and expenditure of its funds.

The Provost is responsible for working directly with the Deans, and the Faculty Assembly when appropriate, on academic planning, and on curricular, budgetary, personnel, and educational policy matters, for recommendation as appropriate to the President. In accordance with the provisions of the Faculty Handbook and the Code of Virginia and upon recommendation of the appropriate dean or administrative officer, the Provost submits to the President recommendations regarding salaries, appointments, promotions and dismissals of members of the staff and faculties of the University, and the establishment of new positions.

The Provost serves as the accreditation officer of William & Mary.

The Provost recommends to the President the calendar of the University, the curriculum of the faculties of the University, and the inauguration of new degrees or programs, the latter being subject to approval by the Board of Visitors. Such recommendations are formulated with due regard to the roles of the respective faculties, the Faculty Assembly, the educational mission of the University in the Virginia system of higher education, and budgetary and administrative feasibility.

Concurrently with the President, the Provost has the authority to transact business in the name of the University, with the exception of indebtedness and those particular assignments made to the Senior Vice President for Finance and Administration. The Provost has the authority to further delegate such authority; such delegation must be consistent with applicable law and regulations, and subject to guidelines for its exercise.

2. The Senior Vice President for Finance and Administration administers the business affairs of the University. Under the direction of the President, the Senior Vice President is responsible jointly with the Provost for budget planning, and for recommendations to the President regarding University resource allocation and expenditure budgets.

It is the Senior Vice President's responsibility to assure that private funds under the custody of the Board are properly invested with the approval of the President and the Committee on Financial Affairs.

The Senior Vice President has custody of the University's key documents.

The Senior Vice President is responsible for the effective operation of the physical plant, the auxiliary enterprises, the general purchasing and supply system, human resources, campus security, and the buildings and grounds of the University.

Concurrently with the President, the Senior Vice President for Finance and Administration has the authority to transact business in the name of the University, including: (1) the transfer, conversion, endorsement, sale, purchase, assignment, conveyance and delivery of any and all shares of stocks, bonds, debentures, notes, and subscriptions warrants, cash or equivalent assets, and evidence of indebtedness; (2) any and all contracts for the purchase of real estate and other property, or other securities or assets now or hereafter owned by the Board, or bearing any similar designation indicating ownership by the University; (3) agreements setting forth the terms for the acceptance of gifts to the University; (4) any and all contracts for the purchase or rental of professional services, supplies and equipment, including software and hardware; the design and construction of facilities; non-disclosure and confidentiality agreements; real estate and property leases or rental agreements; capital leases; acquisition or conveyance of any other type of property interest, including easements; equipment leases or fixed asset rental agreements; use of University facilities; and (5) any other agreements necessary to carry out and support the operations of the University, with the exception of those particular assignments made to the Provost. The sale of real property requires the approval of the Board and the Commonwealth of Virginia. The Senior Vice President for Finance and Administration has the authority to further delegate such authority; such delegation must be consistent with applicable law and regulations, and subject to guidelines for the exercise thereof.

- C. On recommendation of the President, the Board of Visitors appoints the Dean of the Faculty of Arts and Sciences and the Deans of the Schools of Business Administration, Education, Law, and Marine Science. The Deans have general responsibility for the Faculties under their jurisdiction and for the direction of the work of the Faculty or School. The Deans report to the Provost.

The Dean of the Faculty of Arts and Sciences and the Dean of the appropriate School, except as otherwise provided, advises the Provost in the formation of the Faculty and the determination of curriculum.

Subject to the legal obligations of the University, and except as these Bylaws otherwise provide, actual instruction, including such matters as curriculum and degree requirements, is discharged by the respective faculties of the University and the College.

- D. On recommendation of the President, the Board of Visitors appoints the Dean of University Libraries. The Dean of University Libraries, under the direction of the Provost, has general purview over and administrative responsibility for the Earl Gregg Swem Library and those professional and departmental libraries of the University responsible to Swem Library, not including the Wolf Law Library.
- E. On recommendation of the President, the Board of Visitors appoints the Dean of the School of Marine Science as the Director of the Virginia Institute of Marine Science. The Dean/Director, under the direction of the President, has general purview of and administrative responsibility for the affairs of the Institute. Recognizing the integration of activities and on-going support provided to the Institute by William & Mary, the Dean/Director works in close collaboration with the Provost and Senior Vice President for Finance and Administration on financial and budgetary matters.

## **ARTICLE XI**

### **XI. Responsibilities of the President and Other Senior Officers of Richard Bland College**

- A. The President is the chief executive officer of the College, oversees its overall operation under the direction of the Richard Bland College Committee and the Board and in accordance with its policies, and is accountable to the Richard Bland College Committee and the Board for its performance. The President may adopt such rules and regulations as may be deemed appropriate to the proper administration of the College, provided they are not inconsistent with the policies of the Board of Visitors or the requirements of law.

Among the duties as the College's chief executive officer, the President:

1. Upon the recommendation of appropriate academic officers, appoints members of the faculty.
2. Oversees the admission of students, seeing to their well-being and administering a student disciplinary and Honor Code.
3. Oversees the financial, budgetary, transactional and strategic activities of the University, as well as the use and maintenance of its physical facilities.

4. The President, in consultation with the Rector, recommends to the Board candidates for honorary associate degrees.
  5. Confers all properly authorized degrees, with the exception of honorary degrees, which are bestowed by the President and the Rector of the College, or someone designated by the Rector.
  6. Has the authority to transact business in the name of Richard Bland College.
  7. Has the authority to further delegate such authority as has been conferred to the President. Such delegation must remain subject to guidelines for the exercise thereof, and the President remains responsible for the delegated function.
- B. The President, while remaining responsible for the overall administration of the College, is assisted in the performance of duties by a chief academic officer, a chief financial officer, or such other senior officers as the President deems necessary or appropriate. The President recommends the appointment of such officers of the College, subject to the approval of the Board of Visitors.

## **ARTICLE XII**

### **XII. Policies and Regulations**

Policies for the governance of William & Mary and Richard Bland as made from time to time by the Board of Visitors are binding on the appropriate communities and published within the University and the College by appropriate means.

No rule or regulation adopted by the Presidents of the University or RBC is deemed contrary to the policies of the Board of Visitors unless so determined by the Board itself after the promulgation of such rule or regulation.

#### **A. Code of Ethics of William & Mary**

The Board adopted this Code of Ethics for William & Mary, including the Virginia Institute of Marine Science, on April 17, 2009:

Integrity is one of the core values of the College of William & Mary. Thus, we are committed to lawful and ethical behavior in all of the University's activities. At William & Mary, we insist that all members of the University community – our board members, employees, students, and volunteers – comply with all laws, regulations, policies and ethical norms applicable to



them. More generally, we are to be honest, fair, and trustworthy ourselves and to take care that other members of the University community are also.

We, as members of the William & Mary community, will:

1. Obey the laws, regulations, and policies applicable to our university activities.
2. Protect and preserve university resources and ensure their proper use.
3. Avoid both conflicts of interest and the appearance of such conflicts.
4. Safeguard confidential information.
5. Make procurement decisions impartially and objectively.
6. Maintain effective internal controls to safeguard the regularity and integrity of our activities.
7. Treat other people with dignity and respect, ensuring there is no discrimination or harassment at William & Mary.
8. Report any illegal or unethical action that comes to our attention, so the University can investigate and take corrective steps.

#### **B. Code of Ethics of Richard Bland College**

The Board adopted this Code of Ethics for Richard Bland College on April 17, 2009:

Richard Bland College is committed to an environment of uncompromising integrity and ethical conduct. As such, the College's ethical standards are the foundation for both strategic and day-to-day action and activity. The College's faculty and staff are responsible for establishing and maintaining ethical standards, recognizing that their decisions and actions reflect not only on their individual reputations but also on the reputation of the college. Consistent with this responsibility for maintaining the highest ethical standards as well as personal and institutional integrity, the following Code of Ethics provides the framework for conducting College business.

1. We are committed to conducting College business in compliance with all applicable state and federal laws and regulations as well as College policies.
2. We will promote the integrity of all College business and transactions by avoiding direct or indirect actions that are inconsistent with the

State and Local Government Conflict of Interests Act or the Rules for Procurement of Goods, Services, Insurance, and Construction.

3. We make business decisions in the best interest of the College and avoid any conflicts of interest or commitment. As a result, we do not accept gifts, gratuities or favors of monetary value, or engage in private business or professional activities that may appear to affect professional judgment. College employees are in a position of public trust and, therefore, cannot accept gifts, gratuities or favors from bidders, vendors, contractors, or customers for any services they perform in connection with their positions or which are intended to create favorable business treatment.
4. We do not tolerate fraud, theft, waste or abuse of state, College, or College-related funds, property, or other resources and will immediately report suspected irregularities to our supervisor, the Richard Bland College Police Department, or the Office of Internal Audit. Employees also may report suspected irregularities through the Commonwealth of Virginia's Fraud, Waste, and Abuse Hotline.
5. We will not use College funds, property, equipment, services, systems, information, or our position for personal gain. We will protect the College's assets and resources, including intellectual properties, and ensure their proper use.
6. We will not use College funds, property, equipment, services, systems, or information to aid political parties or candidates for public office.
7. We will maintain the confidentiality and security of information entrusted to us by the College and its customers, except when disclosure is authorized or legally mandated. College records are its property and may only be used for job-related purposes. We will comply with the College's Acceptable use Policy for information technology.
8. We will adhere to the principle that the public's business should be conducted in the public view by observing and following both the letter and the spirit of the Virginia Freedom of Information Act.
9. The College is a workplace where all employees, students, and visitors are treated with dignity and respect. Therefore, we do not tolerate harassment or discrimination of any kind against another person. This includes—but is not limited to—discrimination on the basis of race, sex,

handicap, age, veteran status, national origin, religion, sexual orientation or political affiliation. College administrators, managers and supervisors are responsible for creating a work environment free of discrimination or harassment. Administrators or supervisors have a legal obligation to act whenever they learn, directly or indirectly, about discrimination or harassment.

10. The College is committed to ensuring the safety and security of employees, students, and visitors. Employees are responsible for compliance with environmental, health and safety laws and regulations and should make every effort to maintain a safe and healthy work environment.

## **MISCELLANEOUS**

**Adoption and Amendment of Bylaws.** All Bylaws of the Board previously adopted are hereby superseded. All bylaws of the Faculties and other organizations of the University or the College must be consistent with the Bylaws of the Board. The Board charges the President of William & Mary or the President of RBC, as appropriate, with the responsibility to recommend to the Board amendments to the bylaws of the Faculties and other organizations that are determined to be changes of significance.

The Bylaws of the Board may be amended or superseded at any regular meeting of the Board with thirty days prior written notice, or at a special meeting called for the purpose, provided that every such amendment or repeal must receive not less than nine affirmative votes.

**Suspension of Bylaws.** These Bylaws or any one of them may be temporarily suspended at any meeting of the Board by a three-fourths affirmative vote of all members present provided that no rule may be suspended until at least nine vote affirmatively therefore.

**Parliamentary Authority.** Meetings are conducted and minutes taken in accordance with the current edition of Robert's "Rules of Order Newly Revised."

*As amended by the Board of Visitors on September 28, 2018.*

WILLIAM & MARY  
APPOINTMENT OF CHANCELLOR OF THE COLLEGE

The Honorable Robert M. Gates '65, L.H.D. '98 has served as the twenty-fourth Chancellor of The College of William & Mary in Virginia since his investiture at Charter Day on February 3, 2012. Chancellor Gates' seven-year term expires in 2019.

Robert M. Gates '65, L.H.D. '98 has demonstrated distinguished service to his alma mater and his country, during a career in public service that began soon after he graduated from William & Mary in 1965. In 1966, he joined the Central Intelligence Agency and spent nearly 27 years as an intelligence professional, serving six presidents. During that period, he spent nearly nine years at the National Security Council. Dr. Gates served as Deputy Director of the CIA from 1986 to 1989, Assistant to the President and Deputy National Security Adviser at the White House from 1989 to 1991, and Director of the CIA from 1991 to 1993. On December 18, 2006, Dr. Gates took office as the nation's 22<sup>nd</sup> Secretary of Defense under President George W. Bush, and continued in that position under President Barack Obama until his retirement on June 30, 2011. He is the only person ever to serve as Secretary of Defense under two presidents of different political parties, and, in total, Dr. Gates served eight presidents.

After retiring from the CIA, Dr. Gates lectured at some of America's most prominent institutions, including Harvard, Yale, Johns Hopkins, Georgetown, Vanderbilt, and, of course, his alma mater. From 2002 to 2006, he was president of Texas A&M University after previously serving as the university's interim Dean of the Bush School of Government and Public Service from 1999 to 2001. He is the author of three books. *From the Shadows: The Ultimate Insider's Story of Five Presidents and How They Won the Cold War*, was published in 1996. His second book, *Duty: Memoirs of a Secretary at War*, published in 2014, was described as "one of the best Washington memoirs ever" in the New York Times and topped its list of best-selling non-fiction books for five consecutive weeks. His third book, *A Passion for Leadership: Lessons on Change and Reform from Fifty Years of Public Service*, was published in 2016.

Dr. Gates has been awarded the National Security Medal, the Presidential Citizens Medal, and has received the National Intelligence Distinguished Service Medal twice. He has been awarded the CIA's highest award, the Distinguished Intelligence Medal, three times. Upon his retirement, President Obama awarded him the Presidential Medal of Freedom, the highest honor a president can bestow on a civilian. In 1998, the College awarded him the honorary degree of Doctor of

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Humane Letters, and in 2000 Dr. Gates received the Alumni Medallion from the Alumni Association.

William & Mary has benefited greatly from Dr. Gates long connection to the university, particularly so during his time as Chancellor. Given his distinguished service to the nation, extensive leadership experience, and devotion to his alma mater, Chancellor Gates is an invaluable representative of the university.

THEREFORE, BE IT RESOLVED, That, upon recommendation of the President, the Board of Visitors of the College of William & Mary elects The Honorable Robert M. Gates '65, L.H.D. '98 to a second term as the twenty-fourth Chancellor of The College of William & Mary in Virginia, for a period of seven years commencing July 1, 2019.

BE IT FURTHER RESOLVED, That a public re-investiture shall be made at an appropriate time.

**WILLIAM & MARY**  
**2018-2024 SIX-YEAR PLAN UPDATE**

WHEREAS, the College of William & Mary has a long tradition of providing an excellent liberal arts education to the citizens of the Commonwealth and the nation.

WHEREAS, the Governor's Commission on Higher Education has indicated "the Commonwealth's commitment . . . to having a distinctive 'public ivy' at William & Mary;"

WHEREAS, consistent with the requirement of the Higher Education Opportunity Act (the Act), William & Mary developed its 2018-24 Six-Year Plan rooted in this commitment, the goals set out in its Strategic Plan, and the objectives of the Act. This Six-Year Plan was approved by the Board of Visitors of the College of William and Mary in September, 2017.

WHEREAS, the Board of Visitors remains committed to the William & Mary Promise as a business model to enhance the quality of its education while improving predictability and affordability for in-state undergraduate students.

WHEREAS, the Commonwealth's planning process requires an update to the Six-Year Plan on an annual basis, incorporating the most recent funding actions by the Commonwealth and the most recent (FY 2019) operating budget approved by the Board of Visitors in April, 2018.

WHEREAS, the university has reviewed those expenditures necessary to support and enhance its instructional, research, student service, and administrative operations, prioritized those expenditures, and recommended funding through a combination of Commonwealth, College, and reallocated revenue.

WHEREAS, the university continues to evaluate opportunities to improve the effectiveness and efficiency of its academic/administrative programs and activities.

THEREFORE, BE IT RESOLVED, That upon recommendation of the President, the Board of Visitors of the College of William and Mary, approves the William & Mary's Six-Year Plan Update to reflect the university's FY 2019 operating budget as approved by the Board in April, 2017.

BE IT FURTHER RESOLVED, That the Board of Visitors recognizes the incremental state support for operations appropriated by the Commonwealth for the 2018-2020 biennium and as a result, the update reduces the projected in-state undergraduate tuition increase for incoming students from 6.4% as contained in the original plan to 5.4% as contained herein. The Board will take formal action on in-state undergraduate tuition for FY 2020 at its November 2018 meeting.

**COLLEGE OF WILLIAM & MARY  
SIX-YEAR PLAN (2018-20 through 2022-24):**

***Part II NARRATIVE***

William & Mary provides an outstanding education for Virginia students as the Commonwealth's "Distinctive Public Ivy" while expanding its global relevance, increasing interdisciplinary approach to research and education, and strengthening research capabilities. Going forward, the university intends to maintain and enhance an extraordinary form of education, offered by no other institution in the Commonwealth and few others in the country. In developing its six-year plan, the university strives to build on existing strengths, preserving an exceptional public educational experience while contributing to the Commonwealth's educational and economic development needs.

Each of the following sections provides a brief summary of key elements of William & Mary's six-year plan and related strategies as well as efforts to meet specified state policy goals.

**A. INSTITUTIONAL MISSION**

**The William & Mary Mission Statement:**

*The College of William & Mary, a public university in Williamsburg, Virginia, is the second-oldest institution of higher learning in The United States. Established in 1693 by British royal charter, William & Mary is proud of its role as the alma mater of generations of American patriots, leaders and public servants. Now, in its fourth century, it continues this tradition of excellence by combining the best features of an undergraduate college with the opportunities offered by a modern research university. Its moderate size, dedicated faculty, and distinctive history give William & Mary a unique character among public institutions, and create a learning environment that fosters close interaction among students and teachers.*

*The university's predominantly residential undergraduate program provides a broad liberal education in a stimulating academic environment enhanced by a talented and diverse student body. This nationally acclaimed undergraduate program is integrated with selected graduate and professional programs in five faculties -- Arts and Sciences, Business, Education, Law, and Marine Science. Master's and doctoral programs in the humanities, the sciences, the social sciences, business, education, and law provide a wide variety of intellectual opportunities for students at both graduate and undergraduate levels.*

*At William & Mary, teaching, research, and public service are linked through programs designed to preserve, transmit, and expand knowledge. Effective teaching imparts knowledge and*

*encourages the intellectual development of both student and teacher. Quality research supports the educational program by introducing students to the challenge and excitement of original discovery, and is a source of the knowledge and understanding needed for a better society. The university recognizes its special responsibility to the citizens of Virginia through public and community service to the Commonwealth as well as to national and international communities. Teaching, research, and public service are all integral parts of the mission of William & Mary.*

In fulfilling its mission, William & Mary adopts the following specific goals:

- to attract outstanding students from diverse backgrounds;
- to develop a diverse faculty which is nationally and internationally recognized for excellence in both teaching and research;
- to provide a challenging undergraduate program with a liberal arts and sciences curriculum that encourages creativity, independent thought, intellectual depth, breadth, and curiosity;
- to offer high quality graduate and professional programs that prepare students for intellectual, professional, and public leadership;
- to use the scholarship and skills of its faculty and students to further human knowledge and understanding, and to address specific problems confronting the Commonwealth of Virginia, the nation, and the world; and
- to instill in its students an appreciation for the human condition, a concern for the public well-being, and a life-long commitment to learning.

*Note: There are no planned changes in the university's mission statement for the planning period FY18 through FY24.*

## **B. 2018-2024 STRATEGIES**

*The following narratives support the various strategies included in the university's academic and financial plan.*

### **Priority 1—William & Mary Promise (mitigate impact of tuition and fee increases on low- and middle-income students and their families, while continuing its “public ivy” education)**

William & Mary continues to implement the “The William & Mary Promise,” which was approved by the Board of Visitors on April 19, 2013. The Promise created an operating model that provides vitally needed resources to secure the future of Virginia’s distinctive “public ivy” while markedly enhancing predictability, affordability and access for Virginia students. Intended to improve **predictability** in tuition through a four-year tuition guarantee, **affordability** by increasing the university’s investment in need-based financial aid and reduced assumptions about student use of loans, and **accessibility** by providing additional slots for in-state undergraduates, the Promise



and the six-year plan continue the university's investment in need-based student financial aid, increasing the availability of grant funds in lieu of loans, thereby reducing student debt.

Intended to support both low- and middle-income families, the definition of "middle income" used in the William & Mary Promise encompasses more than 70% of Virginia households and reflects the recommendation of the Higher Education Advisory Committee established under TJ21. As adopted by the General Assembly, TJ21 stressed the need to improve middle-income affordability and directed the Higher Education Advisory Committee to provide a definition of the target group. The Committee did so, defining "middle income" as extending to 400% of the federal "poverty" definition, or to roughly \$100,000 in annual income for a family of four with two children.

The results have been noteworthy. Since the William & Mary Promise was adopted in 2013, the average "net price" for Virginia families making less than \$75,000 has dropped more than 20 percent, and the university consistently ranks as having one of the lowest net price averages for in-state students among public institutions nationally. Among public universities in Virginia, the university offers among the lowest net price for in-state students from families with incomes of \$75,000 or less. Further, William & Mary is the only public university in Virginia that has replaced all loans with grants for in-state students with family incomes under \$40,000.

For the 2017-2018 academic year, the incoming class was notable. Not only was the Fall 2017 freshmen class the largest in William & Mary's history – with a total of 1,534 students – it included the largest number of in-state freshmen ever at 998 students. The Promise had a significant impact on the university's ability to attract in-state freshmen, with the university bringing in its most socio-economically diverse incoming class in history. In total, the combined in-state and out-of-state figures for Pell-eligible freshmen increased by 18.6% over the prior year, and when looking at all incoming students – both freshmen and transfers – the increase in Pell-eligible students was up over 20% for the year and up 30% over three years prior. In addition, the Fall 2017 incoming class included an 11% increase in first-generation college students over the prior year.

Recognizing the importance of ensuring that William & Mary remains an affordable option for low- and middle-income students, the university continues to balance the need for incremental financial aid with other priority initiatives given available revenues. Since inception of the Promise, William & Mary historically has increased its allocation of nongeneral funds to support need-based, in-state undergraduate financial aid between \$1.6 million and \$2.4 million. For FY18, the university increased need-based undergraduate aid by \$5.8 million or \$3.5 million more than originally budgeted. The incremental support was the result not only of the increased socio-economic diversity of the incoming class, but changes in the federal financial aid application process and calculations of need. The plan's increase for FY19 reflects an adjustment to base

funding to fully absorb FY18 actual costs as well as incremental funding of approximately \$4.0 million for new aid-eligible students this year. For FY20 and beyond, the university expects annual increases in financial aid as a result of the Promise to hover around \$4 million as William & Mary continues to recruit highly qualified, low- and middle-income Virginians.

**Priority 2—Increase Faculty Salaries**

In addition to promoting access and affordability, the Promise's financial model has allowed W&M to put significant resources into its faculty and staff. Prior to the Promise, average salaries for teaching and research faculty at William & Mary lagged behind its peer institutions by more than 20%. Since the inception of the Promise, the university has increased faculty salaries 4.4% per year on average, which has helped to close the gap. Given the progress W&M has made and the increased need for in-state, undergraduate financial aid in FY18 and FY19, the FY19 operating budget does not include salary increases, as shown in the updated six-year plan. The university anticipates a two-percent across-the-board increase for FY20 as directed by the 2018-2020 Appropriation Act.

**Priority 3—Provide Competitive Staff Salaries**

As with faculty, the Board of Visitors has emphasized the need to increase staff salaries to a competitive, market-based level since the inception of the Promise. Between FY13 and FY18, salaries for administrative and professional faculty and university (operational) staff have increased, on average, 3% with classified staff salaries increasing by an estimated 1.5% as authorized by the state. The revised six-year plan includes no salary increase for FY19, consistent with the Governor and General Assembly's actions for state employees. For FY20, the revised plan includes a 2% across-the-board increase for administrative and professional faculty and all (classified and operational) staff. The plan also anticipates an additional 2% merit increase for classified staff based on the 2018-2020 Appropriation Act.

**Priority 4— New Undergraduate Curriculum**

Funding provided in FY19 as part of this six-year plan will provide the last incremental increase to support the full adoption of the university's new curriculum. First adopted with the incoming class in the Fall 2015, the curriculum reflects William & Mary's new general education requirements, which continue its commitment to a liberal arts education while providing the skills necessary to succeed in the 21<sup>st</sup>-century workforce.

**Priority 5— Degree Production in Data Science and Technology, Science and Engineering, Healthcare, and Education.**

The 2018-2020 Appropriation Act provides \$1.2 million in state general fund (GF) support in FY20 to increase the production of degrees in high demand fields, including Engineering and Design. The Provost has begun working with the university's deans to ensure that, once available, these funds are used to leverage and enhance our existing programs to meet the degree targets

outlined in the Appropriation Act. In addition, the university will invest at least \$267,500 of institutional resources in FY20 to continue the planned expansion of its Engineering and Design Initiative – an essential component of degree production in these areas.

The Engineering and Design Initiative exposes students to the tools, programs, and methods used in traditional engineering and design degree programs and expects them to become familiar with “design thinking” so that they can work comfortably in design studios or entrepreneurial incubators across a broad array of industries. The programs are designed so that students can identify the essence of important problems, parse the tasks and workloads associated with solutions whether working alone or in teams, design those solutions using the latest computer-aided tools, and render those designs into working material objects using the latest methods, in labs, shops, studios, or maker-spaces around our campus.

Once relegated to the information technology field, “big data” has become increasingly important in a vast array of industries. The Data Sciences Minor, which was launched in Fall 2017, has already shown the level of student interest in these programs with 19 students declaring minors in the first year. The Engineering, Physics, and Applied Sciences curriculum– adopted as a track within the Physics major, effective in Fall 2018 – blends key elements of existing physics and applied sciences curricula with a focus on team-based, experiential problem-solving.

Although the targets set out in the Appropriation Act are ambitious given the short ramp-up time, William & Mary anticipates that these investments will result in more degrees being awarded in Data Science and Technology, Science and Engineering and Education. Further, the university continues to work on developing long-term, sustainable relationships with industry leaders who can partner with William & Mary in ways that will meaningfully accelerate programs in other key STEM areas essential to the growth of the Commonwealth’s economy.

#### **Priority 6— Expand eLearning**

The university has continued to expand both its online course offerings and programs. At the program level, the School of Business has been most aggressive with the launch of the Online Master of Business Administration (OMBA) in Fall 2015 and the planned online launch of the new master’s degree in Business Analytics (MSBA) in Fall 2018. In Summer 2017, the School of Business also started a hybrid program for undergraduate business minors that includes an online component. In addition, the School of Education has an existing online presence with its Executive Doctorate of Education (Ed.D.) program and in Spring 2018 started an online master’s program in counselling. Although not yet offering any degree programs, Arts and Sciences now offers a number of online summer term courses with enrollment in these programs having grown from a student headcount of 183 in Summer 2016 to 407 in Summer 2018 – an increase of 122%. Finally, in Spring 2018, the Law School established an online certificate in Military and Veterans Health, Policy and Advocacy. The university continues to explore new programs across all of its

academic units to the extent online delivery can meet student demand effectively. The six-year plan provides funding to expand our existing infrastructure, which will allow us to develop our online offerings more fully.

#### **Priority 7 – RBC Promise Scholars**

The RBC-W&M Promise Scholars program is a new initiative that will include the teaching of William & Mary courses at Richard Bland, scholarship funds, guaranteed housing, peer-to-peer support, and mentorship to high-achieving, low-income RBC students who have committed to transferring to William & Mary.

In spring 2018, Richard Bland College conducted a selective process to identify the first cohort of 10 honors-caliber, first-year, in-state students who are Pell grant recipients and committed to attending William & Mary. Beginning in Fall 2018, these students will be designated as RBC-W&M Promise Scholars who will be provisionally admitted to William & Mary for their third and fourth years, pending successful completion of an associate's degree and meeting minimum GPA requirements as per the existing articulation agreement.

Promise Scholars will receive a \$2,000 merit scholarship from William & Mary in their second year at Richard Bland and will be guaranteed housing designated for Promise Scholars. This community of peers will share their academic aspirations and accompany one another to Williamsburg for their upper-class years. Beginning in Fall 2019, Richard Bland also will begin awarding a new scholarship of the same amount to first-year students selected for the program.

William & Mary has selected two faculty members as inaugural Promise Fellows who will go to Petersburg to teach a general education course, giving Promise Scholars the opportunity to experience William & Mary classes while at Richard Bland. Beginning in the 2018-19 academic year, each faculty member will travel twice weekly to Richard Bland to teach William & Mary's signature COLL 100 and COLL 150 classes. These courses are required for all traditional William & Mary freshmen. Students in COLL 100 courses investigate the significant concepts, beliefs and creative visions, theories and discoveries that have shaped understanding of the world. They become more adept at presenting and defending ideas in ways that go beyond writing. Students in COLL 150 courses learn methods of scholarly research and practice and strengthen writing skills.

Once the scholars transfer to William & Mary, they will be guaranteed on-campus housing their junior year. Additionally, they will receive annual \$3,500 scholarships to offset student loans during their last two years. These scholarships will be in addition to any financial aid for which the students qualify, which will equate to a no-loan, all-grant financial aid package, enabling these students to finish their degrees at William & Mary without student debt.

**Priority 8 – Improve Student Services**

Recent and continuing enrollment growth, combined with William & Mary's focus on financial aid and enhancing the student experience have contributed to the need for additional resources to support the financial aid office and student affairs activities.

**Priority 9 — Increase Academic Support**

The Mason School of Business has instituted a number of new programs including the Online MBA and MSBA mentioned in eLearning above over the past couple of years. The enrollment at the Mason School continues to grow as these programs are still introducing new cohorts. This investment will provide additional academic support within the Mason School to help meet growing student demand.

**Priority 10 – Creative Adaption Program**

This plan continues to encourage and support creative adaptation across the academic enterprise using both incremental and reallocated funds. As the scale of projects increases additional investment may be required to fully implement pilot projects. A more detailed discussion of creative adaptation and projects recently supported follows in Section D – Evaluation of Prior Six-Year Plan.

**Priority 11—Support Base Operations and Continue Business Innovation**

Base Operations provides funding to support essential services in selected areas, including academic support, student services, administrative functions, and plant operations as well as incremental funding needed to support the nongeneral fund share of fringe benefit increases. Not reflected in the revised six-year plan is the new "surcharge" established as part of the 2018-2020 Appropriation Act for university employees hired on or after January 1, 2014 who are participating in the university's optional retirement plan (Item 464, Paragraph O). William & Mary is awaiting guidance from the Virginia Retirement System as to how this surcharge will be assessed, but based on preliminary discussions the impact is anticipated to be significant and on-going.

Given that many of the cost escalations in this area are unavoidable or outside of the university's control, William & Mary attempts, to the extent possible, to identify incremental new dollars through internal *reallocations* as part of on-going efforts to reprioritize existing dollars through Business Innovation. The Business Innovation project, launched as part of the William & Mary Promise and led by the Provost and the Vice President for Strategic Initiatives, develops and implements plans for more efficient business processes and revenue generating activities in order to reallocate dollars to support the university's highest priority needs. The university will continue to implement recommendations made by its outside consultant (organizational structure, business processes, and operating efficiencies) while identifying additional opportunities through an internal evaluation process.

**Priority 12 - Whole of Government**

In 2015, Virginia's Secretary of Veterans Affairs commissioned a report, "Growing the Military Mission in the Commonwealth of Virginia", which called for the creation of a "Whole of Government" Center of Excellence (COE) at William & Mary. The report envisioned this effort as the foundation of what could become the Harvard Kennedy School of the South, bringing a focus to issues particularly of interest to the military. The COE would bring to bear the best of William & Mary's academic efforts in public policy, law, business, and other areas and build on strong connection to the military and its facilities in the region. This effort, in part, would help the military recruit, retain and develop the next generation of military and civilian talent in defense of our nation. With support from the Secretary's office, the Hampton Roads Military and Federal Facilities Alliance (HRMFFA) and the reallocation of university funding, William & Mary has begun to implement the report's call to action. Faster than many predicted, William & Mary began an on-campus track in its Master of Public Policy (M.P.P.) program in Fall 2017. Enrollments were lower than anticipated, however, due largely to the program's two-year, full-time, on-campus curriculum. The 2018-2020 Appropriation Act includes funding in FY20 for W&M to develop the first-year curriculum online, which will reduce the on-campus requirements for the program to one year. Once implemented, W&M anticipates that the online, first-year curriculum will also increase interest for potential students in other M.P.P. tracks who cannot currently commit to a two-year, full-time, on-campus program.

**Priority 13 - Counseling Veterans and Their Families:**

The 2018-2020 Appropriation Act includes funding for William & Mary to develop a veterans and military concentration in its Master's in Counseling program at the School of Education and to create a certificate program for those already certified as counselors but who want to work specifically with military members, veterans and their families.

**C. FINANCIAL AID**

Continuing the university's commitment under the Promise (see narrative under Priority 1) to ensure that a William & Mary education remains affordable for low- and middle-income Virginia families, this six-year plan includes \$5.5 million in FY19 and a cumulative \$9.2 million in FY20 from institutional resources to support in-state, undergraduate, need-based financial aid.

**D. EVALUATION OF PREVIOUS SIX-YEAR PLAN**

To the extent that funds were available, the 2016-18 biennia saw implementation of six-year plans submitted under the TJ21 legislation. While many of the elements of those initial plans continue in this current submission, highlights of progress made on prior strategies include the following:

- **William & Mary Promise**— As described above, the “The William & Mary Promise” established an operating model that provides vitally needed resources to secure its future while markedly enhancing predictability, affordability and access for Virginia students. Elements of the Promise include:

- **Predictability through a Four-year Tuition Guarantee:** The Promise provides Virginia families with financial predictability through a commitment that tuition will remain constant through all four years of the students’ undergraduate study. Since its inception in Fall 2013, entering Virginia students and their families have known exactly what their tuition would be for all four years at William & Mary, with assurance that tuition would not rise year to year.
- **Affordability for Middle-Income Families:** As noted above, the Promise reduces “net tuition” paid by middle-income families, as defined by the state’s Higher Education Advisory Committee (HEAC). Based on FY15 data, average net price for families earning \$30,000 or less was \$4,046. For families earning between \$30,000 and \$48,000, average net price was \$4,997. For those earning between \$48,000 and \$75,000, average net price was \$10,982. Among families earning at least \$75,001 but less than \$110,000, average net price remained flat during this time period despite tuition increases implemented under the Promise.
- **Affordability by Reducing Debt for William & Mary Graduates:** The Promise reduces the loan burden for middle-income in-state undergraduate students who have demonstrated financial need. The William & Mary Promise lowers the maximum amount of loans required to meet full need for an in-state financial aid package by 36% (\$2,000 annually) for families with an income between \$40,000 and \$60,000, and by 18% (\$1,000 annually) for all other families with demonstrated financial need. Students from Virginia families with a household income of less than \$40,000 continue to receive financial aid that covers 100% of their need with grants. William & Mary is the only public university in Virginia to have replaced all loans with grants for in-state students with need whose families earn \$40,000 or less annually.

Overall, only 38% of William & Mary graduates carry debt, a percentage well below that of other public universities in Virginia or across the nation. They also borrow less than the state or national averages. And, William & Mary graduates pay back their student loans at far higher rates with less than 1% of William & Mary borrowers defaulting on their student loans.

- **Increased Accessibility for Virginia Students:** The Promise provided for 150 additional in-state undergraduate students to be enrolled at William & Mary over four years. The university's enrollment projections demonstrate that they have met this commitment. This growth is in addition to a previous 2011 commitment to increase overall undergraduate enrollment by 150 in-state undergraduate slots.
- **Faculty Salaries**—Supplementing bonus and base salary funding provided by the Commonwealth, the Board of Visitors authorized merit-based increases to base salary for faculty averaging 2% in FY13, 6% in FY14, 5.5% in FY15, 4.5% in FY16 and 3% in FY17. Although William & Mary lost some ground in the last year relative to peers, the collective actions have helped the university to continue moving towards the Commonwealth's 60<sup>th</sup> percentile goal (peer group based).
- **Undergraduate Enrollment Growth**—By Fall 2014, the university met its 2011 commitment to the Commonwealth to grow in-state undergraduate enrollment by 150 over four years. The university met its growth goals in the 2016-18 biennium, using funds dedicated to maintaining the quality of education while growing the student population to a sustainable size.
- **New Undergraduate Curriculum** — William & Mary's new general education College Curriculum (COLL) constitutes a continued commitment to the liberal arts mission of the College while providing the skills necessary to succeed in the 21<sup>st</sup> century workforce. The COLL curriculum integrates the study of substantive knowledge with inquiry-based learning and the opportunity to apply new knowledge actively through individual research projects conducted under faculty supervision. It spans all four years, with the first and fourth year tipped towards critical thinking and inquiry, while the second year favors subject-matter distribution and the third year expands global and cross-cultural knowledge and experience. It continues to emphasize writing and communication as it prepares graduates to become agile thinkers who can communicate persuasively and collaborate productively. William & Mary maintains required proficiency in digital literacy (to be fulfilled with an online course) and a foreign language and an added mathematics proficiency. The university committed significant resources over the biennia to support the faculty and resources needed to implement this new curriculum.
- **Engineering and Design Initiative** – As described above, the Engineering and Design Initiative is intended to bring tools, programs and methods traditionally employed in engineering and design programs to students in a way that allows them to analyze problems and develop solutions with the critical thinking skills inherent in a liberal arts education. William & Mary launched this initiative in FY17 with initial funding to stimulate activity across disciplines at William & Mary. The initial investment has helped to create



makerspaces for faculty and students to collaborate and share resources and knowledge and aided the establishment of a minor in Data Science and a major track within Physics in Engineering Physics and Applied Design. These spaces provide the tools needed to advance engineering and design-based projects.

- **eLearning Platform**—Using state and institutional funds, the university established a baseline eLearning platform supporting blended and online instruction especially in professional schools and graduate programs. William & Mary have also identified high-quality digital educational resources that can be used in courses and continue to explore opportunities to provide certificates, continuing education, and other online activities and programming.
- **Academic Program Initiatives and Improving Student Services**—Funding in these areas during the 2016-18 biennium helped to provide resources to support the academic mission of the university as well as improve the student experience. Specifically within student services, resources were directed to career services to address growing student demand. In addition, funding supported systems that have not kept up with demand due to limited resources.
- **Creative Adaptation Fund** – The university continues to set aside \$150, 000 annually to engage and unleash the creative energy in academic areas. The program encourages the development of innovative adaptations that improve the quality of educational programs either directly or indirectly by reducing costs or generating new revenues that can be reinvested in people and programs. This fund, designated for academic units, complements an on-going effort to improve university business practices through innovation and efficiency actions.

FY17 and FY18 projects include:

1. **Innovation Lab Summer Initiative**—Develops the content resources and implementation plan to offer a series of institutes and workshops in the Professional Development Center in the School of Education to equip K-12 school leaders with the tools and processes to foster innovation in teaching and learning. Offers multiple week-long, small group institutes and a larger conference format event. Based on similar institutes and other topics designed for K-12 participants. Developing these resources will allow the School to generate additional revenue.
2. **BUAD 443 - Entrepreneurial Ventures Redesign - Blended Learning**—This course fulfills a requirement for the undergraduate Bachelor of Business Administration

concentration in entrepreneurship and provides students with an introduction to the essential concepts in entrepreneurship. A course refresh was needed to build on the success of the in-person course format by pairing rigorous online content with rich in-person entrepreneurial ecosystem experiences. This effort allows W&M to expose the students to the growing entrepreneurial ecosystem, broaden the reach of course content by using an online format, expand exposure of entrepreneurship to non-business school students, and generate revenues through certificate programs open to audiences beyond the student population.

3. **Online Master's Degree Program in Counseling**—In collaboration with Everspring, our third-party partner in online programs, the counseling faculty in the School of Education will launch an online master's degree program with emphases in school counseling, marriage and family counseling, and clinical mental health counseling. The Creative Adaptation Fund will provide support for the development of the initial four courses of the program. There are few accredited online master's degree programs in counseling and this represents an opportunity to grow W&M's program.
4. **Well-Aligned Classes for a Well-Rounded Education in the Life Sciences and Computer Science**—This project seeks to provide an improved learning experience for students that scales with the large student populations seen in both disciplines. It also addresses the need for biology majors to be confident and competent in the application of computational methods and for computer science majors to learn how abstract computational methods apply to real-world challenges in the life sciences. eLearning techniques will be employed and carefully evaluated to provide a high-quality learning experience for courses that cater to hundreds of students each semester. Two new courses will be developed that introduce life science students to basic computer science and its power to solve a wide range of problems in biology and medicine. In addition, traditional wet lab exercises throughout the introductory biology curriculum will be replaced with a series of computer science exercises that address important issues in contemporary computational biology.
5. **Expanding Online Learning Modules for the Principles of Economics Course**—The Principles of Economics courses are large courses that are required for majors in Economics, Business, International Relations, and Public Policy. In 2012, Principles was redesigned by developing 17 online learning modules that substitute for lectures. The project was successful, but it is time to revise the modules, add new ones and write an instructor's manual to help others use the modules which will help meet high demand and allow enrollments to grow.

6. **Creation of a Dual-Purpose GIS Certificate Program to Support Expansion of the Center for Geospatial Analysis (CGA)**—Almost every arts and sciences discipline has been heavily influenced, if not wholly transformed, by the adoption of geospatial research and analysis techniques. Whether it be the politics of drawing congressional district boundaries or the geographical spread of dialects, folklore motifs, or invasive plant species, all employ similar techniques for gathering and analyzing spatially referenced information. This project focused on the development of a dual-purpose Geographic Information Systems (GIS) Certificate Program run by CGA. The program serves the needs of existing students by adding a GIS certificate option and by bringing post-baccalaureate students to campus for an intensive on-year program in GIS.
- **Fringe Benefits and State Funding Reduction**—The university allocated funds to support its share of significant increases in health insurance costs. While our original plan assumed some growth in fringe benefit costs, actual increases significantly exceeded estimates. At the same time, in FY18, the university is absorbing a 5% base reduction in state funding.
  - **Business Innovation**—A less publicized aspect of the William & Mary Promise was a commitment to improved efficiency and effectiveness across both academic and administrative units. The university continues to look for ways to reallocate funds through its business innovation efforts. William & Mary has a standing committee of senior leadership who look for opportunities across campus with an eye towards the best usage of our limited resources. Since FY14, the university has reallocated over \$4 million in recurring funds that have been redirected to support the highest priority needs. In addition to the \$4 million, the Provost asked deans to reallocate 5% of their budgets to higher priority items including salaries over this same time period.

#### **E. TUITION RATE INCREASES**

This original six-year plan included a 6.4% increase in tuition and mandatory E&G fees for incoming, in-state undergraduate students in FY19 and FY20 under the William & Mary Promise. As described above, under the Promise, in-state, undergraduate tuition is set for each cohort of incoming Virginia students and does not increase during their four years at William & Mary. Recognizing the incremental investment the state has planned for William & Mary in FY20, the university has updated the plan to reduce the proposed tuition increase for in-state students in FY20 to 5.4% over the current freshmen class. Given the four-year guarantee, this increase equates to less than a 1.4% annual increase if compounded over the four year time period. By lowering tuition, the university is able to leverage the state's additional support and reduce the impact on students and their families while still ensuring that the university has sufficient resources to make strategic investments in high priority programs like its Engineering & Design initiative and data science programs. As shown in the plan, the university plans to invest an

incremental \$267,500 in institutional resources along with the \$1.2 million provided by the state in general fund support to increase the production of degrees in high demand fields.

The proposed six-year plan also includes a 3.4% increase in tuition and mandatory E&G fees for out-of-state undergraduate students.

For graduate students, William & Mary has assumed a 4.4% increase for both in-state and out-of-state. In-state law student tuition assumes increases of 2.6% in FY19 and 2.3% in FY20, with out-of-state being 1.9% and 0.3% respectively.

The revised six-year plan also includes a 5.3% increase in mandatory non-E&G fees in FY19 and a 4.0% increase in FY20. Increases for graduate and law students range between 6.0% and 6.2% in FY19, with an expected increase of 4.0% for both student types in FY20. The FY19 increases were slightly higher than originally projected for the six-year plan due to debt service requirements for capital projects, including the opening of the new Integrated Wellness Center, limited increases in staffing for new programs or activities, contractual obligations, and increases in the indirect cost recovery rate to E&G programs. All proposed fee increases are consistent with the new provisions under Section 4-2.01 b) 8. after accounting for debt service, student health services, and required changes in compensation. Specific to the FY19 actions, the opening of the new Integrated Wellness Center in September has been accompanied not only with additional debt service which is supported by student fees, but also additional student health programming. In FY20, the proposed fee increase anticipates mandated salary and fringe benefit actions, debt service needs, and a full year of program support for new student health services.

As indicated above, current tuition and fees do not take into account the potential impact of the new "surcharge" established as part of the 2018-2020 Appropriation Act for university employees hired on or after January 1, 2014 who are participating in the university's optional retirement plan (Item 464, Paragraph O). W&M is in on-going discussions with the Virginia Retirement System and legislative staff to determine how this surcharge will be assessed. Implementation of that surcharge may impact future tuition and fee rates.

#### **F. CONTRIBUTIONS TO ECONOMIC DEVELOPMENT**

Employing more than 2,700 faculty and staff, and enrolling more than 8,500 students, William & Mary is a strong contributor to the state's economy. According to a recent Weldon-Cooper study conducted by the Virginia Business Higher Education Council (VBHEC), the total economic contribution resulting from William & Mary operations during FY15 was \$955 million in GDP and the total state revenue contribution was \$101 million. The university also contributes to economic development efforts through the following groups and organizations:

- University Based Economic Development officers (UBED)
- Virginia Economic Developers Association (VEDA)
- Greater Williamsburg Partnership
- Launchpad, Greater Williamsburg Regional Business Incubator
- Historic Triangle Collaborative (HTC)
- Southeastern Universities Research Association (SURA)

William & Mary often serves as a leader and convener of programs benefiting the region and state. Each year William & Mary students volunteer for more than 245,000 hours of service. Calculated at minimum wage that amounts to nearly \$2 million in contributed labor in areas of need, often financially distressed communities. William & Mary's School of Education offers graduate courses to provide in-depth training to teachers in preparation for serving as math specialists in K-5 schools. These school divisions are rural, have been cited for deficiencies in mathematics by the Virginia Department of Education, and are characterized as low socio-economic status areas. Further, as a university recognized as being military friendly, William & Mary not only encourages enrollment by veterans but also provides assistance to them through the Puller Veterans Benefits Clinic at the law school.

William & Mary's Mason School of Business is home to the Alan B. Miller Entrepreneurship Center. The Center exists to educate, inspire, and support individuals in developing the skills and mindset of an entrepreneur. In its Field Consultancy programs, elected teams composed of second-year MBA students, third-year law students, and undergraduates work as consultants charged with identifying, researching and proposing a solution for a real business problem faced by their client organization. Each project team works under the guidance of a faculty member and Executive Partners.

William & Mary graduates in the Class of 2017 are working in 58 different industries, including high tech/information technology, consulting, education, financial services, government, healthcare, law, technology and many others. Those not joining the workforce enrolled in 132 distinct graduate programs. Through them, the more than 100 Executives in Residence collaborating with the Mason School of Business, and 10,810 employers actively participating in Tribe Careers, William & Mary has a broad reach that makes it an active, engaged partner in improving the economy of the Commonwealth.

#### **G. KEY CAPITAL OUTLAY PROJECTS**

Over the last two years, the Governor and General Assembly have generously provided approval and funding for William & Mary's most pressing needs capital needs.

Recognizing existing authorizations, the Six-Year Plan as submitted including operating funds for the Fine & Performing Arts Complex (phases 1 & 2) and the West Utilities Plant. Planning is well underway for both of the projects and we expect them to be completed during the 2018-2020 biennium.

The university's Six-Year Capital Plan as approved by the Board of Visitors includes the following projects which will require operating support in the out-years:

- **Construct: Integrated Science Center 4** **\$74,916,000 GF**  
Supports construction of a 124,000 GSF facility that will house Mathematics, Computational Science, Kinesiology, and Engineering and Design. The new facility will be located on the site of the recently demolished Millington Hall, adjacent and tied in to the Integrated Science Center, requiring the renovation of approximately 10,000 GSF. The 2016 General Assembly added the project to the Commonwealth's long-term capital plan, and authorized planning, using university funds if available.
- **Construct: Fine & Performing Arts Complex, Phase 3** **\$39,080,000 GF**  
As noted above, the Commonwealth has previously provided funding support for Fine and Performing Arts (phases 1 & 2). This request supports phase 3 of the "Arts Quarter", which is the improvement of Andrews Hall for Fine Arts and Art History, and the construction of additional space to handle the industrial arts, such as sculpture.
- **Construct: Sadler Center, West Addition** **\$37,742,000 NGF**  
Supports 76,000 GSF addition to the Sadler Center to house many of the Student Affairs functions currently housed in the old Campus Center. This addition is in accordance with the university's 2015 Campus Master Plan. Preplanning for this project has been completed and the project authorized by the 2018 General Assembly.

The Six-Year Capital Plan also includes two relatively small, high priority projects that would require funding and authorization from the Governor and General Assembly. Those projects include:

- **Construct: Population Lab** **\$8,484,000 GF**  
Supports the demolition and reconstruction of a new animal laboratory to replace the heavily-used lab and aviary adjacent to the Tennis Center. The project will meet national standards, improving university standing for National Science Foundation grants. This facility supports primarily biology and psychology curriculum and research.

- Improve: Swem Library** **\$10,715,000 GF**  
 Provides renovation of 26,000 GSF on the ground level of Swem Library in support of:
  - 1) the "Studio for Teaching and Research" including space for the Center for Liberal Arts;
  - 2) the Botetourt Gallery and theater; 3) a new home for "Content Services," including Digital Collections and Inter-Library Loans; and 4) Omohundro research space.

For the 2020-22 and 2022-24 biennia, the university has several major academic and student services buildings that are in need of repair or replacement. A brief description of those projects is included below:

- Renovate: Ewell Hall** **\$21,565,000 GF**  
 The former home to Music, and the original Phi Beta Kappa Hall, much of Ewell will be vacated upon the completion of the new music facility (Fine Arts Phase 1) in summer of 2020. Preplanning to create a general classroom "swing-space" building would be an appropriate first step in design.
- Renovate: Adair Hall** **\$20,744,000 NGF**  
 With the move of Kinesiology to ISC 4, Adair becomes a support facility for Rec Sports and Athletics, per the 2015 Campus Master Plan. This renovation will restore and rehabilitate the locker rooms, restore the main gym, and replace obsolete building systems with modern systems, including fire safety.
- Construct: Jamestown Place** **\$46,666,000 GF**  
 Upon completion of the Sadler West Addition, and in accordance with the 2015 Campus Master Plan, a new facility or facilities, "Jamestown Place," will replace the dilapidated Campus Center, Atrium, and Trinkle Hall to create a new mixed use and administrative edge along Jamestown Road.
- Improve Kaplan Arena** **\$34,864,000 NGF**  
 Supports total building systems renovation, fire safety and ADA compliance.
- Renovate: Dormitories** **\$14,900,000 NGF**  
 Continues the university's third decade of investment in student residence hall improvements. Supports renovation projects for various dormitories, dependent on priority, urgency, and debt (fee) capacity. Next on the priority list are Green & Gold Village, and Botetourt Complex.

## H. RESTRUCTURING

Since its implementation, restructuring has provided significant benefits to William & Mary, other Virginia institutions of higher education, and the Commonwealth. The university continues to support the goals of restructuring and encourage exploration of additional areas where operational flexibility can better serve both the institutions and the state.

With more than a decade of experience under restructuring, William & Mary has identified at least five key areas where additional flexibility would improve business operations and benefit both the institution and the Commonwealth.

1. **Procurement.** Many of the procurement practices included within the management agreements pre-dated the state's small purchase charge program, which has significantly influenced how and what William & Mary is purchasing. Similarly, performance standards and expectations around spending patterns and practices are still predicated on best practices in the late 1990s and early 2000s, and no longer reflect current practice. Since that time, higher education institutions have become more sophisticated in managing their procurement spend and in identifying opportunities for strategic sourcing. Revisiting the assumptions, standards, and authorizations established under restructuring would be beneficial to ensuring that higher education institutions' procurement operations keep pace with industry best practices and that scarce resources are managed effectively. In addition, expanding the authority for all institutions – including Richard Bland College and other Tier I institutions – to use VASCUPP (Virginia Association of College and University Procurement Personnel) contracts without additional approval from the Department of General Services (DGS) would create additional efficiencies for those institutions as well as within DGS.
2. **Employee Compensation.** The flexibility provided to William & Mary and other Tier III institutions to provide salary increases with institutional funds has been essential to the university's success over the last decade. William & Mary would welcome added flexibility to offer employees additional benefits options, including allowing both operational and classified employees the ability to participate in the university's optional retirement plan.
3. **Enrollment Management.** State policy requires the university to maintain its ratio of in-state and out-of-state undergraduate students at current levels. Although William & Mary remains committed to serving Virginia students, the university would welcome the opportunity, as exists in many states, to increase the number of out-of-state students it serves **while ensuring that the number of in-state students served remains at or above current levels.** The state's requirement to maintain the current ratio between in-state



and out-of-state students restricts the university's ability to manage its enrollment based on market demands and programmatic needs.

4. **Tuition Management.** Given fluctuations in state funding and declining growth in overall state support over the last decade, it is essential to William & Mary's financial health that the Board of Visitors maintains the ability to set tuition and fees for its students. The Board of Visitors is uniquely positioned to understand the institution's operational model, financial needs, and market position relative to peer institutions both within and outside of the Commonwealth.
5. **Carryforward of E&G Funds.** The university's ability to carry forward E&G funds from year to year is essential given the uncertainties of state funding and the volatility of higher education markets. Institutions must be able to manage funds prudently without fear of penalty if they spend less than budgeted in a given year. With that assurance, institutions can more effectively manage and establish reasonable reserves to ensure they remain financially solvent during economic downturns and do not have to seek additional state support or burden students with additional costs to cover those gaps. New language included under Section 4-1.05c of the Appropriation Act recognizes the importance of this issue as universities seek to improve institutional planning and cost predictability for students and their families.

**WILLIAM & MARY**  
**FY20 OPERATING AND CAPITAL BUDGET AMENDMENTS**

William & Mary has received guidance from the Governor’s Office and the Virginia Department of Planning and Budget (DPB) related to the submission of operating and capital budget amendments to the 2018-2020 Appropriation Act.

As described in his September 14, 2018 memo to state agency heads and presidents of Virginia’s public colleges and universities, Clark Mercer, Chief of Staff, notes that operating budget amendments for new general fund support in the 2018-20 biennium should reflect the Governor’s priorities, which include “...strengthening the foundation of our economy through improved...workforce development.”

Given the Governor’s focus on workforce development and William & Mary’s existing strengths in data science and business analytics, the university plans to submit the following operating budget amendment as described below:

**RECRUIT ADDITIONAL FACULTY TO SUPPORT THE EXPANSION OF PROGRAMS IN DATA SCIENCE AND RELATED ANALYTICS FIELDS**

**Proposed Request:**

| <u>FY19</u> | <u>FY20</u>  |
|-------------|--------------|
| \$ 0 GF     | \$950,000 GF |
| 0.0 FTE     | 5.0 FTE      |

The current Data Science Program at William & Mary provides students with the ability to minor in Data Sciences or to develop a self-designed interdisciplinary major with a focus in the area. Since its inception in Fall 2017, the Data Science Program has already seen significant success with 19 declared minors, and an additional 50 students have declared a self-designed major in Data Science or expressed an interest in doing so. Courses offered in the Data Science program are in high demand with all courses either filled to maximum capacity or over-enrolled each semester. Total numbers of students enrolled in Data Science courses were 190, 291 and 251 in Fall 2017, Spring 2018 and Fall 2018 semesters, respectively.

Over the next decade, the demand for data scientists will outstrip supply as an increasing number of industries move to apply the discipline and rigor of data analytics to solve complex economic and social problems. Building on existing educational and research strength in Data Science and Business Analytics, this request will support the recruitment of 5 additional faculty, a strategic cohort of hires that will permit the development of a major in Data Science with supplemental course offerings and certifications to expand the integration of data science across multiple disciplines.

Similarly, for capital projects, guidance from the Governor’s Office indicated that preference would be given for projects that directly support the Governor’s priorities and “maximize the benefit of the taxpayer dollars by running a smart, efficient, and responsive government.”

The university continues to put forward a request to renovate the ground level of Swem Library to improve the use of currently outdated and inefficient space. With the benefit of additional thinking around the convergence of the future of work, learning, and service, the renovation of Swem Library will provide much needed space to advance the use of technology to enhance teaching and learning. A short summary of the request is provided as follows:

**IMPROVE: SWEM LIBRARY TO ESTABLISH A**  
**CENTER FOR TEACHING EXCELLENCE & LEARNING INNOVATION** **\$10,715,000 GF**

Renovate approximately 27,680 GSF on the ground level of Swem Library to develop a new Teaching and Learning hub that will catalyze innovative teaching across the university, building upon William & Mary’s rich tradition and dedication to exceptional teaching and transformative learning experiences. The new space will be programmed to foster peer-to-peer collaborations across disciplines, scale up best practices, and support faculty in utilizing traditional and next-generation digital resources for improving teaching, enhancing learning outcomes, and advancing scholarship in these areas. In addition, the Center will serve as a university-wide incubator for online learning.

**WHEREAS** the Board of Visitors recognizes the Commonwealth’s interest in supporting workforce development, particularly in the areas of data science and analytics, and

**WHEREAS** the university has clearly established core expertise in these areas with strong student demand for expanded programs, and

**WHEREAS** the Board of Visitors recognizes the importance of ensuring that its facilities are utilized efficiently, effectively, and in a manner that supports the development of leading edge technologies and the use of technology in education and workforce development,

**NOW THEREFORE, BE IT RESOLVED,** That the Board of Visitors approves the administration’s proposed operating and capital budget amendments

**NOW THEREFORE, BE IT FURTHER RESOLVED,** That the Board of Visitors approves annotating the revised Six-Year Plan for 2018-2024 to reflect these high priority items.

**WILLIAM & MARY**  
**CORPORATE RESOLUTION TO TRANSACT BUSINESS AND CONFIRM**  
**AUTHORIZED BUSINESS AGENTS FOR THE COLLEGE OF WILLIAM & MARY**

The *Bylaws* of the Board of Visitors of The College of William & Mary in Virginia clarify the power of certain officers of the College to transact business in the name of the University. At the September 28, 2018 meeting, the *Bylaws* were revised.

Article X, Section B.2. of the revised *Bylaws* states:

Concurrently with the President, the Senior Vice President for Finance and Administration has the authority to transact business in the name of the University, including: (1) the transfer, conversion, endorsement, sale, purchase, assignment, conveyance and delivery of any and all shares of stocks, bonds, debentures, notes, and subscriptions warrants, cash or equivalent assets, and evidence of indebtedness; (2) any and all contracts for the purchase of real estate and other property, or other securities or assets now or hereafter owned by the Board, or bearing any similar designation indicating ownership by the University; (3) agreements setting forth the terms for the acceptance of gifts to the University; (4) any and all contracts for the purchase or rental of professional services, supplies and equipment, including software and hardware; the design and construction of facilities; non-disclosure and confidentiality agreements; real estate and property leases or rental agreements; capital leases; acquisition or conveyance of any other type of property interest, including easements; equipment leases or fixed asset rental agreements; use of University facilities; and (5) any other agreements necessary to carry out and support the operations of the University, with the exception of those particular assignments made to the Provost. The sale of real property requires the approval of the Board and the Commonwealth of Virginia. The Senior Vice President for Finance and Administration has the authority to further delegate such authority; such delegation must be consistent with applicable law and regulations, and subject to guidelines for the exercise thereof.

BE IT RESOLVED, That the following statement of certification will accompany this resolution, requiring signature by the Secretary of the Board of Visitors attesting to its validity and correctness:

I, \_\_\_\_\_, Secretary of the Board of Visitors of The College of William & Mary in Virginia, do hereby certify that the foregoing is a true and correct copy of the Resolution approved by the Board of Visitors of said College at a duly constituted meeting held in the City of Williamsburg, Virginia, on the 28<sup>th</sup> day of September, 2018, at which a quorum was present and acting throughout, and that said resolution appears in the minutes of said meeting, and that the same has not been rescinded or modified and is now in full force and effect. I further certify that said organization is duly organized and existing, and has the power to take the action called for by the foregoing resolution. I further certify that Katherine A. Rowe is President and Samuel E. Jones is Senior Vice President for Finance and Administration of The College of William & Mary in Virginia.

Given under my hand and official seal of The College of William & Mary in Virginia on the \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_, Secretary

VIRGINIA INSTITUTE OF MARINE SCIENCE  
SIX-YEAR PLAN UPDATE

WHEREAS, in response to the Commonwealth's direction that the Virginia Institute of Marine Science (VIMS) prepare a separate Six-Year Plan from the College of William & Mary; and

WHEREAS, consistent with the requirements of the Higher Education Opportunity Act of 2011 (the Act), VIMS developed its 2018-20 Six-Year Plan rooted in the goals set out in its Strategic Plan and the objectives of the Act; and

WHEREAS, this Six-Year Plan was approved by the Board of Visitors of the College of William and Mary in September 2017; and

WHEREAS, the Commonwealth's planning process requires an update to the Six-Year Plan on an annual basis, incorporating funding actions by the Commonwealth as reflected in the FY18 budget approved by each institution's Board of Visitors; and

WHEREAS, VIMS has identified those expenditures necessary to support its research, education, advisory service, and administrative operations, has prioritized those expenditures, and has recommended funding through primarily Commonwealth revenue;

THEREFORE, BE IT RESOLVED, that upon recommendation of the Dean and Director of VIMS and the President of the College, the Board of Visitors of the College of William & Mary approves VIMS' Six-Year Plan Update as outlined in the subsequent pages.

## VIRGINIA INSTITUTE OF MARINE SCIENCE

2017 SIX-YEAR PLAN NARRATIVE**2018 Updates** (*italicized*)**A. INSTITUTIONAL MISSION**

The **Mission** of the Virginia Institute of Marine Science is to seek and broadly communicate knowledge in marine and coastal science to the Commonwealth of Virginia and the nation through research, education, and advisory service.

As a nationally and internationally recognized premier marine science institute, our overarching goals in the **VIMS Vision** are to (1) make seminal advances in understanding marine and coastal systems through research and discovery, (2) translate research findings into practical solutions to complex issues of societal importance, and (3) provide new generations of researchers, educators, problem solvers, and managers with a marine-science education of unsurpassed quality.

**B. STRATEGIES**

**Increase Graduate Financial Aid.** As one of the top producers of marine science graduate-level degrees in the nation, the William & Mary School of Marine Science at VIMS has awarded over 1,000 degrees since VIMS was founded over 75 years ago. Our graduate students provide essential capacity in support of VIMS research programs and advisory services mandated in the *Code of Virginia*. Our alumni successfully compete for jobs in academia, federal and state agencies, K-12 education, non-profits, and marine-related businesses within the private sector. Many have gone on to become leaders in areas such as aquaculture, fisheries management, storm surge modeling, water quality research, and environmental management and restoration approaches for coastal and estuarine environments. Despite the quality and success of the program, we are increasingly concerned that the high cost to our faculty of supporting research-focused graduate students is putting VIMS at a competitive disadvantage and limiting program enrollment below capacity. Increased state graduate financial aid of \$425,000 is vital to program stability and for increasing the competitiveness of VIMS' faculty in winning external grants and contracts by providing matching funds (also known as cost share). We have prioritized this request in order to reflect the very high value of the graduate program to VIMS, the Commonwealth, and the nation.

VIMS faces a challenge unknown at most of our peer institutions in Virginia and across the nation. Without an undergraduate marine science major, William & Mary is unable to provide the needed graduate student support that typically comes from teaching assistantships. This significantly disadvantages our institution relative to most of our peers that have greater need, and thus more opportunities, to engage graduate students in assisting with undergraduate courses. We also do not have the significant endowments of our peer private institutions. Therefore, the bulk of the financial aid provided to SMS students must be derived from competitive external grants and contracts to faculty. VIMS faculty currently provide more than \$2 of non-general funding from external grants and contracts for every \$1 of general funds used to provide tuition and assistantship support to graduate students. While the faculty will

continue to aggressively pursue competitive federal, state, and private grants and contracts to assist in meeting student financial needs, traditional fund sources are virtually saturated, and in many instances, are being reduced. The funding requested is sufficient to cover one year of tuition for an incoming class of 25 students. During this first year, students carry a heavy course load and are unable to contribute to grant-funded research in a meaningful way, and as such, faculty cannot justify expending grant funds on student financial aid. Without Virginia's financial commitment, VIMS will also be far less competitive for recruiting and retaining top-tier faculty who are attracted to VIMS, in part, because of the opportunity to work with talented graduate students.

**Increase Base Operating Support.** *This strategy has now been met. The General Assembly in their 2018 session provided VIMS with \$625,000 in each year of the biennium for operations and maintenance of new facilities coming online.*

**Increase Base Operating Support.** This request supports much needed core base operating funds at the Institute given that the normal formulas the state uses to assess and supply base operating support to higher education institutions do not readily apply to VIMS and, thus, disadvantages the Institute. Specifically this request includes vital support for 1) service contracts for high tech scientific equipment purchased through the Equipment Trust Fund, 2) inflationary increases in general operating expenses, and 3) support for personnel services in support units.

**Utilize Advanced Modeling and Assessment Technologies for Chesapeake Bay Water Quality Improvement.** *This strategy has now been met. The General Assembly in their 2018 session provided VIMS with \$893,753, starting in FY 2020, for water quality improvement work. The funding includes \$406,075 for on-going support, \$84,678 for debt service costs under the Master Equipment Leasing Program (MELP) associated with the modeling and assessment technologies, and \$403,000 for development of the State of the Elizabeth River Scorecard for pollution levels in the Elizabeth River.*

**Utilize Advanced Modeling and Assessment Technologies for Chesapeake Bay Water Quality Improvement.** The need to assess and verify the effectiveness of public fund expenditures to restore water quality in Chesapeake Bay is critically important. Historically, the Commonwealth was largely dependent upon the EPA Chesapeake Bay Program model and monitoring data to assess progress towards meeting Bay water quality goals. In recent years VIMS, in collaboration with DEQ, has employed more advanced water quality modeling and assessment technologies in Virginia's tributaries to support efforts by the state and local governments to meet water quality goals. The EPA has now recognized the value of the higher spatial and temporal resolution provided by these technologies and has indicated their willingness to allow states to adopt a more focused approach towards meeting and assessing water quality goals, potentially resulting in significant savings to local governments and the state. VIMS is uniquely positioned with its expertise, state-of-the-art modeling capabilities, advanced assessment technologies and mandated role as the scientific advisor to the Commonwealth on marine and coastal natural resource issues to provide this critical need. The

proposed program would build on these strengths to further develop and utilize models that more accurately represent conditions in Virginia waters and to couple these models with real-time water quality data to provide a comprehensive, high-resolution view of water quality that far exceeds the spatial extent, temporal coverage, and accuracy of the current monitoring program. Such information would furnish decision makers with the information necessary to make more informed decisions related to Bay restoration and TMDL (Total Maximum Daily Load) implementation.

Advanced water quality assessment can be most effectively achieved with a Commonwealth Chesapeake Bay Observing System comprised of a network of buoys that can remotely obtain water quality data and transmit it to a central location for analysis. This system would expand and integrate VIMS' current technologies to produce a unified, state-of-the-art system. The system would integrate water quality and weather to allow for near real-time responses in support of environmental management with public health and economic consequences, such as harmful algal blooms and fishery impacts, as well as statewide tidal water quality assessments. As an example, Virginia's rapidly growing oyster aquaculture industry would benefit greatly from an advanced water quality assessment and early warnings of harmful algal blooms.

**Monitor Bay Grasses.** Submerged bay grasses are a critical living resource in Chesapeake Bay that supports valuable fish and crab resources. Because bay grasses are dependent on good water quality they are being used as key indicators of water quality improvement in Chesapeake Bay by the Virginia Department of Environmental Quality. VIMS has conducted a bay-wide annual survey of bay grasses since 1987, with considerable support from EPA, NOAA and the state of Maryland. That support has declined in recent years as costs have risen. We are seeking to establish a stable funding base for maintaining the Virginia portion of this valuable survey.

The results of the annual survey are important to the Commonwealth for a number of reasons. (1) Bay grass acreage is embodied in Virginia's water quality standards; (2) the Virginia Secretary of Natural Resources must report annually to various Virginia House and Senate Committees on the status of bay grass abundance from the annual surveys (*Code of Virginia* §2.2-220); (3) bay grass acreage is an important component the blue crab fisheries management plan (*Code of Virginia* §28.2-203.1); (4) bay grass survey maps are used by the Virginia Marine Resources Commission in evaluating aquaculture lease applications; and (5) bay grass acreage is used as a metric for attainment of the restoration goals established by the Chesapeake Bay Program and its partners, including the Commonwealth of Virginia.

VIMS is uniquely qualified to provide this service, not only because of its experience in conducting the surveys, but because it has pioneered restoration techniques for bay grasses that are now used worldwide and is widely recognized for its scientific leadership in bay grass restoration.



**Enhance Chesapeake Bay Environmental Technology.** Natural economic benefits derived from the Chesapeake Bay are estimated to be valued at more than \$100 billion annually, with the Bay supporting many economically important fisheries, including blue crabs, striped bass, and oysters. The Bay waters also enhance coastal property values and support a vital tourist economy, including nature-based recreation industries. However, urbanization and increased fertilizer usage have led to excessive nutrient inputs entering the Bay, negatively affecting the health of the Bay ecosystem and the economic services it provides. For those economically invested in the Chesapeake Bay, there is an urgent need to implement the latest technology-based solutions to address major current and future environmental challenges, including: (1) hypoxia ["dead zones"], (2) water clarity, (3) acidification, and (4) Harmful Algae Blooms [HABs] and pathogens. These challenges facing the Bay are becoming increasingly critical each year, as temperatures rise, storms become more intense, and atmospheric carbon dioxide levels rise.

Fortunately, new technologies are making it feasible to use real-time data to produce short-term spatially extensive forecasts of hypoxia, water clarity, acidification metrics, and harmful algal blooms, resulting in improved decision support products for commercial and recreational anglers, watermen, beach managers, public health agencies, oyster hatcheries, and other shellfish growers. Addressing these Bay-wide challenges through forecasted information requires effective collaboration among business, education and government, and is only possible because of new technological advances in real-time data collection systems. Here we propose to leverage existing VIMS expertise in a novel *Chesapeake Bay Environmental Technology Initiative*, which will include: implementing state-of-the-art models that can ingest real-time Bay data, sensors that can collect and transmit data in real-time to improve forecast accuracy, and a new, targeted mobile platform that will improve stakeholder accessibility of this information. By promoting collaborative technological innovation among researchers, educators, entrepreneurs and government, this proposed initiative addresses multiple policy priorities of *GO Virginia*, including *Innovation, Invention, Improvement and Infrastructure*. In addition, information garnered from this initiative will address Governor McAuliffe's policy priorities by allowing VIMS researchers to better understand how to "protect and improve the health of the Chesapeake Bay", and better "prepare the Commonwealth for the effects of climate change".

**Boost Marine Aquaculture and Fisheries Health.** Virginia is one of the nation's leaders in the aquaculture production of bivalves, particularly oysters and clams. Improvements in disease resistance, genetics, and management have led to major advances in shellfish production in the state. Yet, outbreaks of disease continue to damage economically important and ecologically sensitive marine resources in the Commonwealth and nation. Examples of these diseases include dermo and MSX in oysters, *Hematodinium* in blue crabs, mycobacteriosis in striped bass, morbillivirus in dolphins, and wasting disease in sea stars, to name just a few.

The pathogens responsible for these outbreaks often are not well known, their risks to marine life and risk of spread remain understudied, and their full ecological impacts have been difficult

to assess. To meet the challenge of conserving and improving aquaculture and fisheries industries, we propose an initiative to provide science-based guidance on the development of improved techniques in aquaculture and disease management.

VIMS scientists have considerable expertise working with diseases of marine animals. We aim to leverage this expertise by augmenting training in aquaculture, identifying and liaising with key industry groups, serving as a clearinghouse for information to policy makers, establishing state and regional response protocols against diseases, and developing tools to enhance aquaculture production by mitigating the effects of disease outbreaks in our marine resources. Our goal is to build on existing and emerging aquaculture programs to augment fishery and aquaculture resources in the Commonwealth and Chesapeake Bay region.

Specifically, VIMS will:

- Enhance public outreach in aquaculture, environmental health, and marine animal health;
- Provide additional pathology services for industry and regulators;
- Establish surveillance protocols to facilitate identification, assessment, and prediction of emerging pathogens;
- Develop modeling tools to quantify epidemiological and ecological impacts of disease;
- Implement Response Planning Workshops to mitigate diseases in natural and cultured marine resources;
- Enhance technology transfer and training with the aquaculture industry; and
- Establish regular reporting to the VMRC and other agencies on status of new developments.

These objectives will build on VIMS' strengths in aquaculture and environmental sciences to provide cutting-edge science in support of efforts by resource managers, public health officials and industry to manage around marine diseases. Specific examples follow.

1. Shellfish aquaculture is a rapidly expanding economic sector that relies heavily on certification that seed shipped regionally and nationally is pathogen-free. We work closely with industry in this certification process, but the optimization and validation of newer molecular protocols is needed for rapid assessments, surveillance, and quality assurance. New advances in technology such as genetic manipulation, sample processing and automation, and sensor development will greatly facilitate this work.
2. Blue crab stocks fluctuate markedly due to fishing, predation, poor settlement, and disease; yet the latter (disease) remains understudied, even though several pathogens damage juvenile crabs in seasonal outbreaks.
3. Striped bass are susceptible to mycobacterial infections that show strong associations with increasing water temperature. The impact on fish populations has been difficult to quantify, but new modeling estimates indicate a significant increase in mortality due to this pathogen. The increased mortality from disease must now be factored into stock assessments and management plans for crabs and striped bass.

This strategy will provide guidance on the management and mitigation of existing and emerging disease threats to vital fishery and aquaculture resources in the Commonwealth and Chesapeake Bay region. The health of our marine resources is fundamental to the growth of local industries and to the revitalization of coastal communities that dependent upon them.

**Establish a Molecular Core Facility.** Rapidly advancing technology has led to a revolution in the realm of molecular biology and genomics, giving scientists much greater power to address complex problems in marine and estuarine systems. This revolution offers the opportunity for VIMS to improve its capabilities in fulfilling its advisory mission to the Commonwealth in the areas of fisheries and aquaculture, environmental health, and coastal ecology. Extremely large amounts of data can be generated in a relatively short period of time using this technology, offering unparalleled opportunities to create more sustainable environments, bolster regional economies, and protect human health.

Currently, VIMS researchers in within three different departments use molecular approaches to address important research questions related to resource management and public health issues in Virginia, including fisheries and aquaculture management, harmful algae blooms, and shellfish health and safety. Key pieces of heavily used shared equipment are scattered across campus and are rapidly becoming outdated. VIMS' ability to accommodate this research, which requires massively high-throughput sequencing, digital PCR, transcriptomics and single cell genomics, is limited by the absence of a centralized facility with support. *Now is the time for VIMS to establish a consolidated Marine and Aquaculture Molecular Core Facility.*

We are seeking to upgrade critical instruments and to add technical expertise in advanced bioinformatics analyses, and dedicated technical staff to operate and coordinate the use of specialized equipment, and to advise researchers on appropriate strategies and approaches to answer their research questions. Almost all top-tier marine research institutions, including Woods Hole Oceanographic Institute, Scripps Institution of Oceanography, Rosenstiel School at University of Miami, University of Rhode Island, University of Washington, and others, support these types of core facilities with state of the art equipment and technical expertise. VIMS needs this facility to remain competitive in the 21<sup>st</sup> Century and to provide the Commonwealth with state-of-the-art, science-based advice.

This initiative requests funds to consolidate, and update where necessary, existing equipment, thereby expanding VIMS' capacity for high-throughput sequencing, and staffing the facility with a technician and bioinformatician. Over the past five years, VIMS has leveraged its existing molecular genetics capabilities for over \$5 million dollars in extramural research funds. Enhancing our capabilities further would expand our capacity to leverage even more extramural money in support of our research, education and advisory missions.

**Develop an Oyster Biosecurity Plan.** The majority of cultivated oysters in the mid-Atlantic and increasing numbers elsewhere are triploid; that is, they contain an extra set of chromosomes rendering them sterile. In Virginia, triploid oysters account for approximately

90% of the oyster aquaculture production. These triploids are made by crossing tetraploid oysters, those that contain four sets of chromosomes, with diploid oysters, those that contain the normal two sets of chromosomes. VIMS is the major producer of tetraploid oysters, with other commercial companies currently developing the capacity for growing tetraploids also. While triploid oysters are reproductively sterile, tetraploids are fertile. Citing concerns about their reproductive capability, the state of South Carolina has recently taken steps to limit the deployment of tetraploid oysters in state waters. As the number of tetraploid oysters being held in Chesapeake Bay waters has increased, there is a critical need to evaluate the risks that these oysters may or may not pose to wild oyster stocks. The specific risk of concern is that, were a feral population of tetraploid oysters to become established in Virginia waters, tetraploid oysters might then be able to mate with native, wild diploid oysters resulting in some portion of the wild population being sterile triploids. VIMS' objective is to develop a biosecurity plan based on the scientific assessment of risks of holding tetraploid oysters in the Bay. We intend to assess the environmental concerns regarding the use and grow out of tetraploid oysters, for example, issues of health, reproduction, and population genetics, in order to inform a biosecurity plan. The ultimate goal is to assure that the use of these oysters in aquaculture is done in an environmentally responsible fashion and ultimately, make recommendations to the VMRC Commissioner for establishing guidelines for the use of tetraploid oysters in Virginia waters.

**Accelerate Economic & Community Impacts from Coast & Marine Science and Technology.** This proposed program leverages Virginia Sea Grant's (VASG) coastal community development funding (\$50,000 annually) and graduate research and workforce development fellowship program (\$40,000/year/fellow), VIMS' legacy services in economic impact analysis, Fisheries Resource Grant program and coastal and marine science and technologies, and partnerships with members of the VASG seven-university partnership (e.g., Virginia Tech Seafood Agriculture Research and Education Center and Office of Economic Development; William & Mary's Public Policy Program and Mason School of Business) to:

- Facilitate greater university-community and public-private partnerships that fast-track scientific discoveries and streamline the process of turning those discoveries into innovations that accelerate economic and community development in Virginia; and
- Meet pressing economic development analysis needs in coastal communities that inform local economic and community development decisions and planning.

This initiative contains three elements: 1) sector-specific Research & Development (R&D) plans; 2) collaborative public-private partnership-led graduate research and workforce development fellowships; and 3) economic impact analysis to support local and state economic and community development planning.

First, the program would establish partnerships with coastal and marine industries (e.g., aquaculture farms, hatcheries, seafood processors, coastal engineering and construction firms, marina, boat-building, etc.) and facilitate sector-specific R&D strategic plans to identify priority R&D needs that are currently limiting economic growth. Based upon the R&D

strategic plans, VASG, VIMS, and our academic partners will advance opportunities to seed-fund product and market development activities (e.g., NOAA Small Business Innovation Research, Virginia Research Investment Fund, Fisheries Resource Grant, Virginia's National Disaster Resilience Competition award). In collaboration with industry and academic partners, VASG would further leverage technical assistance from the Virginia Business Higher Education Council, GO Virginia, regional Economic Development Organizations, and other business incubators. For example, VASG has partnered on a grant with RISE, a non-profit organization establishing innovative resilience initiatives as part of the Virginia's HUD National Disaster Resilience Competition grant. RISE's mission is to test innovation and facilitate partnerships and collaboration in the resilience and coastal adaptation fields that lead to economic growth. RISE, in partnership with the global startup incubator 1776, will lead the Resilience Campus in Norfolk to enhance entrepreneurship skills and build highly scalable businesses. RISE has start-up seed funding available.

Second, new public-private partnerships will co-fund graduate research and workforce development fellowships working directly with the private sector and university advisors to advance coastal and marine science, innovations and new technologies. For example, VASG has partnered on grant proposals with five environmental engineering firms to co-fund graduate research fellows in resilience design and currently co-sponsors a summer resilience design fellow with Clark Nexsen, developing innovative flood and water management strategies, designs and technologies with market potential throughout Virginia, the nation and world. VASG is working with RISE to explore commercialization potential of these innovations.

Third, VASG and VIMS will provide economic impact analysis to local communities to inform economic and community development decisions and planning with the best available scientific information. These local and state community plans and policies are essential to enable commercialization from innovations. For example, VASG and VIMS are working closely with several new local and state-wide economic development programs, including GO Virginia, the Rural Coastal Virginia Community Enhancement Authority, and the Middle Peninsula Alliance Board.

**Implement a post-graduate Commonwealth Coastal and Marine Fellowship program in collaboration with the Virginia Sea Grant (VASG) program that has been housed at VIMS since 2008.** This proposed program would be modeled after the highly successful national Sea Grant Knauss Marine Policy Fellowship and similar state fellowship programs operated by state Sea Grant programs in Washington and California. The goal of the Commonwealth Coastal & Marine Policy Fellowship is to develop and support exceptional post-graduates by partnering them with an agency mentor where they receive on-the-job training, and hone their professional skills, while improving the stewardship of the Commonwealth's coastal and marine resources. The program increases the capacity of the host agencies by supporting fellows who are working on mission-relevant programs, and leveraging the knowledge and capacity of Virginia's academic institutions. The program enhances

retention of Virginia's best coastal and marine science graduates in careers within the Commonwealth.

**Continue to operate as a year-round facility.** As an independent state agency that is heavily involved in research and graduate education, VIMS also provides advisory service to the Commonwealth in the form of expert scientific advice on marine-related issues throughout Chesapeake Bay and the coastal ocean. All three of our missions, the graduate program, research and advisory programs, are heavily operational for the entire 12-month calendar year, and in fact, all of our faculty hold 12-month appointments. Field research is most active between April and October, but most other activities occur equally throughout the year. For example, throughout calendar year 2016, VIMS offered a total of 362 outreach programs reaching nearly 25,000 citizens. More than 50% of those programs were held on VIMS' main campus. These were in the form of campus tours, after hours lecture series, discovery labs, summer camps for children in grades 1-8, workshops, training programs, and more. VIMS always has been, and will continue to be, a year-round operation.

**Virginia Research Investment Fund.** VIMS submitted two Letters of Intent to the VRIF for consideration. The project summaries are as follows:

**Expanding tetraploid technology for improved yields of oyster aquaculture in Chesapeake Bay**

Virginia leads the east coast in aquaculture production of clams and, more recently, oysters. These developments have come from transfer of contemporary technologies from public institutions, such as, the Virginia Institute of Marine Science. In fact, VIMS has become a world leader in shellfish aquaculture technologies. One of those technologies has been a force in driving oyster aquaculture to the forefront: tetraploid technology. Tetraploid oysters are used by commercial hatcheries to produce sterile (spawnless) *triploid* oysters, which comprises >90% of farmed oysters in Virginia, and increasingly, east coast states. This technology is part of the IP portfolio of the Aquaculture Genetics and Breeding Technology Center at VIMS.

This proposed project will focus on expanding our mastery of tetraploid technology through several objectives:

- We will expand the development of tetraploid "lines" by developing new genetic material for release to industry.
- We will test this new material during this project through collaboration with several strategically located oyster farms, including one in Maryland where a new market for tetraploid technology is rapidly developing. Such expansion will benefit Virginia hatcheries.
- We will recruit and train a Tetraploid Technologist who will specialize in the practical breeding of tetraploid material for the benefit of commercial aquaculture. This position will be absorbed into operations at ABC after the grant period.
- Using the genetic materials at hand, we will continue our investigations into triploid mortality that have arisen in the last several years.

**Commercialization of low-cost underwater sensor platform for animal-borne and 'crowd-sourced' environmental monitoring in the Chesapeake Bay and beyond.**

Understanding the changes that our aquatic and marine environments are undergoing requires data collection, but we do not have sensors deployed in the majority of places due to high costs and logistical challenges. At the same time, our waters are continually plied by a variety of species that can carry electronic sensor tags, as well as by fishermen and other ocean users who could deploy them. Off-the-shelf electronic sensor tags have become reliable but are very costly and measure only a few variables. Fishermen are typically equipped with only thermometers, if anything, for environmental data collection.

We propose to commercialize the low-cost animal-borne sensor platform we have developed for shark behavior studies, and extend it to measure variables of interest for environmental monitoring and fisheries (e.g. dissolved oxygen, nutrient concentration). Several oxygen sensors are now available with long term stability (i.e. no short term drifts, frequent calibration not required). Pairing these stable oxygen sensors with our platform would enable tagged animals to function as autonomous vehicles, sampling the water column through their movements. In the Chesapeake Bay, additional oxygen measurements would be extremely valuable. The Bay suffers from eutrophication, which causes hypoxia, so there are episodes in which certain parts of the Bay's waters become degraded as fish and shellfish habitats, causing harm both to diverse wildlife and to Virginia's important fishery industry.

In addition to attaching the device to animals, it can be attached to a fishing pole for collection of vertical profile data. By pairing the device with the user's smartphone, the collected temperature, oxygen or other profile data could be uploaded to a server along with GPS coordinates, generating a large amount of new in situ measurement effort. This would become a 'crowd-sourced' oceanographic dataset with far greater spatial and temporal coverage than what could be accomplished by research cruises and other science platforms. Both NASA and NOAA presently have citizen science portals to accept crowd-sourced data. In conjunction with the hardware, we propose to provide the data analytics platform for interpretation of the sensor measurements by end users, immediately on their smartphones, as well as on the internet.

Our team has developed an inexpensive arduino-based accelerometer animal tag over the past two years and deployed it on captive sharks, so we have many of the building blocks in place. We have expertise in small low-power surface mount electronics development and microcontroller programming. We have substantial operational experience with animal tag application and recovery. We will provide a means to locate and recover the tag after timed release based on GPS and cellular uplinked location information.

This project will focus on commercialization and adaptation of our product to the target market. We anticipate that researchers, fishermen, boaters and other ocean users will be customers.

**C. FINANCIAL AID – Not Applicable**

**D. EVALUATION OF PREVIOUS SIX-YEAR PLAN STRATEGIES**

**Graduate Financial Aid.** VIMS faculty continue to aggressively pursue grant support from federal agencies and private donors, and recognize that meeting the need for graduate financial aid will require multiple sources of funds. For example, the VIMS administration made an internal reallocation of \$175,000 to graduate student support beginning in Fall 2013 and William & Mary's Provost allocated up a total of eighteen tuition waivers annually beginning in Fall 2014 for enrollment of top doctoral program students. In addition, the state awarded just under \$80,000 for Graduate Financial Aid beginning in FY17.

These efforts have reversed a trend of decreasing enrollment in our doctoral program from a low of 38 in Fall 2012 to 50 in Fall 2016. Additional state support is a critical element if we are to maintain our historic leadership in graduate education in marine science and take advantage of our strategic institutional goal of further increasing enrollment via a professional master's degree program.

**Enhance Chesapeake Bay Water Quality Modeling and Monitoring.** *This strategy has now been met. The General Assembly in their 2018 session provided VIMS with \$893,753, starting in FY 2020, for water quality improvement work. The funding includes \$406,075 for on-going support, \$84,678 for debt service costs under the Master Equipment Leasing Program (MELP) associated with the modeling and assessment technologies, and \$403,000 for development of the State of the Elizabeth River Scorecard for pollution levels in the Elizabeth River.*

**Increase Base Operating Support.** *This strategy has now been met. The General Assembly in their 2018 session provided VIMS with \$625 K in each year of the biennium for operations and maintenance of new facilities coming online.*

**Management of Marine Diseases.** VIMS has over \$467,000 in active grants during FY17 to conduct research related to understanding and managing marine diseases. The state support that we are now seeking is to more effectively put the knowledge that we gain through this research into use in monitoring and outreach programs to assist industry.

**Monitoring Bay Grasses.** VIMS obtained a small amount of one-time money during FY17 from the EPA to continue this monitoring program. However, these funds are not available in FY18 and the program has been forced to lay-off one person. Our current federal dollars are not sufficient to sustain this program at levels needed to provide DEQ and VMRC with up-to-date monitoring that they require for water quality standard evaluation and aquaculture permitting, respectively.

**Develop and support new management and policy approaches at state and local government levels.** The Commonwealth Center for Recurrent Flooding Resiliency, a joint partnership between VIMS, ODU, and W&M, provided partial support for this strategy centered around the topic of flooding.



**Implement a Post-Graduate Commonwealth Coastal and Marine Fellowship Program.**

With pilot funding from VIMS, VASG, the Virginia Environmental Endowment, and three state host agencies (VA Department of Environmental Quality, VA Department of Conservation and Recreation, and VA Marine Resource Commission), three Fellows were placed in 2017. Six outstanding candidates applied for the three available host positions. VASG conducted all recruitment and pre-screening, fiscal management, and Fellow oversight and technical assistance. The host agencies developed and oversee the Fellow's job tasks and activities, interviewed candidates, and serve as professional mentors for the 12-month duration of the Fellowship. While one-time seed funding was provided and minimal leveraged funding exists (e.g., \$10,000/year from VEE), long-term support is needed for the Commonwealth Coastal and Marine Fellowship program.

**E. TUITION RATE INCREASES**

Although the W&M School of Marine Science (SMS) resides at VIMS, we do not set the tuition and fees for the students in this graduate program. Those rates are set by the W&M Provost, Senior VP for Finance and Administration, with ultimate approval by the Board of Visitors. Unfortunately, the recent increases in graduate tuition and fees for marine science have negatively affected enrollment at the SMS. We aspire to have 120 students, yet our Fall 2016 headcount was 91. This is due to a combination of increasing tuition and fees and level, or even reduced, funding from external granting sources such as NOAA and NSF. The Director and Dean of VIMS has requested that W&M hold the SMS tuition and fees at current levels for fiscal years 2019 and 2020.

**F. CONTRIBUTIONS TO ECONOMIC DEVELOPMENT**

- a. University-led or public private partnerships in real estate and/or community redevelopment

VIMS has engaged in conversations over the last several years with Gloucester County's Economic Development Authority (EDA), a private developer, and W&M's Real Estate Foundation to explore the possibility of a mixed-use development contiguous to VIMS' Gloucester Point campus that would provide food, retail, and housing. VIMS does not have any auxiliary services, such as dormitories or food service. In fact, VIMS does not even have a campus center. While VIMS does not have the funds to put toward such a redevelopment, we do have approximately 450 faculty, staff, and students who would be very pleased to have these types of amenities contiguous to our campus with the majority willing to be patrons, if the price points are set favorably.

*We learned from the EDA, in June 2018, that a prominent local restaurant owner was buying property within a short walking distance of VIMS for redevelopment into a restaurant, retail shops and, possibly, several apartments. The EDA has offered to bring VIMS into the conversation after the closing on the property so that we can convey our thoughts with regard to redevelopment.*

*Also in June, 2018, Gloucester County produced a video promoting economic development that featured in one segment its relationship with VIMS under the heading "where*

*inquiring minds come to learn." VIMS is one of the county's economic drivers and maintains a strong relationship with the Director of Economic Development, always with an eye towards mutually-beneficial partnerships.*

*Finally, VIMS is located in GO Virginia Region 6, and the VIMS Dean and Director is a voting member of the Region's Council. The Region 6 Council awarded a planning grant in April, 2018 to Virginia Sea Grant, housed at VIMS, to explore developing a partnership that would focus on flooding, resiliency, and research commercialization in the Middle Peninsula. The intent is to determine the most appropriate approach for submitting a larger collaborative project.*

b. State industries to which the institution's research efforts have direct relevance

There are several industries in which VIMS' research efforts have had a direct impact.

Examples include:

- Oyster and Clam Aquaculture Industry. In 2017, the farm gate value for Virginia's shellfish aquaculture industry was \$56.6 million, of which \$38.1 million was attributed to Hard Clams and \$18.5 million to Oysters. This is an all-time high for the shellfish aquaculture industry. The research conducted at VIMS by our faculty and staff over the last 50 years has led to this economic success. Specifically, VIMS researchers provide genetically superior oyster brood stock to industry without charge, and provide guidance to industry on the leading diseases that impact shellfish to provide guidance to industry.
- East Coast Off Shore Scallop Industry. In the early 1990s, the scallop fishery along the U.S. Atlantic seaboard was on a sharp downward slide. Commercial fishermen were having to spend more and more time at sea, up to 240 days per year, but were catching fewer and smaller scallops. Today, that fishery is the second most valuable commercial fishery on the East Coast, with more than \$400 million in scallops landed in 2014. Virginia alone unloaded \$33.6 million in scallops in that year, generating an additional \$21 million in economic activity in the Commonwealth for a total impact of over \$50 million. A large part of the recovery and growth of the East Coast scallop fishery is due to a long-term collaboration between scallopers, fishery managers, and scientists at VIMS. Our scientists have spent thousands of days on commercial scallop boats and research vessels during the last decades, testing and refining dredge equipment to maximize sustainable scallop harvests while minimizing bycatch of yellowtail flounder and sea turtles.
- Agriculture Industry. The Eastern Shore of Virginia is home to tomato farms and, increasingly, chicken farms. VIMS' researchers work with the state and local municipalities to understand the potential impacts of these industries on water quality, and assist in developing mitigation strategies to reduce the impacts.
- Environmental Industry. VIMS researchers developed state-of-the-art biosensors that have early detection functionality for oil spills, rapid quantification in real-time of polycyclic aromatic hydrocarbons (PAHs) concentration (EPA considers PAHs highly toxic and lists 17 as suspected carcinogens), and other contaminants.

- c. High-impact programs designed to meet the needs of local families, community partners, and businesses
- Oyster Aquaculture Training Program. The Oyster Aquaculture Training program is a popular five-month hands-on program that focuses on the principles of oyster aquaculture. Participants learn and work alongside researchers during our oyster hatchery season from April to August. They receive a stipend for the duration of their involvement. To ensure a one-on-one experience, we accept a maximum of only 3-5 participants. During the five-month program, participants rotate through various stages of oyster aquaculture, from our hatchery and field grow-out operations, to our laboratory. Working through these rotations provides a sound understanding of all phases of the oyster life-cycle. Participants also work in the field, learning the importance of seawater flow rates, sieve and bag sizes, and oyster seed sizes and densities. They learn various field grow-out methods, such as suspended culture and rack and bag techniques. By the end of the program, participants have a clear understanding of all areas of oyster aquaculture and are highly qualified and confident in their ability to perform tasks in both oyster hatchery and field operations. Although there are only a small number of participants in any given year, the impact of the program is high and community and industry relations are enhanced.
  - Community Outreach. VIMS and its federal partners offer a wide variety of free public programs both on VIMS' campuses in Gloucester Point and Wachapreague, as well as throughout Hampton Roads and the lower Chesapeake Bay region. In calendar year 2017, VIMS offered more than 350 outreach programs that reached nearly 25,000 citizens. Our programs include After Hours Lecture Series, Discovery Labs, Annual Open Houses at Gloucester Point and Wachapreague, Public Tours, Seafood Symposia, Speakers Bureau, Technical Training and Workshops, Summer Camps for K-8<sup>th</sup> graders, Field and Classroom Experiences, and booths at local Fairs and Festivals.

d. Business management/consulting assistance

*As the state's mandated advisor on a wide range of natural resources management and use issues, VIMS plays a truly unique role as an institution of higher education. In fact, VIMS is a model for the nation in this regard because our advisory services mission is so significantly different from traditional university service to the community, and it shapes VIMS in a most fundamental way. VIMS is identified in 36 sections of the Code of Virginia, and as such we are on call and expected to provide advice based on the highest quality science when requested by the Governor, the General Assembly, state agencies, marine industries, and citizens. The charge put forth to us in the Code of Virginia is an asset, an advantage, and a vibrant part of our institutional culture. Advisory service is in many ways the public face of VIMS.*

*Currently, there are eight to ten major projects ranging from municipal surface water intakes, to Dominion Virginia Power river crossings, to the Chesapeake Bay Bridge Tunnel*

*expansion. Expectations from stakeholders are high and we have a long history of furnishing advice of unsurpassed quality. Many of these projects require multiple permits and are complicated, time-consuming and often controversial. VIMS brings, at no charge, an objective voice that ultimately results in better policy and management decisions, and that help sustain the environment and protect public health.*

*The Commonwealth Center for Recurrent Flooding Resiliency (CCRFR), a partnership between Old Dominion University, W&M Law School's Virginia Coastal Policy Center (VCPC) and VIMS, was established in 2016 to bring university-based expertise to the growing challenge of recurrent flooding. The CCRFR conducts studies, provides training and offers a variety of services in the area of recurrent flooding resiliency, and is currently working with local governments and state and federal agencies throughout Tidewater Virginia to enhance the region's resiliency to flooding. Examples include: 1) working with the City of Virginia Beach to assess resiliency in the tourism industry and assemble policy recommendations; 2) collaborating with Newport News and Norfolk to install low cost-water level-monitors to enhance prediction and visualization tools; 3) assisting the City of Portsmouth in incorporating resiliency to future storms in their comprehensive plan; 4) evaluating the effectiveness of various risk communication methods; 5) mapping local land subsidence rates; 6) contributing to the development of easy-to-use data portal, Adapt Virginia, that provides a wide range of technical and policy decision support for building resiliency; 7) providing leadership in addressing storm water concerns in rural Tidewater, and; 8) developing an improved version of TideWatch, which currently predicts water levels at selected tide gauge stations 36 hours in advance, and will soon provide flood inundation predictions up to 48 hours in advance.*

## **G. CAPITAL OUTLAY**

VIMS has 11 proposed capital projects over the Six-Year Plan period; however, there are three projects that are the top priorities for VIMS in the upcoming biennium and that will have a significant impact on several of the strategies listed in our Six Year Plan. They are (1) Construct an Oyster Research Hatchery, (2) Replace Fisheries Science Building, and (3) Expand and Renovate Watermen's Hall.

**Relocate and Construct an Oyster Research Hatchery.** The current hatchery is nearly four decades old and was originally designed as a production facility for planting large numbers of seed oysters in the Chesapeake Bay. The new hatchery will be 22,000 square feet and constructed on the north side of campus, out of the flood plain, and be specifically purposed for oyster aquaculture research, oyster restoration, industry and economic development, and educational and training space. This research hatchery supports the Virginia Plan Goals 3 and 4 and TJ 21 Objective D5. VIMS' Aquaculture Genetics and Breeding Technology Center (ABC) will be housed in the new hatchery. The 1997 General Assembly established ABC in recognition of the role that genetic research and selective breeding play in aquaculture development. ABC is the first genetics program to focus on oysters and one of the first dedicated Centers for breeding marine species. ABC's mission is to continuously improve oyster aquaculture through the manipulation and control of the genetics and culture of the

oyster. These improvements, through application of cutting edge research, have and will continue to have regional impact and worldwide application. Most importantly, aquaculture is one of the leading economic development opportunities for Chesapeake Bay. ABC addresses industry requirements for a more profitable enterprise by running a breeding and applied research program, which comprises a research hatchery, labs, and farms that are staffed with technicians, students, and trainees. ABC does not sell seed or larvae, but enables industry to meet this demand by providing the best available brood stock.

**Replace Fisheries Science Building.** Currently, the Department of Fisheries Science is housed in three different buildings across campus, Nunnally Hall/Fisheries Science Building, Chesapeake Bay Hall, and Andrews Hall. Nunnally Hall/Fisheries Science Building, that houses 80 percent of the department, is 27 years old and has had three additions in order to accommodate the expanded needs of office, laboratory, and storage space. The building is one story, of VB type construction, and has reached its maximum allowable size according to state building code. This proposed project will demolish the current Nunnally Hall/Fisheries Science Building and construct a new 34,000 square-foot multi-level research laboratory building.

The Department of Fisheries Science provides critical scientific information and objective technical advice on resource management to the Commonwealth (via VMRC), the nation, and the international community. Fisheries faculty and staff have extensive experience and knowledge on the biology and status of fishes, molluscs, and crustaceans, applying both classical skills and novel approaches to enhance our understanding of these animals in their estuarine and marine environments. The research conducted by members of this department informs society and is often the basis for resource policy. This combination of research and advice provides a rich environment for graduate education. Fisheries students integrate into department research, actively participating in VIMS' advisory function. Graduates find employment as teachers, researchers, and resource managers at universities, in local, state, national and international agencies, and in private corporations. This project supports the Virginia Plan Goals 2, 3 and 4 and TJ 21 Objective D5.

**Expand and Renovate Watermen's Hall.** This project consists of expanding and renovating the 1984 vintage Watermen's Hall. This renovation and expansion is critical to meeting the programmatic, technological, and instructional needs of graduate marine education and public outreach at VIMS. The project includes renovation of existing classrooms, and an 11,800 square foot addition for an educational center with classrooms, conference rooms, convertible meeting rooms, and an informal lounge.

Watermen's Hall is a multipurpose building that houses the Institute's administration, advisory services, main research library, classrooms, and an auditorium. Not only does Watermen's Hall provide essential functions and act as the nerve center for the Institute's faculty, staff, and students, but it is the main building where the Institute and the public interface. The building has been well maintained and improvements have included a handicapped accessibility project, re-roofing project, and partial face lift to the McHugh Auditorium, and mechanical equipment

replacement as part of an energy performance contract. However, the building is 31 years old, has never been renovated, and is showing its age. Moreover, VIMS is unable to host regional and national conferences due to lack of proper facilities and class scheduling conflicts. The proposed addition would allow VIMS to hold workshops for 50-100 people with breakout rooms for small discussion groups and improve VIMS' ability to provide advisory services to state and local governments and the general public through outreach training workshops. This project supports the Virginia Plan Goals 2, 3 and 4 and TJ 21 Objective D5.

#### **H. RESTRUCTURING – Not Applicable**

VIRGINIA INSTITUTE OF MARINE SCIENCE  
SIX-YEAR PLAN UPDATE  
INCREMENTAL EXPENSE BY PRIORITY

| Priority | Strategy   | FY 2018-19                                | FY 2019-20                                |
|----------|--|---|---|
| 1        | Increase Graduate Financial Aid  | \$425,00                                  | \$425,000                                 |
| 2        | Increase Base Operating Support  | \$0                                       | \$0                                       |
| 3        | Utilize Advanced Modeling and Assessment Technology for CB Water Quality Improvement | \$0                                       | \$0                                       |
| 4        | Monitor Bay Grasses  | \$297,084                                 | \$297,084                                 |
| 5        | Enhance Chesapeake Bay Environmental Technology                                      | \$557,091                                 | \$292,091                                 |
| 6        | Boost Marine Aquaculture and Fisheries Health  | \$424,519                                 | \$424,519                                 |
| 7        | Establish a Molecular Core Facility  | \$1,145,935                               | \$495,935                                 |
| 8        | Develop an Oyster Biosecurity Plan   | \$315,144                                 | \$315,144                                 |
| 9        | Accelerate Economic & Community Impacts from Coastal & Marine Science and Technology | Will be pursued in the 2020-2022 biennium | Will be pursued in the 2020-2022 biennium |
| 10       | Implement a post-graduate Commonwealth Fellows Program                               | Will be pursued in the 2020-2022 biennium | Will be pursued in the 2020-2022 biennium |
| 11       | Continue to Operate as a Year Round Facility   | No dollar impact                          | No dollar impact                          |

## **VIRGINIA INSTITUTE OF MARINE SCIENCE**

### **FY20 OPERATING AND CAPITAL BUDGET AMENDMENTS**

The Virginia Institute of Marine Science has developed operating and capital budget requests as part of the Commonwealth's budget development process for the 2019 General Assembly session. The Institute has followed the guidelines as directed by the Governor, and given that this budget is to amend the biennial budget, VIMS is not putting forward any new initiatives for consideration.

The two operating budget initiatives are consistent with amendment requests previously approved by the Board of Visitors, are included in the Institute's Six-Year Plan, and align with the goals and objectives of the Commonwealth. In addition, the two capital requests include projects that are on the Institute's Capital Outlay Six Year Plan.

**THEREFORE, BE IT RESOLVED**, That the Board of Visitors of the College of William & Mary in Virginia approves the following operating and capital budget requests for the Virginia Institute of Marine Science for submission to the Commonwealth as part of the 2019 General Assembly budget development process.



**VIRGINIA INSTITUTE OF MARINE SCIENCE****FY20 OPERATING AND CAPITAL BUDGET AMENDMENTS****OPERATING REQUESTS****Monitor Bay Grasses****\$381,590 GF (one-time) 2.8 FTE****\$365,805 GF (ongoing) 2.8 FTE**

Submerged bay grasses are a critical living resource in Chesapeake Bay that supports valuable fish and crab resources. VIMS has conducted a bay-wide annual survey of Bay grasses since 1987, with considerable support from EPA, NOAA and the State of Maryland. The results of the annual survey are vitally important to the Commonwealth because: (1) Bay grass acreage is embodied in Virginia's water quality standards; (2) the Virginia Secretary of Natural Resources must report annually to various Virginia House and Senate Committees on the status of Bay grass abundance from the annual surveys (*Code of Virginia* §2.2-220); (3) Bay grass acreage is an important component of the blue crab fisheries management plan (*Code of Virginia* §28.2-203.1); (4) Bay grass survey maps are used by the Virginia Marine Resources Commission in evaluating aquaculture lease applications; and (5) Bay grass acreage is used as a metric for attainment of the restoration goals established by the Chesapeake Bay Program and its partners, including the Commonwealth of Virginia. In addition, the *Governor's Workgroup on Shellfish Aquaculture* has identified a key issue for the continuing development of oyster aquaculture in Virginia to be the development and implementation of best management practices that promote the co-existence of this important industry and bay grasses. With declining federal support and rising costs for this survey, we are seeking to establish a stable funding base for maintaining the Virginia portion of this valuable survey and to ensure that aquaculture can co-exist with bay grasses.

**Graduate Program Support****\$425,000 GF (ongoing)**

The graduate program of the William & Mary School of Marine Science at VIMS is one of the largest and most successful marine science programs in the nation. We have awarded over 1,000 degrees since VIMS was founded over 75 years ago. VIMS graduate students provide essential capacity in support of mission-focused research programs and advisory services mandated in the *Code of Virginia*. Our alumni are highly successful in competing for jobs in academia, federal and state agencies, K-12 education, non-profits, and marine-related businesses within the private sector. Many have gone on to become leaders in areas such as aquaculture, fisheries management, storm surge modeling, water quality research (including the science of dead zones and harmful algal blooms), and management and restoration approaches for our coasts and estuaries. Despite the quality and success of the program, the high cost to our faculty of supporting research-focused graduate students is an ever-increasing concern because it limits program enrollment below capacity and also puts VIMS at a competitive disadvantage. Increased state graduate financial support of \$425,000 is vital to program stability. It will increase faculty competitiveness in winning external grants and contracts by providing matching funds (also

known as cost share), thereby enhancing VIMS' ability to conduct the research that is vital to the Commonwealth. We have prioritized this request in order to reflect the very high value of the graduate program to VIMS, the Commonwealth, and the nation.

### **CAPITAL OUTLAY REQUESTS**

#### **Construct New Oyster Hatchery**

**\$18,900,000 GF (one-time)**

Supports the construction of a new 22,000 square-foot state-of-the-art Oyster Hatchery that will house space for industry and economic development, oyster restoration, and educational and training space. The new hatchery will be a single story masonry and concrete wet lab building featuring a brood stock lab, spawning lab, larvae cultural families lab, larvae culture lines labs, setting lab, algae lab, experimental lab, workshop, shared and field labs, and support spaces.

#### **Construct New Fisheries Science Building**

**\$26,500,000 GF (one-time)**

Supports the construction of a new 34,000 square-foot state-of-the-art research laboratory building to replace the 28-year-old Nunnally/Fisheries Science Complex which will include office and laboratory space supporting the Department of Fisheries Science. The new building will consolidate most of the Fisheries Science Department in one location and improve the colloquy between the faculty, staff, and students of the department. Also residing in the building will be the Nunnally Ichthyology Collection which serves as the largest repository for freshwater, Chesapeake Bay, and coastal fishes in Virginia.

**RESOLUTION OF THE BOARD OF VISITORS OF  
THE COLLEGE OF WILLIAM AND MARY  
2018 9(c) REVENUE BOND PROGRAM PARTICIPATION: RENOVATE  
DORMITORIES (LANDRUM HALL)**

WHEREAS, there have been passed by the General Assembly of Virginia and signed by the Governor acts entitled "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2018" (the "2018 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2017" (the "2017 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2016" (the "2016 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2015" (the "2015 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2014" (the "2014 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2013" (the "2013 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2012" (the "2012 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2011" (the "2011 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2010" (the "2010 Act"), "Commonwealth of Virginia Parking Facilities Bond Act of 2009" (the "2009 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2009" (the "2009 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2008" (the "2008 Act"), "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2007" (the "2007 Act"), and "Commonwealth of Virginia Higher Educational Institutions Bond Act of 2006" (the "2006 Act" and, together with the 2007 Act, 2008 Act, 2009 Acts, 2010 Act, 2011 Act, 2012 Act, 2013 Act, 2014 Act, 2015 Act, 2016 Act, 2017 Act, and the 2018 Act, the "Acts");

WHEREAS, pursuant to the Acts, the Treasury Board of the Commonwealth of Virginia (the "Treasury Board") is authorized, by and with the consent of the Governor, to sell and issue bonds or bond anticipation notes of the Commonwealth of Virginia (the "Commonwealth") for the purpose of providing funds, together with other available funds, for paying the cost of acquiring, constructing, renovating, enlarging, improving and equipping certain revenue-producing capital projects at certain institutions of higher learning of the Commonwealth and for paying issuance costs, reserve funds and other financing expenses (the "Financing Expenses"), all in accordance with the provisions of Section 9(c) of Article X of the Constitution of Virginia;

WHEREAS, for the College of William and Mary in Virginia (the "Institution"), such revenue-producing capital projects include "Renovate: Dormitories (Landrum Hall), 204-18100-006 (each individually, a "Project" and, collectively, the "Projects"); and

WHEREAS, the Treasury Board is proposing to sell and issue bonds or bond anticipation notes pursuant to the Acts for such revenue-producing capital projects, in one or more series;

NOW, THEREFORE, BE IT RESOLVED BY THE RECTOR AND VISITORS OF THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA:

Section 1. The Board of Visitors of the Institution (the "Board") requests the Treasury Board to sell and issue bonds (the "Bonds") or bond anticipation notes ("BANs") in an aggregate principal amount not to exceed \$ 2,941,000 to finance all or a portion of the costs of each Project plus Financing Expenses (for each individual Project, the "Individual Project Bonds" or "Individual Project Notes" and, collectively, the "Individual Project Borrowing" and for all Projects, the "Project Bonds" or "Project Notes" and, collectively, the "Project Borrowings"). The Individual Project Borrowings will be identified by amount by the State Treasurer upon issuance of any Bonds or BANs.

Section 2. With respect to each Project, the Board (a) covenants to fix, revise, charge and collect a room rent fee and other rates, fees and charges, for or in connection with the use, occupation and services of such Project and (b) pledges such rates, fees and charges remaining after payment of (i) the expenses of operating such Project and (ii) the expenses related to all other activities funded by the room rent fee ("Individual Project Net Revenues") to the payment of the principal of, premium, if any, and interest on the Individual Project Borrowing relating thereto. The Board further covenants that it will fix, revise, charge and collect such rates, fees and charges in such amounts so that Individual Project Net Revenues will at all times be sufficient to pay, when due, the principal of, premium, if any, and interest on the related Individual Project Borrowing and on any other obligations secured by such Individual Project Net Revenues (such payments collectively the "Required Payments"). Each Individual Project Borrowing shall be secured on a parity with other obligations secured by the Individual Project Net Revenues relating to such Individual Project Borrowing (other than any obligations secured by a prior right in Individual Project Net Revenues). Any Individual Project Net Revenues pledged herein in excess of the Required Payments for an Individual Project Borrowing may be used by the Institution for any other lawful purpose.

Section 3. It is hereby found, determined and declared that, based upon responsible engineering and economic estimates and advice of appropriate officials of the Institution, as shown on the Financial Feasibility Study attached hereto as Exhibit A, with respect to each Project, the anticipated Individual Project Net Revenues pledged herein will be sufficient to pay the Required Payments for such Project so long as the aggregate amount of net debt service on the Individual Project Borrowing for such Project actually payable in any bond year does not exceed the amounts assumed in the Financial Feasibility Study relating thereto.

Section 4. The Board covenants that the Institution will furnish the Treasury Board its general purpose financial statements, within 30 days of their issuance and receipt, audited by a firm of certified public accountants or the Auditor of Public Accounts which shall include a schedule of revenues and expenditures for auxiliary enterprise systems. If Individual Project Net Revenues for any Project are insufficient to pay Required Payments for such Project during such period, the Institution shall provide evidence of a plan to generate Individual Project Net Revenues for such Project sufficient to make such Required Payments in the future.

Section 5. The Board covenants that so long as any of the Project Notes are outstanding, the Institution will pay to the State Treasurer, not less than 30 days before each interest payment date, an amount estimated by the State Treasurer to be due and payable on such date as interest on the Project Notes. The Board covenants that so long as any of the Project Bonds are outstanding, the Institution

will pay to the State Treasurer, not less than 30 days before each interest or principal payment date, the amount certified by the State Treasurer to be due and payable on such date as principal of, premium, if any, and interest on the Project Bonds.

Section 6. The Board covenants that the Institution will pay from time to time its proportionate share of all expenses incurred in connection with the sale and issuance of any series of Bonds that includes Project Bonds or Project Notes and all expenses thereafter incurred in connection with the Bonds, including without limitation the expense of calculating any rebate to the United States of the earnings derived from the investment of gross proceeds of the Bonds, all as certified by the State Treasurer to the Institution.

Section 7. The Board covenants that the Institution will not take or omit to take any action the taking or omission of which will cause the Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Internal Revenue Code of 1986, as amended, including regulations issued pursuant thereto (the "Code"), or otherwise cause interest on the Bonds to be includable in the gross income of the owners thereof for federal income tax purposes under existing laws. Without limiting the generality of the foregoing, the Institution will pay from time to time its proportional share of any rebate to the United States of the earnings derived from the investment of the gross proceeds of the Bonds.

Section 8. The Board covenants that the Institution will proceed with due diligence to undertake and complete the Projects and that the Institution will spend all of the available proceeds derived from the sale of the Project Borrowings for costs associated with the Projects and appropriated for the Projects by the General Assembly.

Section 9. The Board covenants that the Institution will not permit the proceeds of each Individual Project Borrowing to be used in any manner that would result in (a) 5% or more of such proceeds being used in a trade or business carried on by any person other than a governmental unit, as provided in Section 141(b) of the Code, (b) 5% or more of such proceeds being used with respect to any output facility within the meaning of Section 141(b)(4) of the Code, or (c) 5% or more of such proceeds being used directly or indirectly to make or finance loans to any persons other than a governmental unit, as provided in Section 141(c) of the Code. The Institution need not comply with such covenants if the Institution obtains the written approval of the State Treasurer and an opinion of nationally recognized bond counsel acceptable to the Treasury Board that such covenants need not be complied with to prevent the interest on the Bonds from being includable in the gross income of the owners thereof for federal income tax purposes.

Section 10. The Board covenants that for so long as any of the Bonds are outstanding the Institution will not enter into any operating lease, management contract or similar agreement with any person or entity, other than a state or local governmental unit, for all or any portion of any of the Projects without first obtaining the written approval of the State Treasurer and an opinion of nationally recognized bond counsel acceptable to the Treasury Board that entering into such agreement will not cause the interest on the Bonds to be included in the gross income of the owners thereof for federal income tax purposes.

Section 11. The Board covenants that for so long as any of the Bonds are outstanding, the Institution will not sell or dispose of all or any part of any of the Projects without first obtaining the written approval of the State Treasurer and an opinion of nationally recognized bond counsel acceptable to the Treasury Board that such sale or disposition will not cause interest on the Bonds to be included in the gross income of the owners thereof for federal income tax purposes.

Section 12. The officers of the Institution are authorized and directed to execute and deliver all certificates and instruments and to take all such further action as may be considered necessary or desirable in connection with the sale and issuance of the Bonds.

Section 13. The Board acknowledges that the Treasury Board will rely on the representations and covenants set forth herein in issuing the Bonds, that such covenants are critical to the security for the Bonds and the exclusion of the interest on the Bonds from the gross income of the owners thereof for federal income tax purposes, that the Board will not repeal, revoke, rescind or amend any of such covenants without first obtaining the written approval of the Treasury Board, and that such covenants will be binding upon the Board so long as any of the Bonds are outstanding.

Section 14. This resolution shall take effect immediately.

The undersigned Secretary of the Board of Visitors of the College of William and Mary in Virginia does hereby certify that the foregoing is a true and correct copy of a resolution adopted at a meeting of the Board of Visitors of the College of William and Mary in Virginia duly convened and held on \_\_\_\_\_, 2018 at which a quorum was present and voting, and that such resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of \_\_\_\_\_ the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

\_\_\_\_\_  
Sue H. Gerdelman  
Secretary of the Board of Visitors  
The College of William & Mary

Board of Visitors  
September 26-28, 2018

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**EXHIBIT A**  
**FINANCIAL FEASIBILITY STUDY**

**For the Biennial Budget for 2018 – 20**

Name of Agency/Institution William & Mary Submission Date 05/08/18  
Agency Code 204  
Project Name Renovate: Dorms (Landrum) Project Code 204-18100-006  
Project Amount \$ 2,941,000

Proposed Financing Arrangement: Bond  Capital Lease  Other (specify) \_\_\_\_\_

Requested Type of Financing  9(c) \* - Obligations secured by project revenues (e.g., dormitory, dining) and the full faith and credit of the Commonwealth. Submit to Treasury.  
 9(d) \* - Any other financing arrangement. Submit to SCHEV.

Submitted by: Name Martha T. Terrell  
Title Senior Planner  
E-mail mtshee@wm.edu  
Telephone Number 757-221-2568  
Fax Number 757-221-2749

The attached Financial Feasibility Study has been prepared using information and projections believed to be reliable and accurate for the purpose of estimating the demand and affordability of the proposed capital project.

Amy Sebring, MPP  
Chief Financial/Fiscal Officer

**Feasibility Studies may be submitted via e-mail to:**

**9(c) Feasibility Studies**  
Department of the Treasury  
leslie.english@trs.virginia.gov  
debora.greene@trs.virginia.gov  
DUE DATE: August 15, 2017

**9(d) Feasibility Studies**  
State Council of Higher Education for Virginia  
RussellCarmichael@schev.edu  
DUE DATE: August 15, 2017

### Key Terms

**9(c) Debt** – Refers to bonds or other obligations authorized under the provisions of Article X, Section 9(c) of the *Constitution of Virginia*. Such debt is secured by (i) net project revenues and (ii) the full faith and credit of the Commonwealth (i.e., a general obligation pledge). Consequently, only revenue-producing capital projects are eligible (e.g., dormitories, dining facilities, etc.). Authorization for 9(c) bonds requires an affirmative vote of two-thirds of the members elected to each house of the General Assembly. Further, prior to its authorization by the General Assembly, and again prior to its issuance, the Governor must certify that the anticipated net revenues of the project will be sufficient to pay principal and interest on the debt. The FFS is a critical part of this determination. 9(c) bonds are issued by the Treasury Board.

**9(d) Debt** – Refers to bonds or other obligations authorized for issuance under the provisions of Article X, Section 9(d) of the *Constitution of Virginia*. Such debt may or may not be secured by state funds. Project authorization must be provided in the Appropriation Act or other Act of the General Assembly. A financial feasibility study should be completed for any project expected to be supported in whole or in part from project revenues or general revenues of the agency or institution. This includes projects to be financed under the Virginia College Building Authority (VCBA) Pooled Bond Program. The project may or may not be revenue producing. Capital leases and other obligations are included in this category

FFS's for 9(d) projects must be submitted to State Council of Higher Education for Virginia by August 15<sup>th</sup> of each year. The State Council of Higher Education shall identify the impact of all projects requested by the institutions of higher education on the current and projected costs to students in institutions of higher education and the impact of the project on the institution's need for student financial assistance. The State Council of Higher Education for Virginia shall report such information to the Secretary of Finance and the Chairman of the House Appropriations and Senate Finance Committees no later than October 1 of each year.

**Capital Lease** – Capital leases are considered long-term obligations for accounting purposes. The State Comptroller defines capital leases as leases which meet any one (or more) of the following criteria:

- 1) transfer of ownership of the property to the lessee at the end of the lease term;
- 2) bargain purchase option at the end of the lease term;
- 3) lease term equal to 75% or more of the estimated economic life of the leased property; and
- 4) present value of the net minimum lease payments equal to or exceeding 90% of the fair market value of the property.

**Capitalized Interest** – Interest to be paid on the bonds during the period of construction that is financed as part of the bond issue. Capitalizing interest increases the overall cost of borrowing, but may be necessary in cases where project revenues are to be used to pay debt service. Conversely, where revenues are already being collected (i.e., a fee or fee increase has already been implemented), capitalized interest may not be appropriate.

**General Revenue Pledge** – A pledge of all general operating revenues of the institution of higher education (as opposed to a pledge of a specific revenue or revenue stream). The general revenue pledge is generally stronger than a specific revenue pledge. A general revenue pledge is required for the VCBA Pooled Bond Program. General operating revenues include: total gross university sponsored overhead, unrestricted endowment income, tuition and fees, indirect cost recoveries, auxiliary enterprise revenues, general fund appropriations and other revenues not required by law to be used for another purpose.

**Incremental Annual Operating Expenses** – The increase in annual operating costs attributable to the project.

**Non-recurring costs** – One-time project costs (e.g., land acquisition, special utility fees, permits, etc.) required for



project completion.

**Private Use** – means any use by a trade or business that is carried on by persons or entities other than state or local governmental entities. Such use could involve ownership, management, service or incentive payment contracts, research agreements, leases, subleases, loans, or any other arrangement that conveys special legal entitlements or economic benefit to the non-governmental entity from the beneficial use of the project.

**Reserve Fund** – An amount set aside, usually from project revenues or bond proceeds, to mitigate the impact of fluctuations or interruptions in the flow of revenues to pay debt service. The presence of a reserve fund may enhance the credit. For the purposes of the feasibility study, reserve funds are generally for debt service and are funded from project or institutional revenues. 9(c) projects are expected to generate sufficient net revenues to fund a reserve at an amount equal to approximately 10% of the amount financed.

**Section 1 - General Information – To be completed for all projects.**

1. Describe the project in sufficient detail so that an uninformed reader has a clear understanding of the project. Indicate whether the project involves new construction or is a renovation/addition to an existing facility.  
**This project is the renovation of an existing dormitory that has not been renovated in recent memory (40+ years). The dormitory is 42,835 GSF, containing three stories plus an attic, and sits on the historic Old Campus of the university. Constructed in 1958, the dorm features the same fine architectural details that distinguish neighboring facilities, beginning with Jefferson Hall (dorm) which was built in 1920. At 221 beds, Landrum is one the university's largest dorms. The renovation project involves tearing out all demising walls and building systems, leaving floors, walls and structure in place and rebuilding with improved layout, systems, fixtures and finishes, including an elevator for handicapped access.**
2. Describe how the project is essential to fulfilling the institution's/agency's mission. What alternatives are available?  
**Integral to the university's mission to engage students, is the campus environment in which that engagement takes place. The on-campus student residential experience takes place through access, adjacency and interaction. The university's Board of Visitors is committed to maintaining and supporting the high level of on-campus residency which stands between 70%-75% for decades despite steady enrollment increases.**
3. Was the project part of the agency's capital outlay submission? If so, include a copy of the project narrative.  
**Each biennium, the university consistently requests 9c debt support for dorm renovation projects (umbrella), going back to 1989. This project is the next priority under that umbrella.**
4. Describe the effect the project will have on those students or users who will financially support the project.  
**Students receive a direct benefit from having residential facilities that are safe, functional and pleasant to live in. Facilities that do not have these qualities detract and distract from the learning experience.**
5. Describe the probable effects of the project on the community and environment, including changes to the value of property as a result of the project.  
**Renovation work is key to protecting the value of the property by providing much-needed replacement, improvement, repair and upgrade. It will guard against system and facility obsolescence. It increases functionality and efficiency.**
6. Explain how the project and its impact have been conveyed to local officials and their reaction/response.  
**When we take a dorm off-line, there can be impact to the local community. However, the university's Real Estate Foundation (WMREF) purchased a local hotel (Days Inn) to offset that impact. Local official are supportive of the university's efforts to enhance and increase on-campus housing as a means of reducing pressure on rental property within the local residential community.**
7. Describe any other positive or negative aspects of the project.  
**These umbrella projects demonstrate good stewardship of the Commonwealth's valuable fixed assets.**
8. Briefly describe the financing proposal. Indicate if this proposal is for a bond financing, a capital lease, or some alternative financing arrangement.  
**Total project cost is \$19,463,177. \$17,337,000 in new 9c revenue bond financing and \$2,126,177 in existing authority under 204-18100 will be used to fund the project. This request is for the increment between \$14,396,000 of prior request, and \$17,337,000 of current request: \$2,941,000**

9. Are specific revenues planned to support debt service or lease payments? (If so, you will need to complete Section 3.)

**Student housing rent revenue will service the debt.**

10. Describe how the financing fits within your debt management policy?

**The BOV-adopted 2017 (FY) states that debt as a percent of operating expense shall not exceed 10%. The university's debt ratio stands at 5.6% for FY 17 and is projected to decrease to 5.4% in FY 18. The estimate reflects an increase in revenue relative to stable interest rates, as well as favorable refunding of existing debt. [This information will not be updated until September 2018.]**

11. Provide your institution's debt ratios as estimated under your debt management policy:

- (a) as of June 30, 2017, including any authorized and unissued estimated debt; and **5.6%**  
(b) including the financing of this project. **5.6%**

#### Private Use

12. Will any person or entity other than the governmental unit provide (directly or indirectly) any part of debt service on the portion of the bonds issued for the project? For example, will a private foundation or federal agency be required (or expected) to make an annual contribution toward the payment of debt service.

Yes  No. If yes, please identify the person or entity and the percent of debt service to be provided.

13. Do you anticipate that any person or entity other than the state institution/agency will have a contractual right, different from the rights available to the general public or students, to use any part of the project or to use or buy goods or services produced at the project? For instance, have you contracted parking spaces in a parking deck to a nearby corporate office?

Yes  No If yes, briefly summarize the planned contractual agreement.

14. Do you contemplate any part of the project being managed or operated by any person or entity other than the state institution/agency under a management or service contract, incentive payment or other "privatized" arrangement? Examples include contracts for food service, parking service, dormitory management, bookstore management, etc.

Yes  No If yes, summarize the anticipated contractual arrangement (i.e., contract term, renewal options, compensation arrangements, etc.).

Note: These arrangements may impact whether the project is eligible for tax-exempt financing. Once tax-exempt bonds have been issued, entering into this type of contract or arrangement may affect the bond's tax-exempt status. **So long as the bonds are outstanding**, the terms of any such arrangement must be reviewed and approved by the State Treasurer prior to the execution of any contract.

#### Section 2 – Cost Information (complete for all projects)

15. Do you anticipate the need for capitalized interest on any bond financing (i.e., to pay interest during construction)? If so, explain. **No.**

16. Itemize the capital costs of the project. Estimate the costs of issuance at 2% of the cost of the project. Please subtotal project costs net of the 2% cost of issuance and then show a gross cost of project including the cost of issuance. Note that the total cost should be used as the AMOUNT BORROWED field of the worksheet. Attach the CO-2 estimate or further estimate of project cost, if available.
17. What is the anticipated useful life of the project? **30-40 years.**

|                                    |           |
|------------------------------------|-----------|
| A & E                              | 0         |
| Land Acquisition                   | 0         |
| Sitework/Utilities                 | 0         |
| Construction                       | 2,941,000 |
| Equipment/Furnishings              | 0         |
| Contingencies and Other Costs      | 0         |
| Subtotal                           | 2941000   |
| Costs of Issuance (2% of Subtotal) | 58820     |
| Capitalized Interest (Estimate)    | 0         |
| Total                              | 2999820   |

18. List and describe any initial **Non-Recurring Costs** related to the project and the source of funding for each of these items.

**None identified at this time.**

19. List and estimate the **Incremental Annual Operating Expenses**. Provide any supporting documentation and illustrate how your estimate was made. These expenses include personnel costs, utilities, contractual services, supplies and materials, indirect costs, equipment, etc.

**None identified at this time. Incremental annual costs are assumed to be cost neutral when compared to current operating costs. However, should there be an adjustment, the source would be HEO- 0306.**

Using 2.0% as the rate for investment of the Reserve Fund (reinvestment rate) and the following borrowing assumptions, complete Spreadsheet #1 – Cost Components

**The current Borrowing Rates are provided by the Department of the Treasury.**

| <u>Term</u> | <u>9(c) Borrowing Rate</u> | <u>9(d) Borrowing Rate</u> |
|-------------|----------------------------|----------------------------|
| 25 years    | 3.50%                      | 3.65%                      |
| 20 years    | 3.20%                      | 3.35%                      |
| 15 years    | 2.70%                      | 2.85%                      |
| 10 years    | 2.10%                      | 2.25%                      |
| 7 years     | N/A                        | 2.10%                      |

**Section 3 Revenue Information. (Complete for all revenue-producing projects)**

20. Describe the Revenue Sources that will be used for payment of debt service and the expenses associated with these revenues. Consider what other expenses are planned to be supported by the revenues, and how much revenue will actually be available for debt service.

**An incremental annual increase of \$44 in the housing rent across a total of 5136 beds, including the Days Inn. The average annual cost of a standard double room is \$7258 for FY 19. [Room rent runs from \$3306 to \$4359 per semester.]**

21. If revenues will be derived from a group of similar facilities (a system) and an increase in system revenues will be used to support the debt, provide justification for any system contribution and any marginal increase in system-wide fees.

**System contribution is necessary to reduce the impact of amortization.**

22. If revenues will be derived from just one facility of several similar facilities in a campus system, show all fees for all similar facilities and justify any differential in pricing between the facilities.  
**See item #20. <http://www.wm.edu/offices/residence/office/oncampus/residencehalls/roomrates/index.php>**
23. Will project revenues or revenues pledged to the payment of debt service be available prior to completion of the project? Describe the timing of revenues and when they will be available and sufficient to begin servicing the debt.  
**Yes, the debt service will be programmed into the College's room and board rates in advance of the requirement. For instance, the debt service necessary to support this project has been programmed into the system, effective with Fall semester 2017.**
24. What studies have been completed to demonstrate the demand for the facility and the reliability of the revenue stream? (Attach copies if available.)  
**No studies were performed. During the spring housing lottery (in preparation for the following fall), the College regularly (and historically) receives room requests in excess of capacity.**
25. If any portion of the revenues are already pledged or otherwise committed to other debt service payments, provide a schedule of debt service payments (by issue). Identify the portion of the revenue source that is committed or being used to pay debt  
**The revenue committed to this project is "new."**
26. If any revenues are projected to increase, explain how the projections were calculated. Do not use an automatic growth rate.  
**NA**
27. If institutional reserves are to be used to service the debt, include the source of funds, balances for the last five years, and impact on future balances. Identify the authorization for using these funds to pay debt service and other costs.  
**NA**
28. If any amounts currently used for debt service are expected to be available and used for debt service on this project (i.e., the existing debt will be retired), provide the project(s), the bond series, and the annual amount to be available. Address the status of the existing facility's physical condition and plans for repair or maintenance. Conversely, explain why any such amounts scheduled to be available are not planned for use for debt service on this project. **NA**

Using the information described above, complete Spreadsheet #2 – Revenue Components

**Section 4 General Financial Condition - Complete this section for all projects**

29. Provide the following FTE enrollment and admissions information.

| Enrollment           | Last 5 years |         |         |         |         |
|----------------------|--------------|---------|---------|---------|---------|
|                      | 2016-17      | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| Undergraduate        | 6276         | 6301    | 6299    | 6271    | 6171    |
| Graduate & 1st Prof. | 2341         | 2183    | 2138    | 2105    | 2087    |
| Total                | 8617         | 8484    | 8437    | 8376    | 8258    |

|                       |       |       |       |       |       |
|-----------------------|-------|-------|-------|-------|-------|
|                       |       |       |       |       |       |
| On-Campus             | 73%   | 74    | 74    | 73    | 72    |
| Off-Campus            | 27%   | 26    | 26    | 27    | 28    |
| <b>Admissions</b>     |       |       |       |       |       |
| Applications Received | 14382 | 14952 | 14552 | 14046 | 13660 |
| Applications Accepted | 5253  | 5153  | 4805  | 4665  | 4394  |
| Students Enrolled     | 1504  | 1517  | 1511  | 1479  | 1467  |

30. Provide the annual Per Student Fee(s) to be assessed to support the project -- **Room Rent = \$22 per semester; or \$44 per year.**

| Student Level      | Domicile  |              |
|--------------------|-----------|--------------|
|                    | Virginian | Nonvirginian |
| Undergraduate      | 0         | 0            |
| First Professional | 0         | 0            |
| Graduate           | 0         | 0            |
| Unclassified       | 0         | 0            |

31. Provide the Total Annual Student Fee(s) Revenue assessed to support the project

| Student Level      | Domicile  |              |
|--------------------|-----------|--------------|
|                    | Virginian | Nonvirginian |
| Undergraduate      | 0         | 0            |
| First Professional | 0         | 0            |
| Graduate           | 0         | 0            |
| Unclassified       | 0         | 0            |

**Section 5 Capital Lease Projects – Complete Items 32 through 35 only if the financing involves a capital lease.**

32. Discuss the alternatives that were considered before deciding that the capital lease structure was the best option.

33. Who is the Lessor? Who is the Lessee?

34. Who will manage the facility during and after construction?

35. Who will be issuing bonds or otherwise financing the project? Will it be tax-exempt debt?

Financial Feasibility Study - Part II  
 Spreadsheet 1 - Cost Components  
 William & Mary  
 Renovate: Dorms (Landrum) 204-18100-006

|           |      | Debt Service | Principal | Interest  | Reserve Fund Payment | Reserve Fund Balance | Total Debt Service | Annual Expenses | Non Recurring Initial Outlays | Total Cost |
|-----------|------|--------------|-----------|-----------|----------------------|----------------------|--------------------|-----------------|-------------------------------|------------|
|           | 2018 |              |           |           |                      |                      |                    |                 |                               | 0          |
| 1         | 2019 | 205,382      | 109,388   | 95,994    | 20,538               | 20,538               | 225,920            | 0               | 0                             | 225,920    |
| 2         | 2020 | 205,382      | 112,888   | 92,494    | 20,538               | 41,487               | 225,920            | 0               |                               | 225,920    |
| 3         | 2021 | 205,382      | 116,500   | 88,881    | 20,538               | 62,855               | 225,920            | 0               |                               | 225,920    |
| 4         | 2022 | 205,382      | 120,228   | 85,153    | 20,538               | 84,650               | 225,920            | 0               |                               | 225,920    |
| 5         | 2023 | 205,382      | 124,076   | 81,306    | 20,538               | 106,882              | 225,920            | 0               |                               | 225,920    |
| 6         | 2024 | 205,382      | 128,046   | 77,336    | 20,538               | 129,557              | 225,920            | 0               |                               | 225,920    |
| 7         | 2025 | 205,382      | 132,144   | 73,238    | 20,538               | 152,687              | 225,920            | 0               |                               | 225,920    |
| 8         | 2026 | 205,382      | 136,372   | 69,010    | 20,538               | 176,279              | 225,920            | 0               |                               | 225,920    |
| 9         | 2027 | 205,382      | 140,736   | 64,646    | 20,538               | 200,342              | 225,920            | 0               |                               | 225,920    |
| 10        | 2028 | 205,382      | 145,240   | 60,142    | 20,538               | 224,887              | 225,920            | 0               |                               | 225,920    |
| 11        | 2029 | 205,382      | 149,887   | 55,494    | 20,538               | 249,923              | 225,920            | 0               |                               | 225,920    |
| 12        | 2030 | 205,382      | 154,684   | 50,698    | 20,538               | 275,460              | 225,920            | 0               |                               | 225,920    |
| 13        | 2031 | 205,382      | 159,634   | 45,748    | 20,538               | 299,982              | 225,920            | 0               |                               | 225,920    |
| 14        | 2032 | 205,382      | 164,742   | 40,640    | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 15        | 2033 | 205,382      | 170,014   | 35,368    | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 16        | 2034 | 205,382      | 175,454   | 29,928    | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 17        | 2035 | 205,382      | 181,069   | 24,313    | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 18        | 2036 | 205,382      | 186,863   | 18,519    | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 19        | 2037 | 205,382      | 192,842   | 12,539    | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 20        | 2038 | 205,382      | 199,013   | 6,368     | 0                    | 299,982              | 205,382            | 0               |                               | 205,382    |
| 21        | 2039 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 22        | 2040 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 23        | 2041 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 24        | 2042 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 25        | 2043 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 26        | 2044 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 27        | 2045 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 28        | 2046 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 29        | 2047 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
| 30        | 2048 | 0            | 0         | 0         | 0                    | 0                    | 0                  | 0               |                               | 0          |
|           |      | 4,107,637    | 2,999,820 | 1,107,817 | 266,996              |                      | 4,374,633          | 0               | 0                             | 4,374,633  |
| PV @3.20% |      | 2,999,820    |           |           | 215,655              |                      | 3,215,475          | 0               | 0                             | 3,215,475  |

| (1) DEBT INFORMATION |           | (2) ANNUAL OPERATING EXPENSES |          |
|----------------------|-----------|-------------------------------|----------|
| Borrowing Year       | 2018      | Personal Services             | 0        |
| Amount Borrowed      | 2,999,820 | Contractual Services          | 0        |
| Borrowing Rate       | 3.20%     | Supplies and Materials        | 0        |
| Term (Years)         | 20        | Indirect Cost                 | 0        |
| Reinvestment Rate    | 2.00%     | Utilities                     | 0        |
| Reserve Fund Target  | 299,982   | Equipment                     | 0        |
|                      |           | Other                         | 0        |
|                      |           | <b>Total Annual Expenses</b>  | <b>0</b> |

Financial Feasibility Study - Part II  
 Spreadsheet 2 - Revenue Components  
 William & Mary  
 Renovate: Dorms (Landrum) 204-18100-006

|                   | User Fees        | Part Time User Fees | Other Student Fees | Indirect Cost Recoveries | Revenue From Operations | Institutional Reserves | Retirement of Existing Debt | Other    | Total Revenues   |
|-------------------|------------------|---------------------|--------------------|--------------------------|-------------------------|------------------------|-----------------------------|----------|------------------|
| 2018              |                  |                     |                    |                          |                         |                        |                             |          |                  |
| 2019              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2020              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2021              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2022              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2023              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2024              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2025              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2026              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2027              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2028              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2029              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2030              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2031              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2032              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2033              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2034              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2035              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2036              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2037              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2038              | 225,984          | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 225,984          |
| 2039              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2040              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2041              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2042              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2043              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2044              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2045              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2046              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2047              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| 2048              | 0                | 0                   | 0                  | 0                        | 0                       | 0                      | 0                           | 0        | 0                |
| <b>4,519,680</b>  | <b>0</b>         | <b>0</b>            | <b>0</b>           | <b>0</b>                 | <b>0</b>                | <b>0</b>               | <b>0</b>                    | <b>0</b> | <b>4,519,680</b> |
| <b>PV @ 3.20%</b> | <b>3,300,736</b> | <b>0</b>            | <b>0</b>           | <b>0</b>                 | <b>0</b>                | <b>0</b>               | <b>0</b>                    | <b>0</b> | <b>3,300,736</b> |

| USER FEE INFO                   |        | NET REVENUES FROM OPERATIONS |        |
|---------------------------------|--------|------------------------------|--------|
| # of Units                      | 5,136  | Net Sales                    |        |
| Session Fee                     | 44     | Cost                         |        |
| Rate increase years 1-4         | 0.000% | Profit                       | 0      |
| Rate increase years 5+          | 0.000% | Operating Expenses           |        |
| <b>SUMMER/PARTIME USER FEES</b> |        | Selling                      |        |
| # of Units                      | 0      | General Administrative       |        |
| Session Fee                     | 0      | Lease Payment                |        |
| Rate increase years 1-4         | 0.000% | Gross Operating Income       | 0      |
| Rate increase years 5+          | 0.000% | Rate increase years 1-4      | 0.000% |
|                                 |        | Rate increase years 5+       | 0.000% |



September 26-28, 2018

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Financial Feasibility Study - Part II  
 Spreadsheet 3 - Net Revenues/Coverage  
 William & Mary  
 Renovate: Dorms (Landrum) 204-18100-006

|      | Total<br>Cost | Reserve<br>Fund<br>Payment | Adjusted<br>Total<br>Cost | Total<br>Revenues | Net<br>Revenues | Coverage<br>Percent |
|------|---------------|----------------------------|---------------------------|-------------------|-----------------|---------------------|
| 2018 | 0             |                            |                           |                   |                 |                     |
| 2019 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2020 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2021 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2022 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2023 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2024 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2025 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2026 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2027 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2028 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2029 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2030 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2031 | 225,920       | 20,538                     | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2032 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2033 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2034 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2035 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2036 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2037 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2038 | 205,382       | 0                          | 205,382                   | 225,984           | 20,602          | 110.03%             |
| 2039 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2040 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2041 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2042 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2043 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2044 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2045 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2046 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2047 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
| 2048 | 0             | 0                          | 0                         | 0                 | 0               | 0.00%               |
|      | 4,374,633     | 266,996                    | 4,107,637                 | 4,519,680         | 412,043         |                     |

**RESOLUTION OF THE BOARD OF VISITORS OF  
THE COLLEGE OF WILLIAM AND MARY  
DECLARING THE INTENTION TO REIMBURSE  
THE COST OF CERTAIN EXPENDITURES:  
RENOVATE DORMITORIES/LANDRUM HALL**

**WHEREAS**, THE COLLEGE OF WILLIAM AND MARY (the "Institution") has undertaken the construction of its RENOVATE: DORMITORIES/Landrum Hall 204-18100-006 (the "Project"); and

**WHEREAS**, The Institution has made or will make expenditures (the "Expenditures") in connection with the Project; and

**WHEREAS**, The Institution may determine that the funds advanced and to be advanced to pay Expenditures will be reimbursed to the Institution from the proceeds of one or more obligations to be issued by or on behalf of the Institution (the "Indebtedness").

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF VISITORS OF THE INSTITUTION:

1. **The Board of Visitors of the Institution hereby adopts this declaration of official intent under Treasury Regulations Section 1.150-2 and declares that the Institution intends to reimburse itself, in accordance with such Section 1.150-2, with the proceeds of Indebtedness for Expenditures made on, after or within 60 days prior to the date of the adoption of this Resolution with respect to the Project, except that Expenditures made more than 60 days prior to the date hereof may be reimbursed as to certain *de minimis* or preliminary expenditures described in Treasury Regulations Section 1.150-2(f) and as to other expenditures permitted under applicable Treasury Regulations.**
2. **The maximum principal amount of Indebtedness expected to be issued for the Project is \$ 2,941,000.**
3. **This Resolution shall take effect immediately upon its adoption.**

Adopted: \_\_\_\_\_

\_\_\_\_\_  
Sue H. Gerdelman  
Secretary of the Board of Visitors  
The College of William & Mary

**RESOLUTION TO APPROVE THE 9(d) DEBT RESOLUTION  
OF THE BOARD OF VISITORS OF  
THE COLLEGE OF WILLIAM AND MARY  
VIRGINIA COLLEGE BUILDING AUTHORITY FINANCING AUTHORIZATION:  
CONSTRUCT THE SADLER CENTER WEST ADDITION**

**WHEREAS**, pursuant to and in furtherance of Chapter 12, Title 23.1 of the Code of Virginia of 1950, as amended (the "Act"), the Virginia College Building Authority (the "Authority") developed a program (the "Program") to purchase debt instruments issued by public institutions of higher education in the Commonwealth of Virginia ("Participating Institutions" and each a "Participating Institution") to finance or refinance projects of capital improvement ("Capital Projects" and each a "Capital Project") included in a bill passed by a majority of each house of the General Assembly of Virginia (the "General Assembly");

**WHEREAS**, under the Program the Authority from time to time issues its Educational Facilities Revenue Bonds (Public Higher Education Financing Program) ("Pooled Bonds") to finance the purchase or refunding of debt instruments issued by Participating Institutions to finance or refinance Capital Projects;

**WHEREAS**, if a Participating Institution desires to finance or refinance a Capital Project through the Program it must enter into a loan agreement with the Authority, under which: (i) the Participating Institution will issue its promissory note pursuant to Chapter 1208, Title 23.1 of the Code of Virginia of 1950, as amended, to evidence a loan to it by the Authority; (ii) the Authority will agree to issue Pooled Bonds and use proceeds thereof to purchase the promissory note; (iii) the Participating Institution will agree to use proceeds of Pooled Bonds, loaned to it and received in exchange for its promissory note, to finance or refinance the Capital Project and to not take actions that may jeopardize any federal tax-exempt status of interest on Pooled Bonds allocable to financing or refinancing the Capital Project; and (iv) the Participating Institution will agree to make payments under the promissory note in sums sufficient to pay, together with certain administrative and arbitrage rebate payments, the principal of, premium, if any, and interest due on such Pooled Bonds;

**WHEREAS**, the Board of Visitors (the "Board") of *THE COLLEGE OF WILLIAM AND MARY* (the "Institution") from time to time desires to finance or refinance Capital Projects for the Institution as a Participating Institution under the Program, and now proposes that the Institution issue its promissory note or notes (collectively, the "Note") to be sold to the Authority in accordance with a loan agreement or loan agreements between the Institution and the Authority (collectively, the "Loan Agreement"), under which proceeds of Pooled Bonds will be loaned to and received by the Institution in exchange for the Note, to finance or refinance costs of the following Capital Projects authorized for bond financing by the General Assembly: the *Construct the Sadler Center West Addition* (Project Code 204-18360) (collectively, the "Project"); and

**WHEREAS** the Board desires to designate certain Institution officers (i) delegated the authority to approve the forms of and to execute and deliver the Loan Agreement, the Note and any amendments thereto, and any other documents necessary or desirable in connection with financing or refinancing costs of the Project through and participation in the Program; and (ii) responsible for monitoring post-issuance compliance with covenants of the Institution related to maintaining any federal tax-exempt status of interest on Pooled Bonds.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD:**

**Section 1.** The Project is hereby designated to be undertaken and financed or refinanced by the Authority and, accordingly, the *President, Provost, Senior Vice President for Finance and Administration, and Vice President for Finance and Chief Financial Officer* (the "Authorized Officers") are each hereby delegated and invested with full power and authority to approve the forms of the Loan Agreement, the Note and any amendments thereto (in connection with any refunding of Pooled Bonds financing or refinancing the Project or otherwise), and any pledge to the payment of the Note and any amendment thereto of total gross university sponsored overhead, unrestricted endowment income, tuition and fees, indirect cost recoveries, auxiliary enterprise revenues, general and nongeneral fund appropriations and other revenues not required by law or previous binding contract to be devoted to some other purpose, restricted by a gift instrument for another purpose or excluded from such pledge as provided in the Loan Agreement, subject to the provisions of Section 3 hereof.

**Section 2.** Subject to the provisions of Section 3 hereof, the Authorized Officers are each hereby delegated and invested with full power and authority to execute, deliver and issue, on behalf of the Institution, (a) the Loan Agreement, the Note and any amendments thereto (in connection with any refunding of Pooled Bonds financing or refinancing the Project or otherwise), with approval of such documents in accordance with Section 1 hereof evidenced conclusively by the execution and delivery of the respective document, and (b) any other documents, instruments or certificates as may be deemed necessary or desirable to finance or refinance costs of the Project through and participate in the Program, and to further carry out the purposes and intent of this resolution. The Authorized Officers are authorized and directed to take such steps and deliver such certificates in connection with delivery of the Note, and any amendment thereto, as may be required under any existing obligations, including bond resolutions relating to any outstanding general revenue pledge bonds, and to notify Virginia Department of Treasury representatives serving as Authority staff at least 60 days in advance of a pledge of any amounts pledged to the payment of the Note in accordance with Section 1 hereof to, or as security for, the payment of any other Institution obligations issued or entered into after the date hereof for so long as the Note and any amendments thereto remain outstanding.

**Section 3.** The authorizations given above as to the approval, execution, delivery and issuance of the Loan Agreement, the Note and any amendments thereto (in connection with any refunding of Pooled Bonds financing or refinancing the Project or otherwise) are subject to the following parameters: (a) the principal amount to be paid under the Note allocable to any component of the Project, together with the principal amount of any other

indebtedness with respect to such component, shall not be greater than the amount authorized for such component by the General Assembly plus amounts needed to fund issuance costs, original issue discount, other financing (including without limitation refunding) expenses and any other increase permitted by law; (b) the aggregate principal amount of the Note shall in no event exceed \$37,742,000 as the same may be so increased; (c) the aggregate interest rate payable (i) under a tax-exempt Note shall not exceed a "true" or "Canadian" interest cost more than 50 basis points higher than the interest rate for "AA" rated securities with comparable maturities, as reported by Thomson Municipal Market Data (MMD) or another comparable service or index for tax-exempt yields, as of the date that the interest rates are determined, taking into account any original issue discount or premium and (ii) under a taxable Note shall not exceed a "true" or "Canadian" interest cost more than 50 basis points higher than the interest rate for "AA" rated securities with comparable maturities, as reported by MMD or another comparable service or index for taxable yields, as of the date that the interest rates are determined; (d) the weighted average maturity of the principal payments due under the Note shall not exceed 20 years after the original issue date of the Note; (e) the last principal payment date under the Note shall not extend beyond the reasonably expected weighted economic life of the Project; and (f) subject to the foregoing, the actual amount, interest rates, principal maturities, and date of the Note shall be approved by an Authorized Officer, as evidenced by the execution thereof.

**Section 4.** The Board acknowledges that if there is a failure to make, as and when due, any payment of the principal of, premium, if any, and interest on any promissory note issued by the Institution as a Participating Institution to the Authority under the Program, including without limitation the Note and any amendments thereto, the State Comptroller is authorized under the Program and Section 23.1-1211 of the Code of Virginia of 1950, as amended, to charge against appropriations available to the Institution all future payments of principal of, premium, if any, and interest on such promissory note when due and payable and to make such payments to the Authority or its designee, so as to ensure that no future default will occur on such promissory note.

**Section 5.** The Board agrees that if the Authority determines the Institution as a Participating Institution shall be subject to continuing disclosure obligations under Rule 15c2-12 of the federal Securities and Exchange Commission with respect to any Pooled Bonds, (a) an Authorized Officer shall, and is hereby authorized and directed to, enter into a continuing disclosure undertaking in form and substance reasonably satisfactory to the Authority, and (b) the Institution will comply with the provisions and disclosure obligations contained therein.

**Section 6.** The Board designates the **SENIOR VICE PRESIDENT FOR FINANCE AND ADMINISTRATION** to be responsible for implementing procedures to monitor post-issuance compliance with covenants in any loan agreement between the Institution as a Participating Institution and the Authority, including the Loan Agreement and any amendments thereto, related to maintaining tax-exempt status for federal income tax purposes of interest on any Pooled Bonds, including without limitation monitoring the use of any portion of all Capital Projects for the Institution financed or refinanced with such Pooled Bonds and compliance with any applicable federal income tax remedial action requirements in connection

with certain changes in such use. Such officer shall review such post-issuance compliance at least annually for so long as such Pooled Bonds remain outstanding.

**Section 7.** This resolution shall take effect immediately upon its adoption.

Adopted: \_\_\_\_\_, 2018

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Sue H. Gerdelman  
Secretary of the Board of Visitors  
The College of William & Mary

**RESOLUTION OF THE BOARD OF VISITORS OF  
THE COLLEGE OF WILLIAM AND MARY  
DECLARING THE INTENTION TO REIMBURSE  
THE COST OF CERTAIN EXPENDITURES:  
SADLER CENTER WEST ADDITION**

**WHEREAS,** THE COLLEGE OF WILLIAM AND MARY (the "Institution") has undertaken the construction of its SADLER CENTER WEST ADDITION (the "Project"); and

**WHEREAS,** The Institution has made or will make expenditures (the "Expenditures") in connection with the Project; and

**WHEREAS,** The Institution may determine that the funds advanced and to be advanced to pay Expenditures will be reimbursed to the Institution from the proceeds of one or more obligations to be issued by or on behalf of the Institution (the "Indebtedness").

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF VISITORS OF THE INSTITUTION:**

1. **The Board of Visitors of the Institution hereby adopts this declaration of official intent under Treasury Regulations Section 1.150-2 and declares that the Institution intends to reimburse itself, in accordance with such Section 1.150-2, with the proceeds of Indebtedness for Expenditures made on, after or within 60 days prior to the date of the adoption of this Resolution with respect to the Project, except that Expenditures made more than 60 days prior to the date hereof may be reimbursed as to certain *de minimis* or preliminary expenditures described in Treasury Regulations Section 1.150-2(f) and as to other expenditures permitted under applicable Treasury Regulations.**
2. **The maximum principal amount of Indebtedness expected to be issued for the Project is \$ 37,742,000.**
3. **This Resolution shall take effect immediately upon its adoption.**

Adopted: \_\_\_\_\_

\_\_\_\_\_  
Sue H. Gerdelman  
Secretary of the Board of Visitors  
The College of William & Mary

**WILLIAM & MARY  
RESOLUTION TO APPROVE THE UNIVERSITY SUCCESSION PLAN**

**WHEREAS**, Code of Virginia §2.2-1209 directs public institutions of higher education to prepare succession plans for presentation to their boards of visitors and to share copies with the Commonwealth Department of Human Resource Management; and (“DHRM”); and

**WHEREAS**, DHRM developed a succession plan template with a focus on key personnel, executive positions, and those nearing retirement; and

**WHEREAS**, the university’s Office of Human Resources worked with key leadership to identify factors that may have an impact on talent requirements and operational continuity; now

**THEREFORE, BE IT RESOLVED**, that the Board of Visitors approves the submission of the university’s succession plan to DHRM with a copy to the Secretary of Education; and

**BE IT FURTHER RESOLVED**, That the Board of Visitors requests periodic updates to the university succession planning process.