Update Report on the Capital Outlay Plan for 2018-2024

JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

August 1, 2017

Background:

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

On June 5, 2017, the state issued instructions for the preparation and submission of the 2018-2024 Capital Outlay Plan. The deadline for submission of the Six-Year Capital Outlay Plan to the state was July 7, 2017, and the university prepared and submitted the plan by the due date. The state instructions required submission of only projects requesting some portion of General Fund resources in their budget. Attachment A shows the list of projects with General Fund support submitted to the state with the listing ranked in priority order for state support. This project arrangement reflects the needs of the university, priorities of the state, and positions the university with options to respond to various funding abilities of the state in the future. The list of items is consistent with the list approved by the Board of Visitors at its April 2017 meeting, with a few minor adjustments for refined project costs and fund splits.

State Capital Budget Review and Approval Process:

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

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

1) A state appointed Six-Year Capital Outlay Plan Advisory Committee (staffed by several central agencies and offices) will review all 2018-2024 capital plans submitted agencies and institutions over the summer of 2017. This phase will include ongoing interactions by the university to position its projects.

2) By November 1, 2017, the Advisory Committee will provide a set of recommendations to the Governor, Chairman of the Senate Finance Committee, and Chairman of House Appropriations Committee to update the state's capital outlay plan for the 2018-2024 period.

3) On December 18, 2017, the Governor is scheduled to present to the General Assembly a bill proposing the state's updated capital outlay plan and a budget bill including planning funds or full funding for high priority items in the plan.

4) The legislature may amend the proposed plan and the proposed funding program in the Executive Budget Bill during the 2018 General Assembly. Depending on the overall size of the capital program and the amount of General Fund support for its projects, the University may submit legislative amendments for projects. This phase includes ongoing interactions by the university until a budget bill is passed.

5) July 1, 2018, the state's updated 2018-2024 plan, capital funding program, and list of projects for the 2018-2020 biennium becomes effective.

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

Preliminary signals from Six-Year Capital Outlay Plan Advisory Committee indicate modest capital funding expectations for the 2018-2020 biennium. The state funds nearly all of its capital program with external debt and actively manages debt to a five percent debt burden ratio as part of a strategy to preserve its AAA Credit Rating. The large capital funding program for the 2016-2018 biennia combined with revenue performance in fiscal year 2018 has consumed projected debt capacity through FY2019. The recovery of debt capacity may accelerate or subdue based on the pace of revenue growth.

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

Nongeneral Fund Projects and University Debt:

The Plan includes projects with 100 percent nongeneral fund support and these are shown on a separate schedule (Attachment B) because they do not compete for General Fund resources. The state instructions for this submission specified not to submit any projects supported entirely with nongeneral fund resources. Under the university's Management Agreement for Capital Projects, the state has authorized the Board of Visitors to approve and implement projects

supported 100 percent by nongeneral funds. Each project must be individually approved by the Board of Visitors. Under this authority, the university may bring resolutions to the Board to initiate projects from the Plan independent of the state budget process. When the university is prepared to initiate a project supported entirely with nongeneral funds, including a financing plan, the university submits a capital project resolution to the Board for consideration. The list in Attachment B includes the high priority projects for which nongeneral fund resources are anticipated to be sufficient to start a project during the six-year period or for which a private fund raising campaign is a high priority.

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

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

Attachment A

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

as of August 1, 2017

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

Attachment B

Nongeneral Fund Six-Year Capital Outlay Plan for 2018-2024

as of August 1, 2017

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

Attachment C

Project Descriptions for the 2018-2024 Capital Outlay Plan

JOINT FINANCE AND AUDIT COMMITTEE
AND BUILDINGS AND GROUNDS COMMITTEE

August 1, 2017

General Fund Projects:

University Division

1. Undergraduate Science Laboratory Building

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

2. Global Business and Analytics Complex

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

3. Randolph Hall Replacement

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

4. Corps Leadership and Military Science Building

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

5. Robeson Hall Renovation

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

6. Academic Support and Student Success Center

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

7. Brooks Center Renewal

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

8. Health and Safety Improvements

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

Cooperative Extension/Agricultural Experiment Station Division

1. Global Systems Sciences Buildings

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

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

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

3. Center Woods Complex Improvements

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

Nongeneral Fund Projects:

Intelligent Infrastructure Complex

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

- Hitt Hall

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

- Intelligent Infrastructure Building

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

- Smart Dining Hall

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

- Smart Design and Construction Complex

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

- Intern Hub (VTTI)

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

- Rural Smart Track

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

Health Sciences and Technology

- Comparative Oncology Center

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

- Translational Medicine, Phase I

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

Creativity and Innovation District

- Academic Space

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

- Innovation and Athletics Living Learning Community

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

Academic Quality

- Applied Projects Building (CRC)

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

- Enterprise / High Performance Computing Data Center

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

- Falls Church Property Acquisition

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

Student Experience

- Student Wellness Services

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

- Dietrick Hall Dinning Renovation and Expansion

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

- Food Processing Center and Warehouse

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

- Residential Renovations of 1,000 beds by 2024

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

- Dietrick Plaza Improvements

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

- Owens Hall Renewal

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

Athletics Facility Improvements

- ACC Broadcasting studio expansion

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

- Tennis Stadium Expansion

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

- Cassell Coliseum Entrance Improvements

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

- Athlete Nutrition Center

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

Building Envelope Renewals

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